

**AMCELLE RUBBLE FILL**  
Allegany County, Maryland  
Permit No. 1999WRF-0206

**SECOND SEMI-ANNUAL 2024  
STATISTICAL EVALUATION REPORT**  
(DECEMBER 31, 2024)

*Prepared for:*

County Commissioners of  
Allegany County, Maryland  
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## 1.0 INTRODUCTION

### 1.1 Historical Background

The Amcelle Rubble Fill (Permit no. 1999-WRF-0206) located in Allegany County, Maryland, is an inactive construction-and-demolition waste disposal site that received a permit for the former Amcelle Mill demolition debris (Figure 1). The site started receiving rubble fill on 2 June 1994 and received an interim closure in 1997. Final capping of the rubble fill occurred on October 1, 2010, and the mandatory 5 year post closure care period began upon final approval by the Maryland Department of the Environment (MDE) on July 11, 2015.

As of 23 July 2001, the landfill property was deeded by Allegany County to the Maryland Department of Public Safety and Correctional Services.

### 1.2 Reporting Requirements

The groundwater quality at the landfill is monitored semi-annually through 8 groundwater monitoring wells that are screened in the water-table aquifer. The permit requires semi-annual sampling and the submission of a statistical report that discusses groundwater quality from all of the monitoring wells specified in the groundwater monitoring plan. The report is to include analytical data (Appendix A), a Quality Assurance/Quality Control report (Appendix B), statistical analysis of the sampling results (Table 3), a groundwater contour map depicting the groundwater elevation, gradient, and flow direction (Figure 2), time-series analysis of historic data (Figure 3), and geochemical diagrams (Figures 4 and 5).

In the event that statistical analysis reveals a statistically significant increase of any Appendix I constituent, the Maryland Department of the Environment (MDE) is to be notified within 14 days of the determination. Allegany County will then consult with the MDE in preparing an assessment monitoring plan.

In a letter dated January 2, 2024, MDE updated the monitoring and reporting requirements for Tables I and II parameters to include Per- and Polyfluoroalkyl Substances (PFAS). These parameters have been sampled since the 2nd semi-annual 2024 event.

### 1.3 Work Scope

The purpose of this document is to provide a statistical report of the impact the facility has had to groundwater. A total of 58 sampling events have been collected and a statistical analysis was performed on the geochemistry of the groundwater from the 58 sampling events to determine the impact if any to groundwater from the landfill. Quarterly gas monitoring began March 2001.

## 2.0 GEOLOGY AND HYDROGEOLOGY

### 2.1 Introduction

The landfill is situated approximately 4 miles southwest of Cumberland, MD in the Potomac River floodplain between Haystack and Knobley mountains, adjacent to the border of Maryland and West Virginia (Figure 1). The landfill rests on the southeast side of the Haystack and Wills Mountain anticline with strata dipping to the southeast. Stratigraphy in the area of the landfill is dominated by Silurian-aged sedimentary rocks consisting of shale, sandstones, and limestones. The Rose Hill Formation, the McKenzie Formation, and the Wills Creek Shale have gradational contacts and all crop out in the area. The McKenzie Formation is the unit that most likely underlies the landfill. Additionally, thin river floodplain deposits are present at the site.

### 2.2 Local Hydrogeology

The local hydrogeology is dominated by topography, with the groundwater gradient trending southeast towards the north branch of the Potomac River. The unit is recharged by surface infiltration from precipitation, runoff from the surrounding slopes and transmission from adjacent rock strata. The wells range in depth from 20 to 62 feet and are screened within the Silurian strata or floodplain deposits.

Gradient is approximately 0.0119 ft/ft to the east toward the North Branch of the Potomac River.

## 3.0 GROUNDWATER MONITORING PROGRAM

### 3.1 Well Network

The water-table aquifer is monitored at the landfill through 8 wells; 1 upgradient (MW-13) and 7 down-gradient (MW-3, MW-4, MW-5, MW-6, MW-7, MW-11, and MW-12). The monitoring wells are screened through the water-table aquifer.

The wells were sampled March 25, 2024 (Tables 1 and 2). Based on available records, these wells have been sampled 58 times.

### 3.2 Sampling Program

The groundwater monitoring plan for the site includes 40 CFR Part 258, Appendix I metals, volatile organic compounds (VOC's), chlorides, COD, alkalinity, nitrate, pH, specific conductivity, temperature, dissolved oxygen, and common cations and anions (Appendix A). All wells at the site have been equipped with dedicated sampling equipment and are sampled semi-annually. Each well is equipped with low-flow bladder pumps and is sampled after the field parameters stabilize. No difficulties were encountered during this sampling event.

### 3.3 Quality Assurance/Quality Control

Quality assurance and quality control at Amcelle Rubble Landfill are performed in accordance with the *Post-Closure Detection Monitoring Plan* (R.E. Wright, 1997). The program includes the collection and analysis of trip blanks and duplicate samples (Appendix B). For this event, PFAS analyses were subcontracted to Eurofins Lancaster Laboratories using EPA Method 1633.

The QA/QC package included laboratory control samples, matrix spikes, matrix spike duplicates, laboratory duplicates, and method blanks. All general chemistry and metals QA/QC results were within method acceptance criteria. Minor qualifiers were noted where spike recoveries were outside control limits, but these did not affect the usability of the data.

For PFAS, method blanks were non-detect, confirming no laboratory contamination. Several low-level PFAS detections were reported, including:

- PFOA in MW-1 (2.8 ng/L, J-qualified)
- PFOS in MW-1 (8.2 ng/L) and MW-2 (1.8 ng/L)
- PFHxS in MW-2 (13 ng/L)
- PFBS in MW-3 (0.72 J ng/L)

These detections were below federal health advisory levels but represent measurable concentrations above method reporting limits. Duplicate and isotope dilution recoveries for key PFAS analytes were generally within acceptance limits, supporting the reliability of reported results.

Trip blanks collected during the event did not detect any volatile organic compounds (VOCs). Overall, no significant QA/QC issues were identified that would affect interpretation of the groundwater analytical results.

## 4.0 STATISTICAL EVALUATION

### 4.1 Introduction

Subtitle D allows for a variety of statistical techniques for the evaluation of groundwater data (CFR V. 56, No. 196; §258.53). Several different statistical strategies were implemented at Rubble Fill at the request of MDE. The Mann-Kendall Test for Trend was used for intra-well analyses and either the Kruskal-Wallis test or the Wilcoxon Rank-Sum test was used for the inter-well comparisons (Table 3). Time-series (control chart) analyses were performed on every constituent (Table 4; Figures 3).

### 4.2 Data Evaluations

Two types of statistical comparisons were used to test for trends: an intra-well test for trend and an inter-well comparison where upgradient water quality is compared to downgradient water quality. The statistical procedures used are distribution-free methods, whereby the tests do not assume these data to be normally distributed. This eliminates the concern of reaching a false conclusion from violating assumptions. The Type I error rate, or false positive rate, was set at 0.01 for each test. Concentrations of parameters reported as less than the limit of detection were set equal to half of the detection limit.

#### 4.2.1 Intra-Well Test for Trend

The Mann-Kendall Test for Trend was applied to each constituent in each monitoring well. The Mann-Kendall test is a nonparametric or distribution free test for trend (U.S. Environmental Protection Agency (EPA) guidance document 1992; Gilbert 1987)

Increasing trends can be represented mathematically in several formulas, and the most common is a linear increase expressed as (Gilbert 1987):

$$C_i = \alpha + \beta \times X_i + e_i$$

Where,  $C_i$  represents the concentration at time  $I$ ;  $\alpha$  represents the concentration at time 0;  $\beta$  represents the slope coefficient or rate of increase in concentration;  $X_i$  represents the sample date; and,  $e_i$  represents the random deviations about the line. Random deviations from a continuum can be thought of as variability in concentration in a given monitoring well over a short period of time. If the slope coefficient ( $\beta$ ) is not statistically greater than zero, then it is concluded that there is no statistically significant increase in concentration over time (Gilbert, 1987). Hollander and Wolfe (1973) apply the Mann-Kendall test as a distribution-free test for the slope coefficient.

The Mann-Kendall test is designed to identify increasing or decreasing trends in data and is applied to a constituent in a given monitoring well by comparing the current concentration to each prior concentration observed. An indicator variable is assigned a value of 1, 0, or -1, if the current concentration is greater than, equal to or less than, respectively, each prior concentration. The sum of indicator variables ( $K$ ) is then compared to a critical value as a test for trend. The critical statistic is defined to have a 5 percent chance of falsely concluding a trend exists. Large positive values of  $K$  indicate a positive trend over time; negative values of  $K$  indicate a negative trend over time.

The test for trend was performed using data collected from the 2nd semi-annual 2024 through the 1st semi-annual event of 2025 and a second trend test was performed using data collected from the 1995 annual event through the 1st semi-annual event of 2025 (Table 3).

#### 4.2.2 Inter-Well Comparison

Inter-well comparisons of constituent concentrations are used to evaluate the difference in downgradient water quality with the upgradient water quality. It is again emphasized, however, that for this analysis, inter-well comparisons are used as a general screening tool since spatial variability is not accounted for (i.e., either one or no upgradient wells per zone). Comparisons were made by using either the Kruskal-Wallis test or the Wilcoxon Rank-Sum test. The Kruskal-Wallis test was used if less than 50 percent of the concentrations of the constituents were reported as less than the limit of detection. The Wilcoxon Rank-Sum test was used if at least 50 percent of the concentrations of the constituent were reported as less than the limit of detection (EPA 1992).

4.2.2.1 Kruskal-Wallis Test - The Kruskal-Wallis test compares a groundwater constituent's median concentration over time. The objective of this test is to determine if the median concentration at a given downgradient location is significantly greater than that upgradient within the same water-bearing zone.

The Kruskal-Wallis test simultaneously evaluates monitoring well constituent data by comparing their median concentrations over time. For a given constituent in a given zone, the initial step of the Kruskal-Wallis test is to replace concentration with its rank. The rank is obtained by jointly ranking all concentrations from lowest to highest, regardless of monitoring well, and a rank of 1 is assigned to the lowest observed concentration, a rank of 2 to the second lowest concentration, and so on. The average rank is used for concentrations that have the same value.

A statistic is then calculated using the sum of the ranks for each monitoring well. If this statistic is less than or equal to the critical value, it is concluded that there is no difference among monitoring wells. The critical value is obtained from the chi-square distribution with appropriate degrees of freedom. If this statistic exceeds the critical value, then it is concluded that a difference between at least two monitoring wells exists. Further investigation is necessary to evaluate if this difference is attributable to differences in downgradient and upgradient concentrations. This is accomplished by statistically comparing each downgradient monitoring well's mean rank to the upgradient mean rank using the procedure presented in EPA (1992).

4.2.2.2 Wilcoxon Rank-Sum Test - EPA (1992) recommends the Wilcoxon Rank-Sum test over its prior recommendation, the Test of Proportions (EPA 1989), because the Wilcoxon Rank-Sum has a better chance of concluding a difference does exist. The Wilcoxon Rank-Sum test compares the median concentration of the two groups (i.e., the upgradient well and the downgradient wells). The Wilcoxon Rank-Sum test is quite similar to the Kruskal-Wallis test except the Kruskal-Wallis test compares the median concentration of more than two groups. The objective of the Wilcoxon Rank-Sum test is to determine if the median concentration of the group of downgradient monitoring wells is significantly greater than that of the upgradient group.

For a given constituent in a given zone, the initial step of the Wilcoxon Rank-Sum test is to replace concentration with its rank. The rank is obtained by jointly ranking all concentrations from lowest to highest, regardless of monitoring group, and assigning a

rank of 1 to the lowest concentration, a rank of 2 to the second lowest concentration, and so on. The average rank is used for concentrations that have the same value.

A statistic is then calculated using the sum of the ranks at the downgradient monitoring well group. If this statistic is less than or equal to the critical value, it is concluded that there is no difference among the downgradient and upgradient groups. The critical value is obtained from the standard normal distribution. If this statistic exceeds the critical value, then verification sampling may be required to determine if the downgradient group is statistically greater than the upgradient group.

#### 4.2.3 Time-Series Evaluation

Time-series or control chart evaluations provide graphic representations of how a dataset varies through time (Figure 3). This allows historical trends to be observed simultaneously for each well.

#### 4.3 Decision Criteria

The results of these statistical tests are used together with other analyses to assess the potential of a leachate release. Decision criteria used in this analysis include:

- 1) Time-series plots;
- 2) Comparison of constituents to control limits (i.e., background);
- 3) Water quality comparisons at upgradient and downgradient wells using trilinear plots, Stiff diagrams, etc.;
- 4) Source characterization (i.e., leachate results vs. groundwater results) summarized through geochemical plots (i.e., trilinear and/or Stiff diagrams);
- 5) The natural spatial variability between monitored geologic zones; and,
- 6) The historical absence of VOCs.

## 5.0 RESULTS OF STATISTICAL ANALYSES

### 5.1 Volatile Organic Analyses

No volatile organic compounds (VOCs) were detected above laboratory quantitation limits in any well during the 1st Semi-Annual 2025 sampling event (Table 5; Appendix A). All results were reported as non-detect, and no estimated ('J') values were assigned.

### 5.2 Metals and Inorganic Statistical Analysis

For the 1st semi-annual event of 2025, no intra-well statistically significant increases (SSIs) were present. No monitoring well showed both intra- and inter-well statistical exceedances for any parameter.

During the 1st Semi-Annual 2025 sampling event, exceedances of National Primary Drinking Water Standards were limited to turbidity, which was reported above the 5 NTU MCL in MW-3 (29 NTU), MW-4 (65 NTU), MW-7 (65 NTU), MW-11 (32 NTU), MW-12 (9.2 NTU), and MW-13 (38 NTU). All other regulated primary constituents were below their respective MCLs, including arsenic (maximum 4.7 µg/L compared to the 10 µg/L MCL), barium (0.146 mg/L compared to 2 mg/L), cadmium (0.004 mg/L at MW-5 compared to 0.005 mg/L), chromium (non-detect compared to 0.1 mg/L), lead (maximum 1.4 µg/L compared to the 15 µg/L action level), mercury (non-detect compared to 2 µg/L), nitrate-nitrogen (maximum 0.93 mg/L compared to 10 mg/L), and thallium (non-detect compared to 2 µg/L). No volatile organic compounds (VOCs) were detected in any well. Aside from turbidity, no exceedances of primary drinking water standards occurred during this sampling event, though exceedances of secondary standards for iron, manganese, sulfate, total dissolved solids, and pH were observed and are addressed separately.

Exceedances of Secondary Maximum Contaminant Levels (SMCLs) were observed for iron, manganese, sulfate, total dissolved solids, and pH. These results are consistent with historical groundwater quality at the site and reflect natural variability and acid mine drainage influence rather than landfill leachate impact.

Typical geochemical analyses of the groundwater show that groundwater is a calcium-bicarbonate type of water, whereas the typical leachate has a strong component of sodium and chloride ions (Figures 4 and 5). The geochemical similarity of the groundwater samples and the dissimilarity of groundwater to typical leachate provide strong evidence that the groundwater at the facility has not been impacted by leachate.

## 6.0 LANDFILL GAS MONITORING

The Amcelle Rubble Landfill gas monitoring program was established in October 2000 and originally included six borehole locations. The program was modified in 2012 to include four permanent gas monitoring probes (GMP-1 through GMP-4). Soil gas sampling for the 1<sup>st</sup> and 2<sup>nd</sup> quarters of 2025 occurred on March 25 and June 17, respectively (Appendix D). Soil gas monitoring includes connecting a quick connect couple to the soil gas probe and measuring the gas extracted from the soil at the depth of the probe.

If an exceedance above the Lower Explosive Limit (LEL) occurs in a gas monitoring probe, then another sample is collected within 7 days.

No LEL exceedances for methane were detected in the soil gas monitoring probes during the 1<sup>st</sup> or 2<sup>nd</sup> quarterly events of 2025. Methane was not detected in any probe during either sampling event, and the facility has remained in compliance with the post-closure gas monitoring requirements (Appendix D).

## 7.0 SUMMARY

A statistical analysis of groundwater monitoring data collected during the 1st Semi-Annual 2025 sampling event at Amcelle Rubble Landfill shows that the landfill has not impacted groundwater.

Past sampling events had shown statistically significant increases in inter-well analyses for total metals. Rehabilitation of the wells and the installation of low-flow pumps reduced the concentrations of total metals, and all wells at the facility now have dedicated low-flow pumps.

This analysis included data collected from 1995 through the 1st Semi-Annual 2025 sampling event. The major conclusions of this report are:

1. Soil gas samples show that methane does not exist in the soils at a reasonable distance from the landfill (<5 feet).
2. No VOCs were detected above drinking water standards.
3. No statistically significant increases exist for both intra- and inter-well analysis for any constituent. No maximum concentration levels (MCLs) for metals and inorganic constituents were exceeded except for turbidity in MW-3, MW-4, MW-7, MW-11, MW-12, and MW-13.
4. In an October 22, 2002 letter to the Maryland Department of the Environment, the Maryland Department of Public Safety and Correctional Services indicated that they plan no further use of the Rubble landfill and that plans to cap the landfill were pending.
5. Although the final cap was completed during October 2010, the post closure monitoring and maintenance period did not officially begin until the Department conducted a final walk through inspection and documented their approval in a letter dated July 11, 2011. The mandatory 5 year period extended through July 2016.
6. In order to determine if a site is prepared to exit the post closure care, the site owner must show the Department that the site does not, and will not have a detrimental impact on the environment and that the site is meeting all regulatory requirements for groundwater quality, landfill gas migration, and cap maintenance.
7. Based on a review of the last 5 years of monitoring data at the site, the Department has indicated that a total cessation of groundwater monitoring at the facility is unlikely to be approved due to occasional very low VOC detections and intra- and interwell SSIs. However, the site has shown little/no evidence of landfill gas migration and visual inspection reports submitted since 2012 have shown that the cap has been maintained in good working order.

## 7.1 Recommended Actions

1. Submit a revised environmental monitoring plan for Department review now that the mandatory 5 year post closure period is over. This plan may request to modify or cease some portions of the groundwater and landfill gas monitoring plans which have proven to be in compliance for the entire post closure period.
2. Continue semi-annual sampling as approved by the Department.

## 8.0 REFERENCES

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**TABLE 1**

AMCELLE RUBBLE FILL  
 ALLEGANY COUNTY, MARYLAND  
 Permit No. 1999-WRF-0206

**FIRST SEMI-ANNUAL 2025  
 FIELD PARAMETERS**

SAMPLE LOCATION <sup>1</sup>	SAMPLE DATE	SAMPLE TIME	WATER LEVEL <sup>2</sup> (ft)	WELL DEPTH <sup>2</sup> (ft)	WATER PURGED (L)	FIELD PARAMETERS <sup>3</sup>						COMMENTS
						TEMP (C)	COND (µS/cm)	TDS (PPM)	pH (SU)	Turb (NTU)	DO (Mg/L)	
MW-3	3/24/2025	12:30 PM	17.11	21.80	7.0	12.4	616	308	5.76	49.15	5.8	
MW-4	3/24/2025	1:15 PM	19.42	28.00	9.0	12.7	656	329	5.88	38.10	8.4	
MW-5	3/24/2025	2:14 PM	19.13	22.50	8.0	12.3	345	179	5.54	0.00	7.9	
MW-6	3/24/2025	4:40 PM	15.00	24.60	9.0	11.7	631	315	6.18	3.77	8.8	
MW-7	3/24/2025	5:30 PM	15.50	20.60	6.0	11.5	1030	514	6.08	2.54	6.0	F. Blank taken here
MW-11	3/24/2025	2:00 PM	22.53	33.00	7.0	13.3	418	209	5.86	0	9.3	F. Duplicate collected here
MW-12	3/24/2025	4:00 PM	20.49	62.05	16.0	12.6	507	253	6.49	0.00	9.6	
MW-13	3/24/2025	7:20 PM	3.43	49.80	12.0	11.6	956	479	6.69	42.69	5.4	

Notes:

<sup>1</sup> All wells sampled with dedicated low flow pumps

ft = feet

COND = Specific Conductivity

µS/cm = microSiemens/centimeter

<sup>2</sup> Measured from top of inner casing

L = Liters

TDS = Total Dissolved Solids

NTU = Nephelometric Turbidity Unit

<sup>3</sup> Samples are collected after the field parameters are within 10% of each other consecutively.

C = Degrees Centigrade

TURB = Turbidity

DO = Dissolved Oxygen

**TABLE 2**

AMCELLE RUBBLE FILL  
ALLEGANY COUNTY, MARYLAND  
Permit No. 1999-WRF-0206

**FIRST SEMI-ANNUAL 2025  
WATER-LEVEL ELEVATIONS**

<b>MONITORING POINT</b>	<b>MEASUREMENT DATE</b>	<b>MEASUREMENT POINT ELEV.<sup>1</sup> (ft amsl)</b>	<b>WATER LEVEL<sup>2</sup> (ft)</b>	<b>WATER LEVEL ELEV. (ft amsl)</b>
<b>MW-3</b>	3/24/2025	655.13	17.11	638.02
<b>MW-4</b>	3/24/2025	653.76	19.42	634.34
<b>MW-5</b>	3/24/2025	654.40	19.13	635.27
<b>MW-6</b>	3/24/2025	653.21	15.00	638.21
<b>MW-7</b>	3/24/2025	653.20	15.50	637.70
<b>MW-11</b>	3/24/2025	654.75	22.53	632.22
<b>MW-12</b>	3/24/2025	654.87	20.49	634.38
<b>MW-13</b>	3/24/2025	651.69	3.43	648.26

Notes:

<sup>1</sup> Elevation for the top of the PVC from well logs.

<sup>2</sup> Measured from the top of the 4" PVC riser pipe.

ft amsl = Feet above mean sea level.

**TABLE 3**

AMCELLE RUBBLE FILL  
 ALLEGANY COUNTY, MARYLAND  
 Permit No. 1999-WRF-0206

**STATISTICAL ANALYSIS**

MW-13 Upgradient					
Analyte <sup>1</sup>	Mann-Kendall Test for Trend Through:		Downgradient to Upgradient Comparison Through:		Statistically Significant Increase
	2nd SA '24	1st SA '25	1st SA '25	WR or KW <sup>2</sup>	
Antimony	No	No			
Arsenic	No	No			
Barium	No	No			
Beryllium	No	No			
Cadmium	No	No			
Chromium	No	No			
Cobalt	No	No			
Copper	No	No			
Lead	No	No			
Nickel	No	No			
Selenium	No	No			
Silver	No	No			
Thallium	No	No			
Vanadium	No	No			
Zinc	No	No			

<sup>1</sup> Inorganic Constituents from 40 CFR, Part 258, Appendix I

<sup>2</sup> Kruskal-Wallis or Wilcoxon Rank-Sum Test (Inter-well Comparison)

**TABLE 3**

AMCELLE RUBBLE FILL  
 ALLEGANY COUNTY, MARYLAND  
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**STATISTICAL ANALYSIS**

<b>MW-3 Downgradient</b>					
<b>Analyte<sup>1</sup></b>	<b>Mann-Kendall Test for Trend Through:</b>		<b>Downgradient to Upgradient Comparison Through:</b>		<b>Statistically Significant Increase</b>
	<b>2nd SA '24</b>	<b>1st SA '25</b>	<b>1st SA '25</b>	<b>WR or KW<sup>2</sup></b>	
Antimony	No	No	No	WR	No
Arsenic	No	No	No	KW	No
Barium	No	No	No	KW	No
Beryllium	No	No	No	WR	No
Cadmium	No	No	No	WR	No
Chromium	No	No	No	WR	No
Cobalt	No	No	No	KW	No
Copper	No	No	No	WR	No
Lead	No	No	No	WR	No
Nickel	No	No	No	KW	No
Selenium	No	No	No	WR	No
Silver	No	No	No	WR	No
Thallium	No	No	No	WR	No
Vanadium	No	No	No	WR	No
Zinc	No	No	No	WR	No

<sup>1</sup> Inorganic Constituents from 40 CFR, Part 258, Appendix I

<sup>2</sup> Kruskal-Wallis or Wilcoxon Rank-Sum Test (Inter-well Comparison)

**TABLE 3**

AMCELLE RUBBLE FILL  
 ALLEGANY COUNTY, MARYLAND  
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**STATISTICAL ANALYSIS**

<b>MW-4 Downgradient</b>					
<b>Analyte<sup>1</sup></b>	<b>Mann-Kendall Test for Trend Through:</b>		<b>Downgradient to Upgradient Comparison Through:</b>		<b>Statistically Significant Increase</b>
	<b>2nd SA '24</b>	<b>1st SA '25</b>	<b>1st SA '25</b>	<b>WR or KW<sup>2</sup></b>	
Antimony	No	No	No	WR	No
Arsenic	No	No	No	KW	No
Barium	No	No	No	KW	No
Beryllium	No	No	No	WR	No
Cadmium	No	No	No	WR	No
Chromium	No	No	No	WR	No
Cobalt	No	No	No	KW	No
Copper	No	No	No	WR	No
Lead	No	No	No	WR	No
Nickel	No	No	No	WR	No
Selenium	No	No	No	WR	No
Silver	No	No	No	WR	No
Thallium	No	No	No	WR	No
Vanadium	No	No	No	WR	No
Zinc	No	No	No	WR	No

<sup>1</sup> Inorganic Constituents from 40 CFR, Part 258, Appendix I

<sup>2</sup> Kruskal-Wallis or Wilcoxon Rank-Sum Test (Inter-well Comparison)

**TABLE 3**

AMCELLE RUBBLE FILL  
 ALLEGANY COUNTY, MARYLAND  
 Permit No. 1999-WRF-0206

**STATISTICAL ANALYSIS**

<b>MW-5 Downgradient</b>					
<b>Analyte<sup>1</sup></b>	<b>Mann-Kendall Test for Trend Through:</b>		<b>Downgradient to Upgradient Comparison Through:</b>		<b>Statistically Significant Increase</b>
	<b>2nd SA '24</b>	<b>1st SA '25</b>	<b>1st SA '25</b>	<b>WR or KW<sup>2</sup></b>	
Antimony	No	No	No	WR	No
Arsenic	No	No	No	WR	No
Barium	No	No	No	KW	No
Beryllium	No	No	No	WR	No
Cadmium	No	No	No	WR	No
Chromium	No	No	No	WR	No
Cobalt	No	No	No	KW	No
Copper	No	No	No	WR	No
Lead	No	No	No	WR	No
Nickel	No	No	No	KW	No
Selenium	No	No	No	WR	No
Silver	No	No	No	WR	No
Thallium	No	No	No	WR	No
Vanadium	No	No	No	WR	No
Zinc	No	No	No	WR	No

<sup>1</sup> Inorganic Constituents from 40 CFR, Part 258, Appendix I

<sup>2</sup> Kruskal-Wallis or Wilcoxon Rank-Sum Test (Inter-well Comparison)

**TABLE 3**

AMCELLE RUBBLE FILL  
 ALLEGANY COUNTY, MARYLAND  
 Permit No. 1999-WRF-0206

**STATISTICAL ANALYSIS**

<b>MW-6 Downgradient</b>					
<b>Analyte<sup>1</sup></b>	<b>Mann-Kendall Test for Trend Through:</b>		<b>Downgradient to Upgradient Comparison Through:</b>		<b>Statistically Significant Increase</b>
	<b>2nd SA '24</b>	<b>1st SA '25</b>	<b>1st SA '25</b>	<b>WR or KW<sup>2</sup></b>	
Antimony	No	No	No	WR	No
Arsenic	No	No	No	WR	No
Barium	No	No	No	KW	No
Beryllium	No	No	No	WR	No
Cadmium	No	No	No	WR	No
Chromium	No	No	No	WR	No
Cobalt	No	No	No	KW	No
Copper	No	No	No	WR	No
Lead	No	No	No	WR	No
Nickel	No	No	No	KW	No
Selenium	No	No	No	WR	No
Silver	No	No	No	WR	No
Thallium	No	No	No	WR	No
Vanadium	No	No	No	WR	No
Zinc	No	No	No	WR	No

<sup>1</sup> Inorganic Constituents from 40 CFR, Part 258, Appendix I

<sup>2</sup> Kruskal-Wallis or Wilcoxon Rank-Sum Test (Inter-well Comparison)

**TABLE 3**

AMCELLE RUBBLE FILL  
 ALLEGANY COUNTY, MARYLAND  
 Permit No. 1999-WRF-0206

**STATISTICAL ANALYSIS**

<b>MW-7 Downgradient</b>					
<b>Analyte<sup>1</sup></b>	<b>Mann-Kendall Test for Trend Through:</b>		<b>Downgradient to Upgradient Comparison Through:</b>		<b>Statistically Significant Increase</b>
	<b>2nd SA '24</b>	<b>1st SA '25</b>	<b>1st SA '25</b>	<b>WR or KW<sup>2</sup></b>	
Antimony	No	No	No	WR	No
Arsenic	No	No	No	WR	No
Barium	No	No	No	KW	No
Beryllium	No	No	No	WR	No
Cadmium	No	No	No	WR	No
Chromium	No	No	No	WR	No
Cobalt	No	No	No	WR	No
Copper	No	No	No	WR	No
Lead	No	No	No	WR	No
Nickel	No	No	No	WR	No
Selenium	No	No	No	WR	No
Silver	No	No	No	WR	No
Thallium	No	No	No	WR	No
Vanadium	No	No	No	WR	No
Zinc	No	No	No	WR	No

<sup>1</sup> Inorganic Constituents from 40 CFR, Part 258, Appendix I

<sup>2</sup> Kruskal-Wallis or Wilcoxon Rank-Sum Test (Inter-well Comparison)

**TABLE 3**

AMCELLE RUBBLE FILL  
 ALLEGANY COUNTY, MARYLAND  
 Permit No. 1999-WRF-0206

**STATISTICAL ANALYSIS**

<b>MW-11 Downgradient</b>					
<b>Analyte<sup>1</sup></b>	<b>Mann-Kendall Test for Trend Through:</b>		<b>Downgradient to Upgradient Comparison Through:</b>		<b>Statistically Significant Increase</b>
	<b>2nd SA '24</b>	<b>1st SA '25</b>	<b>1st SA '25</b>	<b>WR or KW<sup>2</sup></b>	
Antimony	No	No	No	WR	No
Arsenic	No	No	No	WR	No
Barium	No	No	No	KW	No
Beryllium	No	No	No	WR	No
Cadmium	No	No	No	WR	No
Chromium	No	No	No	WR	No
Cobalt	No	No	No	KW	No
Copper	No	No	No	KW	No
Lead	No	No	No	WR	No
Nickel	No	No	No	KW	No
Selenium	No	No	No	WR	No
Silver	No	No	No	WR	No
Thallium	No	No	No	WR	No
Vanadium	No	No	No	WR	No
Zinc	No	No	No	WR	No

<sup>1</sup> Inorganic Constituents from 40 CFR, Part 258, Appendix I

<sup>2</sup> Kruskal-Wallis or Wilcoxon Rank-Sum Test (Inter-well Comparison)

**TABLE 3**

AMCELLE RUBBLE FILL  
ALLEGANY COUNTY, MARYLAND  
Permit No. 1999-WRF-0206

**STATISTICAL ANALYSIS**

<b>MW-12 Downgradient</b>					
<b>Analyte<sup>1</sup></b>	<b>Mann-Kendall Test for Trend Through:</b>		<b>Downgradient to Upgradient Comparison Through:</b>		<b>Statistically Significant Increase</b>
	<b>2nd SA '24</b>	<b>1st SA '25</b>	<b>1st SA '25</b>	<b>WR or KW<sup>2</sup></b>	
Antimony	No	No	No	WR	No
Arsenic	No	No	No	WR	No
Barium	No	No	No	KW	No
Beryllium	No	No	No	WR	No
Cadmium	No	No	No	WR	No
Chromium	No	No	No	WR	No
Cobalt	No	No	No	WR	No
Copper	No	No	No	WR	No
Lead	No	No	No	WR	No
Nickel	No	No	No	WR	No
Selenium	No	No	No	WR	No
Silver	No	No	No	WR	No
Thallium	No	No	No	WR	No
Vanadium	No	No	No	WR	No
Zinc	No	No	No	KW	No

<sup>1</sup> Inorganic Constituents from 40 CFR, Part 258, Appendix I

<sup>2</sup> Kruskal-Wallis or Wilcoxon Rank-Sum Test (Inter-well Comparison)

TABLE 4  
Amcelle Rubble Landfill  
Time Series  
Elements and Indicator Parameters

Sample Point MW-3

Lab Results	Alkalinity to pH 4.5	Ammonia nitrogen	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chemical oxygen demand	Chloride	Chromium	Cobalt	Copper	Hardness	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate nitrogen	pH	Potassium	Selenium	Silver	Sodium	Specific conductance	Sulfate	Thallium	Total dissolved solids	Turbidity	Vanadium	Zinc
2/23/1995	250			10	0.12		0.0005		20	8	0.01			370		5			0.2		0.1	6.8				597						0.017	
3/12/1996				7	0.11				19					230								6.65											
1/24/1997									25					240		17						6.65											
12/2/1998	247			10	0.51		0.0005	104	33	5	0.03			303	22	10.7			0.2		0.84	7.1				505						0.096	
3/30/1999	216			10	0.2		0.0005	89	26	5	0.01			256	7	8.1			0.2		0.64	7.6				560						0.041	
9/28/1999	195			10	0.23		0.0006	71.8	15	7	0.01			202	9	5.6			0.2		0.11	6.6				432						0.047	
3/28/2000	284			20	0.31		0.0005	116	37	9	0.02			327	12	9			0.2		0.13	6.8				589						0.111	
11/3/2000	173			10	0.06		0.0005	49.9	19	10	0.01			142	5	4.2			0.2		0.1	6.7	5.7		6.3	397	71					0.006	
4/25/2001	179			10	0.07		0.0005	71	15	5	0.01			196	5	4.5			0.2		0.05	6.7	5		6.7	459	63					0.023	
10/24/2001	131			10	0.07		0.0005	55.1	15	3	0.01			155	5	4.3			0.2		0.05	6.4	5.6		6.3	387	68					0.017	
3/21/2002	166			10	0.06		0.0005	68.6	15	6	0.01			191	5	4.8			0.2		0.16	6.8	5.3		5.7	447	77					0.014	
9/25/2002	99			10	0.06		0.0005	41.7	15	6	0.01			122	5	4.4			0.2		0.05	6.5	5.7		6	367	80					0.017	
3/25/2003	221			10	0.36		0.0005	81.2	15	4	0.01			226	5	5.6			0.2		0.06	6.5	5.8		7.2	479	66					0.257	
10/6/2003	286			10	0.41		0.0005	79.4	15	4	0.01			229	5	7.4			0.2		0.05	6.6	6.7		7.2	572	29					0.194	
3/24/2004	243			10	0.123		0.005	0.1	10	13.5	0.01			255	5	0.1			0.2		0.35	6.55	6.34		6.85	518	57.3					0.0387	
9/22/2004	188			11	0.14		0.005	74.4	20	6	0.01			213	5	6.7			0.2		0.05	6.44	6.1		6.5	469	46					0.04	
3/29/2005	237			10	0.17		0.002	86.1	48	7	0.01			253	5	9.1			0.2		0.05	6.73	7.6		7.5	510	45					0.026	
8/23/2005	209			10	0.17		0.002	84.4	48	9	0.01			246	5	8.6			0.2		0.05	6.42	7.2		7.4	510	78					0.04	
3/9/2006	197			14	0.13		0.005	84.4	20	13	0.01			240	5	7.1			0.2		1.31	6.35	6.5		7.5	492	98					0.04	
9/15/2006	158			13	0.11		0.005	78	12	10	0.01			217	8	5.4			0.2		0.05	6.46	6.1		6.4	456	88					0.04	
3/9/2007	162			21	0.14		0.005	114	31	9	0.01			324	8	9.2			0.2		0.05	6.43	6.3		6.2	424	78					0.1	
9/27/2007	162			27	0.15		0.005	102	11	9	0.01			291	10	9			0.2		0.05	6.47	6.9		6.3	441	68					0.12	
3/14/2008	187			23	0.18		0.005	126	34	9	0.01			356	10	9.8			0.2		0.05	7.32	7.1		6.9	481	67					0.14	
9/26/2008	202			30	0.2		0.005	156	25	26	0.01			444	10	13			0.2		0.05	6.53	7.5		6.8	502	67					0.17	
3/26/2009	230			15	0.14		0.005	145	20	10	0.01			400	7	9.4			0.2		0.06	6.67	7		7.4	493	90					0.1	
9/10/2009	213			17	0.16		0.005	141	13	8	0.01			390	6	9.2			0.2		0.05	6.66	7.3		8.3	508	73					0.1	
5/7/2010	236			19	0.15		0.004	156	11	5.67	0.01			429	7	9.76			0.2		0.07	6.74	7.22		8.2	514	66.5					0.11	
2/25/2011	218			21	0.16		0.004	147	10	7.23	0.01			410	8	10.7			0.2		0.14	6.78	7.3		9.3	518	78					0.12	
9/28/2011	225			17	0.12		0.004	138	10	6.8	0.01			378	6	8.1			0.2		0.06	6.81	6.5		8.5	566	85					0.08	
3/15/2012	145			8	0.11		0.004	66.7	10	4.64	0.01			193	3	6.4			0.2		0.33	8.02	6.16		7.5	443	73					0.04	
8/23/2012	84	0.66	2	4	0.07	0.002	0.004	48.5	10	7.92	0.01	0.049	0.01	142	19	2	5	8.14	0.2	0.034	0.26	6.71	6.77	0.035	0.01	9.5	356	78	2	300	21.2	0.01	0.02
3/21/2013	171	0.91	2	6	0.09	0.002	0.004	77.3	10	5.41	0.01	0.044	0.01	217	25.1	2	5.9	7.27	0.2	0.042	0.08	8.2	6.63	0.035	0.01	8.5	497	66	2	308	77	0.01	0.02
9/18/2013	136	0.74	2	7	0.09	0.002	0.004	65	10	15.1	0.01	0.052	0.01	187	29.5	2	5.9	7.61	0.2	0.034	0.06	7.03	6.52	0.035	0.01	10	457	76	2	326	91	0.01	0.02
3/13/2014	125	0.72	2	5	0.08	0.002	0.004	67.8	10	13.7	0.01	0.051	0.01	194	20.3	2	5.9	7.62	0.2	0.031	0.25	7.04	6.78	0.035	0.01	12.2	456	76	2	300	39.9	0.01	0.02
8/29/2014	100	0.88	2	6	0.08	0.002	0.004	50.1	15	13.5	0.01	0.054	0.01	149	23.6	2	5.8	7.68	0.2	0.032	0.53	6.42	7.23	0.035	0.01	10.1	402	67	2	144	36.3	0.01	0.02
3/25/2015	109	0.78	2	9	0.07	0.002	0.004	60.5	10	19.1	0.01	0.05	0.01	175	26.4	2	5.9	7.08	0.2	0.027	0.41	6.61	7.53	0.035	0.01	13.5	431	78	2	279	97	0.01	0.02
9/29/2015	125	0.74	2	5	0.07	0.002	0.004	62.2	10	24	0.01	0.053	0.01	181	20.6	2	6.3	8.26	0.2	0.03	0.06	6.41	6.95	0.035	0.01	15.4	512	73	2	352	6.3	0.01	0.01
3/25/2016	122	0.87	2	5	0.08	0.002	0.004	65.7	10	23.5	0.01	0.048	0.01	189	19.8	2	6	7.98	0.2	0.027	0.06	6.61	7.61	0.035	0.01	14.2	467	86	2	288	29.8	0.01	0.01
9/1/2016	137	0.83	2	18	0.07	0.002	0.004	63	10	22.6	0.01	0.051	0.01	184	23.7	2	6.5	8.87	0.2	0.026	0.05	6.46	7.09	0.035	0.01	14.3	500	82	2	334	23.1	0.01	0.01
3/24/2017	117	0.93	2	4	0.08	0.002	0.004	65.3	10	24.5	0.01	0.05	0.01	190	20.8	2	6.4	7.93	0.2	0.026	0.05	6.3	6.73	0.035	0.01	17.2	501	86	2	338	21	0.01	0.01
9/18/2017	147	0.82	2	9	0.07	0.002	0.004	60.9	10	20.1	0.01	0.047	0.01	176	22.6	2	5.8	7.8	0.2	0.026	0.05	6.61	7.07	0.035	0.01	14.6	521	90	2	358	22	0.01	0.01
3/13/2018	146	0.86	2	4	0.08	0.002	0.004	76.3	10	18.1	0.01	0.051	0.01	219	19.8	2	7	8.32	0.2	0.031	0.05	6.95	8.3	0.035	0.01	18.3	523	83	2	336	30	0.01	0.01
9/17/2018	289	1.18	2	4	0.09	0.002	0.004	111	10	12.4	0.01	0.018	0.01	310	20.7	2	7.8	6.61	0.2	0.011	0.05	6.84	6.5	0.035	0.01	12	703	59	2	442	50	0.01	0.01
3/20/2019	294	2.03	2	9	0.15	0.002	0.004	139	60	26.4	0.01	0.016	0.01	413	54.2	2	16.1	12.7	0.2	0.011	0.05	6.76	7.28	0.035	0.01	22.9	856	122	2	640	170	0.01	0.01
9/4/2019	295	3.36	2	8	0.29	0.002	0.004	95	21	17.2	0.01	0.01	0.01	282	52.1	2	10.9	12.8	0.2	0.011	0.05	6.83	7.78	0.035	0.01	14.7	637	33.3	2	378	360	0.01	0.01
6/4/2020	238	2.69	1	4.7	0.255	0.001	0.002	90.2	13	16	0.01	0.015	0.01	261	38	1	8.74	7.62	0.2	0.01	0.05	6.91	7.5	0.02	0.005	12	592	52.3	0.2	384	95	0.005	0.01
9/29/2020	207	2.16	1	4.3	0.206	0.001	0.002	76.2	9	14.5	0.01	0.015	0.01	220	27	1	7.13	7.06	0.2	0.006	0.03	6.74	7.2	0.02	0.005	11.9	537	63.1	0.2	358	31	0.005	0.01
3/22/2021	207	1.95	1	4.6	0.182	0.001	0.002	74.1	10	15.6	0.01	0.021	0.01	213	23.3	1	6.87	6.97	0.2	0.006	0.05	6.8	7	0.02	0.005	12.3	554	54.8	0.2	320	26	0.005	0.01
8/24/2021	173	1.5	1	3.2	0.147																												

TABLE 4  
 Amcelle Rubble Landfill  
 Time Series  
 Elements and Indicator Parameters

Sample Point MW-4

Lab Results	Alkalinity to ph 4.5	Ammonia nitrogen	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chemical oxygen demand	Chloride	Chromium	Cobalt	Copper	Hardness	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate nitrogen	pH	Potassium	Selenium	Silver	Sodium	Specific conductance	Sulfate	Thallium	Total dissolved solids	Turbidity	Vanadium	Zinc
2/23/1995	246			24	0.1		0.0005			10	4	0.01									0.05	6.9				590						0.095	
3/12/1996				12	0.1									240								6.59											0.03
1/24/1997				23	0.11									310	14							6.49											0.03
4/30/1998	970			13	0.56		0.0025	623	82	3	0.08			1760	74	48.4			0.2		0.05	7.4				548						0.705	
12/2/1998	654			20	0.1		0.0006	209	10	3	0.01			567	10	11.2			0.2		0.05	7.3				578						0.056	
3/30/1999	408			20	0.09		0.0005	158	20	3	0.01			434	8	9.4			0.2		0.05	7.8				532						0.083	
9/28/1999	545			20	0.1		0.0006	199	25	3	0.01			544	7	11.5			0.2		0.1	6.9				536						0.07	
3/28/2000	533			30	0.1		0.0005	204	15	4	0.01			549	8	9.6			0.2		0.05	6.9				566						0.035	
11/2/2000	223			10	0.07		0.0005	86.6	15	5	0.01			243	5	6.6			0.2		0.05	6.6	1.5		6.2	489	66					0.005	
4/25/2001	137			10	0.08		0.0005	49.7	15	4	0.01			149	5	5.9			0.2		0.05	6.6	1.6		6.7	378	60					0.011	
10/24/2001	229			10	0.08		0.0005	97.4	15	4	0.01			272	5	7			0.2		0.05	6.8	2		7.4	536	65					0.015	
3/21/2002	143			10	0.07		0.0005	56.6	15	5	0.01			165	5	5.9			0.2		0.05	6.8	1.6		5.9	379	61					0.01	
9/25/2002	221			10	0.07		0.0005	89.3	15	5	0.01			252	5	7			0.2		0.05	7	1.6		5.9	519	62					0.015	
3/25/2003	133			20	0.09		0.0005	49.8	15	4	0.01			150	5	6.2			0.2		0.05	6.4	1.9		7.2	362	67					0.019	
10/6/2003	145			10	0.07		0.0005	48.2	15	2	0.01			144	5	5.7			0.2		0.05	6.4	1.7		6	393	65					0.008	
3/24/2004	131			11.6	0.0821		0.005	0.1	10	2.41	0.01			157	5	0.1			0.2		0.05	6.39	1.73		6.1	374	87.8					0.0138	
9/22/2004	148			10	0.07		0.005	62.8	10	3	0.01			183	5	6.4			0.2		0.05	6.32	1.8		6	404	65					0.02	
3/29/2005	127			10	0.05		0.002	35.4	10	2	0.01			106	5	4.2			0.2		0.05	6.5	0.9		0.2	354	65					0.01	
8/23/2005	181			12	0.08		0.002	76.7	10	3	0.01			221	5	7.2			0.2		0.05	6.17	1.9		6	457	75					0.01	
3/9/2006	157			16	0.08		0.005	68.1	10	6	0.01			197	5	6.6			0.2		0.13	6.39	2		6.4	407	87					0.01	
9/15/2006	197			22	0.09		0.005	81.6	10	4	0.01			233	5	7			0.2		0.05	6.87	2		6.3	483	88					0.02	
3/9/2007	177			10	0.08		0.005	65.3	10	4	0.01			190	5	6.5			0.2		0.05	6.32	1.9		6.2	437	67					0.01	
9/27/2007	199			26	0.11		0.005	80.2	10	5	0.01			229	5	7.1			0.2		0.05	6.63	2		6.8	491	71					0.01	
3/14/2008	141			11	0.1		0.005	57	10	5	0.01			172	5	7.2			0.2		0.05	6.99	1.9		6.7	396	78					0.01	
9/26/2008	200			10	0.1		0.005	80.3	10	5	0.01			233	5	7.9			0.2		0.05	6.57	1.8		7.3	539	89					0.01	
3/26/2009	163			21	0.13		0.005	77.1	10	6	0.01			225	5	7.9			0.2		0.05	6.51	2.2		7.7	470	96					0.01	
9/10/2009	177			11	0.1		0.005	78.2	10	5	0.01			227	5	7.7			0.2		0.05	6.73	2.2		7.7	504	99					0.01	
5/7/2010	143			19	0.11		0.004	66.6	10	5.22	0.01			196	2	7.32			0.2		0.06	6.37	1.95		7.4	460	96.9					0.01	
2/25/2011	200			9	0.13		0.004	91.6	10	7.2	0.01			261	2	7.9			0.2		0.18	6.67	2.3		8.1	557	98					0.01	
9/28/2011	177			10	0.13		0.004	95.2	10	5.59	0.01			275	2	9.1			0.2		0.06	6.61	2.31		8.2	593	129					0.01	
3/15/2012	90			10	0.12		0.004	66.6	10	5.53	0.01			205	2	9.3			0.2		0.32	7.69	2.26		8.7	497	152					0.01	
8/23/2012	191	1.01	2	10	0.13	0.002	0.004	108	10	5.47	0.01	0.01	0.01	312	32.9	2	10.5	10.2	0.2	0.011	0.49	7.08	2.6	0.035	0.01	9	599	125	2	454	50.3	0.01	0.01
3/21/2013	102	0.79	2	9	0.14	0.002	0.004	86.5	10	6.8	0.01	0.014	0.01	266	28.4	2	12.1	13.9	0.2	0.011	0.06	7.79	2.76	0.035	0.01	10	588	172	2	378	14.6	0.01	0.01
9/18/2013	165	1.08	2	11	0.17	0.002	0.004	109	10	9.05	0.01	0.011	0.01	326	38.9	2	12.9	14.7	0.2	0.011	0.35	6.78	2.71	0.035	0.01	10.6	661	175	2	488	18.8	0.01	0.01
3/13/2014	100	0.89	2	10	0.15	0.002	0.004	95.3	15	8.95	0.01	0.015	0.01	292	27.9	2	13.2	15.4	0.2	0.011	0.29	6.81	2.81	0.035	0.01	11.6	616	182	2	416	13.3	0.01	0.01
8/29/2014	113	1.2	2	18	0.16	0.002	0.004	92.8	10	9.28	0.01	0.016	0.01	285	39	2	12.9	15.1	0.2	0.011	0.06	6.44	3.2	0.035	0.01	12.1	636	185	2	209	23.7	0.01	0.02
3/25/2015	98	0.93	2	15	0.12	0.002	0.004	77	10	8.71	0.01	0.018	0.01	242	25.3	2	12	14.4	0.2	0.011	0.38	6.43	2.38	0.035	0.01	10.9	597	183	2	347	23.3	0.01	0.02
9/29/2015	214	1.66	2	10	0.12	0.002	0.004	101	10	6.78	0.01	0.01	0.01	294	27.4	2	9.8	11.2	0.2	0.011	0.06	6.8	2.67	0.035	0.01	9.1	571	84	2	384	101	0.01	0.02
3/25/2016	89	1.12	2	10	0.13	0.002	0.004	84.6	11	12.3	0.01	0.019	0.01	264	24	2	12.9	16.7	0.2	0.014	0.05	6.36	3.2	0.035	0.01	13.5	574	164	2	376	5.6	0.01	0.02
9/1/2016	223	1.28	2	13	0.13	0.002	0.004	110	10	11.4	0.01	0.01	0.01	322	28.5	2	11.4	13.9	0.2	0.011	0.05	6.67	2.85	0.035	0.01	11.1	648	118	2	440	22.7	0.01	0.02
3/24/2017	103	1.25	2	12	0.16	0.002	0.004	85.8	10	16.7	0.01	0.013	0.01	261	32	2	11.4	15.3	0.2	0.011	0.05	6.32	2.59	0.035	0.01	12.9	603	160	2	390	9	0.01	0.01
9/18/2017	197	1.31	2	12	0.14	0.002	0.004	104	10	18.2	0.01	0.01	0.01	307	31.1	5	11.4	13.9	0.2	0.011	0.05	6.66	2.87	0.035	0.01	12.9	716	166	2	512	15	0.01	0.01
3/13/2018	117	0.95	2	9	0.12	0.002	0.004	80.2	11	19.5	0.01	0.018	0.01	249	22.1	2	11.8	15.2	0.2	0.012	0.05	6.3	2.93	0.035	0.01	14.3	639	176	2	426	11	0.01	0.01
9/17/2018	104	0.71	2	11	0.12	0.002	0.004	72.3	10	18.6	0.01	0.018	0.01	229	34.1	2	11.9	13.1	0.2	0.011	0.05	6.65	2.71	0.035	0.01	14.4	631	168	2	440	9.4	0.01	0.02
3/20/2019	105	0.62	2	13	0.11	0.002	0.004	62.5	10	9.55	0.01	0.013	0.01	201	36.9	2	10.9	10.1	0.2	0.011	0.05	6.47	2.8	0.035	0.01	15.6	566	157	2	378	37	0.01	0.02
9/4/2019	116	0.76	2	10	0.09	0.002	0.004	58.1	10	4.19	0.01	0.015	0.01	182	15.2	2	8.9	10.1	0.2	0.011	0.05	6.57	2.59	0.035	0.01	14	495	140	2	316	12	0.01	0.02
6/4/2020	32	0.68	1	31.8	0.077	0.001	0.002	58.8	10	5.24	0.01	0.016	0.01	182	15.6	1	8.44	10.2	0.2	0.007	0.02	6.07	2.6	0.02	0.005	13.4	465	129	0.2	348	6.6	0.005	0.015
9/29/2020	148	0.96	1	11.5	0.092	0.001	0.002	60.3	10	5.83	0.01	0.014	0.01	183	21.3	1	7.88	9.85	0.2	0.01	0.05	6.63	2.8	0.02	0.005	12.3	489	123	0.2	268	21	0.005	0.012
3/22/2021	99	0.67	1	8.4	0.078	0.001	0.002	53.4	10	8.31																							

TABLE 4  
Amcelle Rubble Landfill  
Time Series  
Elements and Indicator Parameters

Sample Point MW-5

Lab Results	Alkalinity to ph 4.5	Ammonia nitrogen	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chemical oxygen demand	Chloride	Chromium	Cobalt	Copper	Hardness	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate nitrogen	pH	Potassium	Selenium	Silver	Sodium	Specific conductance	Sulfate	Thallium	Total dissolved solids	Turbidity	Vanadium	Zinc
2/23/1995	293				0.06		0.0005			5	0.01			400		5			0.2		0.45	7.3				618						0.065	
3/12/1996					0.04									300							0.44	6.83											0.08
1/24/1997					0.11						0.015			340		15					0.1	6.65											0.09
4/30/1998	271			10	0.18		0.0011	120	10	3	0.03			341	24	10.1		0.2			0.17	7.6				556						0.154	
12/3/1998	285			10	0.13		0.0031	111	25	3	0.02			329	15	12.7		0.2			0.08	7.4				555						0.113	
3/30/1999	314			10	0.08		0.0015	139	15	3	0.01			378	8	7.8		0.2			0.18	7.9				585						0.096	
9/28/1999	314			10	0.12		0.0015	131	15	3	0.01			363	12	9		0.2			0.09	7.3				641						0.095	
3/28/2000	303			10	0.07		0.0012	142	15	4	0.01			396	7	10.2		0.2			0.97	6.7				578						0.055	
11/3/2000	242			10	0.04		0.0008	85.3	15	5	0.01			233	5	4.9		0.2			0.14	7.2	3.6		4.3	513	51					0.019	
4/25/2001	248			10	0.03		0.0005	110	15	3	0.01			295	5	5.2		0.2			0.64	7.1	3.6		6.2	556	51					0.035	
10/24/2001	227			10	0.04		0.0005	95.3	15	3	0.01			263	5	6.2		0.2			0.05	7	4.5		5.1	514	48					0.021	
3/21/2002	194			10	0.04		0.0007	102	15	4	0.01			279	5	6		0.2			0.13	7	4.4		5.4	517	90					0.047	
9/25/2002	289			10	0.04		0.0007	120	15	4	0.01			327	5	6.4		0.2			0.13	7.4	3.8		4.3	634	60					0.034	
3/25/2003	259			10	0.04		0.0005	110	15	3	0.01			298	5	5.9		0.2			0.69	7.1	4.3		7.9	579	66					0.063	
10/6/2003	247			10	0.05		0.0007	101	15	2	0.01			275	5	5.6		0.2			0.16	6.7	4.4		6.5	564	60					0.069	
3/24/2004	256			10	0.0452		0.005	0.1	10	3.61	0.01			350	5	0.1		0.2			0.156	6.87	3.63		6.49	592	86.1					0.0521	
9/22/2004	193			10	0.04		0.005	83.8	10	1	0.01			233	5	5.8		0.2			0.05	6.43	4		5.1	464	91					0.07	
3/29/2005	261			10	0.05		0.002	108	10	2	0.01			299	5	6.9		0.2			0.05	7.06	2.9		8.5	555	52					0.024	
8/23/2005	205			10	0.04		0.002	82.2	10	2	0.01			238	5	7.9		0.2			0.05	6.15	4.3		4.7	472	54					0.04	
3/9/2006	199			10	0.03		0.005	83	10	3	0.01			226	5	4.5		0.2			0.07	6.81	4.5		4.9	452	57					0.07	
9/15/2006	253			10	0.08		0.005	115	10	3	0.01			324	5	9.3		0.2			0.05	6.9	5.1		5	535	56					0.07	
3/9/2007	215			10	0.06		0.005	91.6	10	3	0.01			254	5	6.2		0.2			0.18	6.83	4.6		5.2	476	55					0.05	
9/27/2007	249			10	0.04		0.005	92.8	10	3	0.01			255	5	5.6		0.2			0.06	6.9	4.8		4.6	538	53					0.06	
3/14/2008	219			10	0.07		0.005	114	15	3	0.01			323	7	9.7		0.2			0.1	7.66	5.2		5.4	495	53					0.09	
9/26/2008	98			10	0.04		0.005	47.5	10	2	0.01			139	5	4.9		0.2			0.05	6.34	4.2		4.4	279	43					0.04	
3/26/2009	211			10	0.06		0.005	101	10	3	0.01			292	5	9.8		0.2			0.05	6.84	5.1		4.8	457	57					0.08	
9/10/2009	131			10	0.06		0.005	56	10	2	0.01			162	5	5.5		0.2			0.05	6.63	4.7		4.5	318	38					0.02	
5/7/2010	199			2	0.05		0.004	82	10	1.54	0.01			240	2	8.45		0.2			0.06	6.67	4.55		4.8	458	45.2					0.05	
2/25/2011	142			2	0.04		0.004	78.7	10	2.1	0.01			226	2	7.1		0.2			0.25	6.45	4.4		7	425	81					0.06	
9/28/2011	233			2	0.04		0.004	100	10	1.72	0.01			281	2	7.5		0.2			0.06	6.94	4.26		4.8	536	45					0.04	
3/15/2012	186			2	0.04		0.004	78.8	10	2.31	0.01			226	2	7		0.2			0.35	8.29	3.94		5.6	463	53					0.01	
8/23/2012	116	0.1	2	2	0.04	0.002	0.004	44.9	10	1.31	0.01	0.037	0.01	145	1.28	2	8	2.46	0.2	0.027	0.29	7.03	4.88	0.035	0.01	5	304	39	2	278	9.1	0.01	0.03
3/21/2013	209	0.1	2	2	0.05	0.002	0.004	82.1	10	1.31	0.01	0.041	0.01	241	4.34	4	8.8	2.29	0.2	0.023	0.08	8.33	5.14	0.035	0.01	5.6	496	43	2	366	136	0.01	0.06
9/18/2013	95	0.1	2	2	0.04	0.002	0.004	38.9	15	1.88	0.01	0.033	0.01	126	1.65	2	7	2.43	0.2	0.016	0.38	7.07	4.87	0.035	0.01	5	280	44	2	244	8.3	0.01	0.02
3/14/2014	150	0.1	2	2	0.04	0.002	0.004	81.4	10	1.61	0.01	0.031	0.01	233	1.65	2	7.2	2.05	0.2	0.019	0.06	7.07	4.69	0.035	0.01	5.8	390	44	2	294	17.7	0.01	0.03
8/29/2014	88	0.1	2	2	0.04	0.002	0.004	38.1	10	1.63	0.01	0.035	0.01	118	1.18	2	5.6	2.37	0.2	0.018	0.49	6.44	5.69	0.035	0.01	5.6	278	45	2	109	8.9	0.01	0.03
3/25/2015	264	0.1	2	2	0.03	0.002	0.004	110	10	1.4	0.01	0.028	0.01	300	0.14	2	6.4	1.52	0.2	0.016	0.42	7.33	3.02	0.035	0.01	6.7	580	52	2	336	0.9	0.01	0.01
9/29/2015	252	0.15	2	2	0.04	0.002	0.004	103	10	1.69	0.01	0.024	0.01	304	1.19	2	11.1	2.4	0.2	0.021	0.06	6.94	4.82	0.035	0.01	5.2	551	43	2	392	9.2	0.01	0.02
3/25/2016	200	0.1	2	2	0.03	0.002	0.004	95.9	10	1.53	0.01	0.016	0.01	267	0.35	2	6.7	1.45	0.2	0.023	0.06	7.12	5.23	0.035	0.01	7.1	476	49	2	340	1.7	0.01	0.01
9/1/2016	108	0.1	2	2	0.03	0.002	0.004	39.9	10	1.7	0.01	0.029	0.01	129	1.18	2	7	2.18	0.2	0.014	0.05	6.64	4.64	0.035	0.01	4.9	284	44	2	238	7.3	0.01	0.03
3/24/2017	194	0.1	2	2	0.04	0.002	0.004	86.2	10	2.01	0.01	0.021	0.01	240	0.31	2	6.1	1.47	0.2	0.011	0.07	6.97	4.15	0.035	0.01	5.4	481	50	2	332	1.5	0.01	0.01
9/18/2017	103	0.1	2	2	0.04	0.002	0.004	37.7	10	1.98	0.01	0.031	0.01	120	0.86	2	6.3	2.27	0.2	0.02	0.05	6.59	4.89	0.035	0.01	5.3	299	51	2	254	1.4	0.01	0.01
3/13/2018	172	0.1	2	2	0.03	0.002	0.004	75.2	10	2.37	0.01	0.01	0.01	211	0.31	2	5.5	1	0.2	0.014	0.05	6.71	4.17	0.035	0.01	5.8	443	53	2	318	1.8	0.01	0.01
9/17/2018	162	0.1	2	2	0.04	0.002	0.004	72.2	10	2.88	0.01	0.028	0.01	206	0.9	2	6.3	2.7	0.2	0.012	0.05	7.06	4.3	0.035	0.01	5.6	452	58	2	324	1	0.01	0.01
3/20/2019	97	0.1	2	2	0.03	0.002	0.004	52.9	10	3.48	0.01	0.013	0.01	156	0.28	2	5.8	1.61	0.2	0.015	0.05	6.65	4.13	0.035	0.01	5.9	337	67	2	260	2	0.01	0.01
9/4/2019	94	0.1	2	2	0.04	0.002	0.004	43.7	10	1.86	0.01	0.017	0.01	134	0.91	2	6.1	2.94	0.2	0.012	0.05	6.49	4.2	0.035	0.01	5.2	300	52.6	2	232	0.7	0.01	0.01
6/4/2020	104	0.1	1	1	0.027	0.001	0.002	50.6	10	2.96	0.01	0.012	0.01	148	0.48	1	5.19	1.55	0.2	0.007	0.03	6.99	3.9	0.02	0.005	4.7	311	48.5	0.2	250	0.8	0.005	0.006
9/29/2020	38	0.07	1	1	0.043	0.0005	0.002	18.4	10	2.66	0.01	0.019	0.01	62.3	0.56	1	3.96	2.23	0.2	0.016	0.05	6.25	4.5	0.02	0.005	4.2	173	39.9	0.2	188	1.1	0.005	0.026
3/22/2021	110	0.1	1	1	0.026	0.001	0.002	49.7	10	2.96	0.01	0.009	0.01	144	0.19	1	4.82																

TABLE 4  
Amcelle Rubble Landfill  
Time Series  
Elements and Indicator Parameters

Sample Point MW-6

Lab Results	Alkalinity to ph 4.5	Ammonia nitrogen	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chemical oxygen demand	Chloride	Chromium	Cobalt	Copper	Hardness	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate nitrogen	pH	Potassium	Selenium	Silver	Sodium	Specific conductance	Sulfate	Thallium	Total dissolved solids	Turbidity	Vanadium	Zinc
2/23/1995	211				10	0.03	0.0012		10	7	0.01			380		5			0.2		0.47	7.1				707						0.04	
3/12/1996						0.03								320							2.2	6.82											0.12
1/24/1997						0.06				10	0.008			380		7					0.13	6.68											0.04
4/30/1998	123			10		0.21	0.0005	75.8	10	4	0.03			253		29	15.4		0.2		2.3	7.3				507						0.134	
12/3/1998	142			10		0.04	0.0008	88.5	10	4	0.01			276		5	13.5		0.2		0.28	7.2				583						0.053	
3/30/1999	255			10		0.06	0.0013	135	15	5	0.01			392		6	13.3		0.2		2.05	7.9				706						0.067	
9/28/1999	164			10		0.04	0.0012	80.9	15	4	0.01			248		5	11.2		0.2		0.19	6.6				521						0.052	
3/28/2000	230			10		0.04	0.0011	122	15	8	0.01			357		6	12.4		0.2		3.78	6.5				716						0.051	
11/3/2000	114			10		0.02	0.0008	62.9	15	8	0.01			203		5	11.1		0.2		0.29	6.6	3		7.4	473	130					0.031	
4/25/2001	185			10		0.02	0.0005	103	15	7	0.01			306		5	11.6		0.2		1.35	6.8	2.9		8.5	610	120					0.052	
10/23/2001	72			10		0.02	0.001	53.3	15	6	0.01			183		5	12.1		0.2		0.49	6.5	4.6		9.4	449	133					0.056	
3/20/2002	51			10		0.02	0.0007	43.4	15	6	0.01			149		5	9.9		0.2		0.68	6.5	3		6.7	393	131					0.033	
9/25/2002	80			10		0.02	0.0007	50.7	15	7	0.01			174		5	11.4		0.2		0.15	6.6	3.2		7.1	439	120					0.031	
3/25/2003	117			10		0.02	0.0005	74.5	15	9	0.01			235		5	11.8		0.2		1.2	6.2	2.9		10.4	533	125					0.052	
10/6/2003	168			10		0.02	0.0005	93.1	15	7	0.01			284		7	12.5		0.2		0.16	6.6	3.4		11.7	652	178					0.038	
3/24/2004	173			10	0.0208		0.005	0.1	10	5.01	0.01			324		5	0.1		0.2		0.05	6.74	3.14		11.6	611	153					0.031	
9/22/2004	167			10		0.02	0.005	91.6	10	5	0.01			277		5	11.6		0.2		0.15	6.58	3.4		10.4	584	136					0.05	
3/29/2005	198			10		0.02	0.002	101	10	3	0.01			300		5	11.9		0.2		0.06	6.95	3.3		10.5	609	134					0.036	
8/23/2005	135			10		0.02	0.002	81.1	10	5	0.01			257		5	13.2		0.2		0.08	6.54	3.8		9.7	530	148					0.15	
3/9/2006	250			10		0.01	0.005	126	10	6	0.01			364		5	12.1		0.2		0.6	7.27	3.8		8.9	698	151					0.08	
9/15/2006	78			10		0.02	0.013	55.5	10	6	0.01			188		5	11.9		0.2		0.12	6.94	4.1		9.1	447	155					0.09	
3/9/2007	285			10		0.01	0.005	134	10	5	0.01			388		5	12.6		0.2		3.36	7.27	3.7		8.3	721	112					0.03	
9/27/2007	131			10		0.02	0.005	59.3	10	8	0.01			200		5	12.5		0.2		0.15	7.64	3.8		8	521	123					0.04	
3/14/2008	295			10		0.01	0.005	143	10	8	0.01			410		5	12.8		0.2		0.37	7.36	3.7		9	815	125					0.06	
9/26/2008	91			10		0.02	0.005	69.5	10	10	0.01			237		5	15.4		0.2		0.05	6.92	3.9		10.9	530	154					0.06	
3/26/2009	217			10		0.01	0.005	124	10	8	0.01			366		5	13.8		0.2		0.16	7.05	3.9		10.2	672	173					0.06	
9/10/2009	89			10		0.02	0.005	66.7	10	6	0.01			225		5	14.3		0.2		0.14	6.83	4.3		10.6	497	138					0.05	
5/7/2010	206			2	0.02		0.004	106	10	6.1	0.01			318		2	13.2		0.2		0.06	7.02	3.53		9.9	658	147					0.04	
2/25/2011	278			2	0.01		0.004	155	10	3.55	0.01			448		2	14.9		0.2		2.24	7.26	3.8		10.7	802	155					0.02	
9/28/2011	246			2	0.02		0.004	142	10	10	0.01			422		2	16.3		0.2		0.06	7.11	4.26		13.3	835	201					0.07	
3/15/2012	201			2	0.02		0.004	110	10	4.89	0.01			336		2	14.9		0.2		0.2	8.4	3.73		12.2	687	157					0.05	
8/23/2012	139	1.15	2	2	0.02	0.002	0.004	88.6	10	4.14	0.01	0.048	0.01	284	0.06	2	15.3	7.83	0.2	0.051	0.13	7.53	4.02	0.035	0.01	11.3	547	150	2	424	0.9	0.01	0.05
3/21/2013	222	0.74	2	2	0.01	0.002	0.004	111	10	4.79	0.01	0.023	0.01	335	0.16	2	14.1	5.07	0.2	0.036	0.2	8.38	3.94	0.035	0.01	9.9	689	131	2	468	1.4	0.01	0.04
9/18/2013	130	1.31	2	2	0.02	0.002	0.004	77.1	10	7.61	0.01	0.064	0.01	254	0.21	2	14.9	8.35	0.2	0.053	0.06	7.15	4.22	0.035	0.01	11.7	595	157	2	414	1.2	0.01	0.05
3/14/2014	228	0.95	2	2	0.01	0.002	0.004	131	10	5.81	0.01	0.026	0.01	392	0.09	2	15.7	5.51	0.2	0.036	0.06	7.76	3.97	0.035	0.01	12	707	129	2	472	2.2	0.01	0.06
8/29/2014	203	1.57	2	2	0.02	0.002	0.004	109	10	8.43	0.01	0.045	0.01	338	0.05	2	15.9	8.1	0.2	0.055	0.06	7.5	4.73	0.035	0.01	13.3	706	151	2	200	0.5	0.01	0.06
3/25/2015	210	0.77	2	2	0.01	0.002	0.004	102	10	4.92	0.01	0.025	0.01	317	0.05	2	14.9	3.48	0.2	0.026	0.16	7.77	3.5	0.035	0.01	10.1	652	133	2	357	1	0.01	0.03
9/29/2015	147	1.29	2	2	0.02	0.002	0.004	79.8	10	5.32	0.01	0.066	0.01	271	0.16	2	17.4	7.89	0.2	0.047	0.06	7.55	3.82	0.035	0.01	10.2	589	136	2	400	1.3	0.01	0.05
3/25/2016	191	1	2	2	0.01	0.002	0.004	113	10	6.24	0.01	0.025	0.01	350	0.05	2	16.7	5.14	0.2	0.046	0.06	7.61	4.63	0.035	0.01	12.4	644	137	2	406	0.4	0.01	0.06
9/1/2016	164	1.42	2	2	0.02	0.002	0.004	106	10	9.34	0.01	0.05	0.01	328	0.05	2	15.3	10.3	0.2	0.056	0.13	7.59	4.29	0.035	0.01	12.9	625	168	2	480	0.9	0.01	0.06
3/24/2017	196	0.85	2	2	0.02	0.002	0.004	111	10	7.72	0.01	0.024	0.01	344	0.05	2	16.1	5.17	0.2	0.038	0.16	7.41	3.94	0.035	0.01	12.2	682	147	2	456	0.8	0.01	0.07
9/18/2017	197	1.28	2	2	0.01	0.002	0.004	117	10	12	0.01	0.048	0.01	362	0.08	2	17	9.73	0.2	0.061	0.05	7.56	4.4	0.035	0.01	14.8	747	210	2	546	1.1	0.01	0.07
3/13/2018	174	0.71	2	2	0.01	0.002	0.004	101	10	6.53	0.01	0.027	0.01	320	0.05	2	16.8	4.51	0.2	0.035	0.24	7.75	4.25	0.035	0.01	13.2	662	163	2	450	1.3	0.01	0.05
9/17/2018	142	0.9	2	2	0.01	0.002	0.004	82.2	10	6.17	0.01	0.038	0.01	270	0.05	2	15.8	7.51	0.2	0.046	0.06	7.47	4.06	0.035	0.01	12.8	594	151	2	416	1.8	0.01	0.05
3/20/2019	127	0.44	2	2	0.01	0.002	0.004	58	10	1.85	0.01	0.012	0.01	192	0.15	2	11.4	3.91	0.2	0.021	0.06	7.1	2.37	0.035	0.01	6.7	421	86	2	276	8.5	0.01	0.02
9/4/2019	133	0.35	2	2	0.02	0.002	0.004	64.3	10	4.65	0.01	0.025	0.01	228	0.73	2	16.4	4.83	0.2	0.026	0.06	7.53	2.68	0.035	0.01	10.4	458	100	2	296	1	0.01	0.04
6/4/2020	143	0.36	1	1	0.024	0.001	0.002	78	10	3.7	0.01	0.02	0.01	253	0.11	1	14.2	5.7	0.2	0.033	0.05	7.15	2.8	0.01	0.005	10	528	131	0.2	400	0.6	0.005	0.027
9/30/2020	184	0.73	1	1	0.023	0.001	0.002	90	10	3.98	0.01	0.033	0.01	282	0.19	0.4	14	6.1	0.2	0.033	0.16	7.74	3.6	0.02	0.005	9.6	570	139	0.2	404	2.3	0.005	0.038
3/22/2021	134	0.56	1	1	0.025	0																											

TABLE 4  
Amcelle Rubble Landfill  
Time Series  
Elements and Indicator Parameters

Sample Point MW-7

Lab Results	Alkalinity to ph 4.5	Ammonia nitrogen	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chemical oxygen demand	Chloride	Chromium	Cobalt	Copper	Hardness	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate nitrogen	pH	Potassium	Selenium	Silver	Sodium	Specific conductance	Sulfate	Thallium	Total dissolved solids	Turbidity	Vanadium	Zinc	
2/23/1995	301						0.0005							560		6				0.2	0.08	7.6				1010								
3/12/1996					0.03									300							0.25	7.46												
1/24/1997					0.04					10				380		11						7.26												
4/30/1998	167			10	0.04		0.0005	90.3	13	6	0.01			290		9	15.7		0.2	0.05	7.8					590							0.008	
12/3/1998	451			10	0.13		0.0005	179	18	10	0.01			552		14	25.3		0.2	0.05	7.9					1010							0.016	
3/30/1999	293			10	0.07		0.0005	161	15	9	0.01			498		5	23.2		0.2	0.23	8.1					1020							0.126	
9/28/1999	418			10	0.15		0.0005	205	15	8	0.01			630		27	28.8		0.2	0.05	7.5					955							0.053	
3/28/2000	481			10	0.13		0.0005	238	21	8	0.01			719		30	30		0.2	0.29	7.1					920							0.05	
11/3/2000	461			10	0.09		0.0005	156	15	9	0.01			490		5	24.4		0.2	0.05	7.7	8.7			13.3	929	110						0.005	
4/25/2001	370			10	0.06		0.0005	131	15	6	0.01			420		5	22.5		0.2	0.12	7.4	6.8			13	861	110						0.036	
10/24/2001	495			10	0.14		0.0005	159	15	7	0.01			508		5	26.8		0.2	0.05	7.4	13			17.3	986	70						0.005	
3/20/2002	375			10	0.1		0.0005	213	15	8	0.01			636		5	25.1		0.2	0.11	7.6	6			10.3	1080	309						0.012	
9/25/2002	451			10	0.13		0.0005	218	15	10	0.01			678		5	32.2		0.2	0.07	7.5	9.7			14.8	1230	286						0.021	
3/25/2003	406			10	0.12		0.0005	144	15	7	0.01			455		5	23.3		0.2	0.05	7	7.1			12.2	863	90						0.024	
10/6/2003	444			10	0.39		0.0005	118	15	6	0.01			370		5	18.1		0.2	0.05	7.2	14			15.6	804	10						0.005	
3/24/2004	188			10	0.0763		0.005	0.1	10	6.78	0.01			318		5	0.1		0.2	0.05	7.23	5.23			14.5	610	134						0.01	
9/22/2004	413			10	0.16		0.005	176	10	68	0.01			540		5	24.4		0.2	0.05	6.68	9.7			25.2	1020	169						0.01	
3/29/2005	244			10	0.06		0.002	102	10	4	0.01			317		5	15.1		0.2	0.06	7.5	5.7			25.7	671	123						0.01	
8/23/2005	402			10	0.14		0.002	151	10	6	0.01			462		5	20.3		0.2	0.05	6.56	8.8			22.9	825	93						0.01	
3/9/2006	398			10	0.12		0.005	270	10	11	0.01			807		5	32.2		0.2	0.14	6.98	11.4			27.6	1380	549						0.01	
9/15/2006	521			10	0.16		0.005	265	48	10	0.01			801		13	33.7		0.2	0.09	7.26	13.6			29	1370	405						0.03	
3/9/2007	339			10	0.09		0.005	395	10	9	0.01			1130		5	35.6		0.2	0.05	6.94	9.5			21.1	1650	757						0.01	
9/27/2007	452			10	0.08		0.005	338	10	12	0.01			732		5	35.5		0.2	0.13	6.95	12			23.2	1650	691						0.03	
3/14/2008	406			10	0.06		0.005	329	10	10	0.01			974		5	37.1		0.2	0.05	7.11	9			24.4	1660	591						0.01	
9/26/2008	510			10	0.13		0.005	332	10	15	0.01			1010		5	43.7		0.2	0.05	7.18	14.4			29.4	1630	540						0.06	
3/26/2009	433			10	0.08		0.005	383	11	16	0.01			1140		5	44.1		0.2	0.05	7.06	11.2			31.8	1670	785						0.01	
9/10/2009	557			10	0.17		0.005	377	17	16	0.01			1140		10	49.3		0.2	0.05	7.42	13.8			35.6	1620	478						0.04	
5/7/2010	208			2	0.04		0.004	117	10	5.09	0.01			359		2	16.5		0.2	0.06	7.23	6.87			17.4	718	184						0.01	
2/25/2011	442			2	0.08		0.004	318	10	12.6	0.01			927		2	32.5		0.2	0.24	7.13	11.2			23.6	1500	492						0.04	
9/28/2011	573			2	0.15		0.004	259	11	27.2	0.01			783		2	33		0.2	0.06	7.02	11.3			37.2	1440	235						0.01	
3/15/2012	279			2	0.07		0.004	136	10	16.5	0.01			411		2	17.6		0.2	0.22	8.14	6.28			19.7	759	93						0.01	
8/23/2012	506	0.52	2	2	0.17	0.002	0.004	164	10	17.8	0.01	0.01	0.01	498	5.63	2	21.5	0.22	0.2	0.011	0.08	8.05	10.9	0.035	0.01	25	854	3	2	572	66.4	0.01	0.02	
3/21/2013	464	0.1	2	2	0.13	0.002	0.004	191	10	16.4	0.01	0.01	0.01	578	3.37	2	24.7	0.24	0.2	0.011	0.35	8.26	8.8	0.035	0.01	23	1040	95	2	688	27.6	0.01	0.02	
9/18/2013	579	0.1	2	2	0.15	0.002	0.004	191	10	18.1	0.01	0.01	0.01	587	1.55	2	26.8	0.18	0.2	0.011	0.39	7.38	10.3	0.035	0.01	28.3	1120	34	2	676	11.8	0.01	0.02	
3/14/2014	457	0.1	2	2	0.12	0.002	0.004	244	10	15.9	0.01	0.01	0.04	728	7.5	2	28.9	0.32	0.2	0.011	0.46	7.77	8.44	0.035	0.01	23.6	1250	228	2	826	5.7	0.01	0.1	
8/29/2014	499	0.21	2	2	0.11	0.002	0.004	164	10	8.76	0.01	0.01	0.02	496	2.92	2	21	0.19	0.2	0.011	0.58	7.31	9.44	0.035	0.01	26.1	946	28	2	246	9.7	0.01	0.09	
3/25/2015	403	0.1	2	2	0.1	0.002	0.004	237	10	11.9	0.01	0.01	0.01	701	8.36	2	26.3	0.65	0.2	0.011	0.06	7.52	6.71	0.035	0.01	21.3	1170	307	2	605	60.8	0.01	0.01	
9/29/2015	501	0.5	2	2	0.12	0.002	0.004	269	12	11.9	0.01	0.01	0.08	793	5.27	2	29.6	0.25	0.2	0.011	0.06	7.38	8.9	0.035	0.01	24.6	1290	238	2	938	28.2	0.01	0.94	
3/25/2016	366	0.1	2	2	0.07	0.002	0.004	203	10	14.3	0.01	0.01	0.03	604	4.4	2	23.6	0.16	0.2	0.011	0.06	7.7	6.95	0.035	0.01	22.5	975	213	2	654	12.3	0.01	0.17	
9/1/2016	555	1.09	2	2	0.1	0.002	0.004	219	10	9.87	0.01	0.01	0.04	652	3.64	2	25.8	0.21	0.2	0.011	0.22	7.29	8.69	0.035	0.01	26.6	1020	100	2	722	16.1	0.01	0.46	
3/24/2017	432	0.11	2	2	0.09	0.002	0.004	262	10	13.7	0.01	0.01	0.01	768	3.61	2	28	0.23	0.2	0.011	0.05	7.63	6.55	0.035	0.01	21.9	1320	303	2	966	25	0.01	0.01	
9/18/2017	512	0.52	2	3	0.11	0.002	0.004	166	11	8.26	0.01	0.01	0.01	488	4.33	2	17.9	0.18	0.2	0.011	0.05	7.54	8.4	0.035	0.01	19.9	920	4	2	544	33	0.01	0.02	
3/13/2018	438	0.1	2	2	0.1	0.002	0.004	185	10	9.4	0.01	0.01	0.01	547	3.95	2	20.4	0.2	0.2	0.011	0.05	7.73	6.02	0.035	0.01	19.2	1000	119	2	664	31	0.01	0.07	
9/17/2018	308	0.27	2	2	0.06	0.002	0.004	112	10	2.95	0.01	0.01	0.01	315	1.14	2	8.8	0.16	0.2	0.011	0.06	8.04	4.93	0.035	0.01	17.4	652	33	2	398	17	0.01	0.01	
3/20/2019	143	0.1	2	2	0.06	0.002	0.004	64.7	14	2.54	0.01	0.01	0.01	199	0.24	2	9.1	0.03	0.2	0.011	0.17	7.55	7.68	0.035	0.01	7	401	58	2	248	2.6	0.01	0.11	
9/4/2019	311	0.4	2	2	0.13	0.002	0.004	126	16	5.49	0.01	0.01	0.01	395	2.06	2	19.4	0.39	0.2	0.011	0.06	8.04	9.82	0.035	0.01	15.7	810	132	2	506	26	0.01	0.01	
6/4/2020	373	0.1	1	1.4	0.145	0.001	0.002	235	10	5.99	0.01	0.005	0.01	726	2.34	1	33.6	0.637	0.2	0.01	0.05	7.63	8.8	0.02	0.005	21.8	1240	376	0.2	952	19	0.005	0.01	
9/30/2020	460	0.64	1	0.6	0.16	0.001	0.002	258	12	6.55	0.01	0.005	0.01	789	3.01	1	35.2	0.466	0.2	0.01	0.44	7.56	9.9	0.02	0.005	22.7	1220	395	0.2					

TABLE 4  
Amcelle Rubble Landfill  
Time Series  
Elements and Indicator Parameters

Sample Point MW-11

Lab Results	Alkalinity to ph 4.5	Ammonia nitrogen	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chemical oxygen demand	Chloride	Chromium	Cobalt	Copper	Hardness	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate nitrogen	pH	Potassium	Selenium	Silver	Sodium	Specific conductance	Sulfate	Thallium	Total dissolved solids	Turbidity	Vanadium	Zinc
2/23/1995	127				10	0.13	0.001		10	12	0.01			268		5					0.09	6.6				481						0.021	
3/12/1996						0.1				5.8				160								6											0.03
1/24/1997						0.09								240								5.88											
4/30/1998	71						0.0005	44.6	10	4	0.01			152	7	9.8					0.05	6.8				361						0.025	
12/2/1998	61			10		0.1	0.0005	38.6	10	4	0.01			134	7	9.2					0.05	6.6				328						0.051	
3/30/1999	66			10		0.08	0.0005	40.8	15	6	0.01			141	6	9.4					0.05	6.8				334						0.105	
9/28/1999	64			10		0.08	0.0006	36.7	15	6	0.01			128	5	8.7					0.05	6.1				280						0.034	
3/28/2000	83			50		0.78	0.0011	49.1	54	14	0.12			199	76	18.6					0.05	6.1				338						0.397	
11/2/2000	135			10		0.05	0.0005	66.5	15	12	0.01			221	5	13.4					0.15	6.4			6.7	457	110					0.015	
4/25/2001	128			10		0.03	0.0005	72.8	15	7	0.01			242	5	14.5					0.09	6.7	0.7			9.2	525	130				0.017	
10/24/2001	154			10		0.03	0.0005	80.5	15	5	0.01			272	5	17.3					0.05	6.5	0.8			10.6	620	159				0.005	
3/21/2002	150			10		0.25	0.0005	74.2	15	8	0.01			246	5	14.8					0.05	6.8	1.6			10.4	520	125				0.168	
9/25/2002	134			10		0.04	0.0005	69.4	15	6	0.01			236	5	15.3					0.05	6.6	0.9			8.8	539	135				0.027	
3/25/2003	119			10		0.03	0.0005	59.3	15	6	0.01			201	5	12.9					0.15	6.6	1.2			9.9	477	105				0.029	
10/6/2003	105			10		0.03	0.0005	55.7	15	3	0.01			194	5	13.5					0.05	5.9	0.9			8.6	471	138				0.013	
3/24/2004	127			10		0.0201	0.005	0.1	10	4.6	0.01			230	5	0.1					0.139	6.3	0.665			8.66	508	136				0.0342	
9/22/2004	102			10		0.03	0.005	52.3	10	5	0.01			181	5	12.3					0.05	5.83	0.7			7.9	424	112				0.01	
3/29/2005	106			10		0.02	0.002	58.2	10	3	0.01			200	5	13.3					0.12	6.45	0.6			0.2	404	99				0.098	
8/23/2005	121			10		0.02	0.002	57.3	10	3	0.01			195	5	12.7					0.09	5.67	0.8			7.9	439	105				0.01	
3/9/2006	119			10		0.02	0.005	60.6	10	3	0.01			206	5	13.4					0.16	7.55	0.9			8.1	469	119				0.142	
9/15/2006	106			10		0.03	0.005	53	10	4	0.01			183	5	12.3					0.74	6.21	0.9			7.3	401	116				0.03	
3/9/2007	102			10		0.02	0.005	52.1	10	3	0.01			180	5	12.1					0.28	6.49	0.9			7.6	396	85				0.03	
9/27/2007	105			10		0.02	0.005	49	10	3	0.01			169	5	11.4					0.08	6.74	0.7			7.2	392	91				0.06	
3/14/2008	107			10		0.02	0.005	54	10	4	0.01			184	5	12					0.15	7.33	0.9			7.8	407	93				0.08	
9/26/2008	120			10		0.03	0.005	54.7	10	2	0.01			190	5	13.1					0.09	6.27	0.7			7.4	434	93				0.02	
3/26/2009	96			10		0.02	0.005	55.9	10	4	0.01			192	5	12.8					0.13	6.48	1			8	389	119				0.06	
9/10/2009	105			10		0.03	0.005	56.1	10	3	0.01			193	5	12.8					0.1	6.6	1.3			7.7	412	86				0.03	
5/7/2010	134			2		0.02	0.004	70.2	10	2.43	0.01			235	2	14.4					0.11	6.85	1.23			11.4	476	116				0.02	
2/25/2011	91			3		0.06	0.004	52.9	10	2.33	0.01			182	6	12.2					0.23	6.43	1.5			7.5	372	104				0.05	
9/28/2011	81			2		0.05	0.004	46.7	10	2.13	0.01			164	5	11.4					0.13	6.39	1.44			7.3	375	100				0.05	
3/15/2012	87			3		0.05	0.004	46.3	10	1.93	0.01			161	6	11.1					0.27	7.89	1.55			7.3	381	88				0.05	
8/23/2012	74	0.2	2	2	0.05	0.002	0.004	46.6	10	1.88	0.01	0.031	0.02	162	6.73	4	11.2	7.42		0.018	0.23	7.05	1.86	0.035	0.01	8.2	342	96	2	274	100	0.01	0.03
3/21/2013	80	0.1	2	2	0.03	0.002	0.004	52.1	10	3.55	0.01	0.01	0.01	177	3.2	2	11.4	6.01		0.011	0.14	7.68	1.36	0.035	0.01	8.3	383	98	2	244	57	0.01	0.03
9/18/2013	82	0.2	2	2	0.04	0.002	0.004	45.9	10	2.41	0.01	0.029	0.01	158	4.07	2	10.5	8.21		0.011	0.27	7.04	1.6	0.035	0.01	8.1	359	95	2	242	55.2	0.01	0.03
3/13/2014	79	0.1	2	2	0.02	0.002	0.004	49.1	10	2.01	0.01	0.01	0.01	169	1.87	2	11.3	5.45		0.012	0.17	7.22	1.07	0.035	0.01	7.5	359	94	2	240	28.3	0.01	0.03
8/29/2014	82	0.49	2	2	0.05	0.002	0.004	45	10	1.93	0.01	0.032	0.04	156	6.82	5	10.5	8.29		0.019	0.06	6.73	1.87	0.035	0.01	7.9	361	91	2	138	111	0.01	0.04
3/25/2015	73	0.17	2	2	0.05	0.002	0.004	45.8	10	1.81	0.01	0.014	0.03	161	6.5	3	11.4	5.19		0.014	0.39	6.67	1.53	0.035	0.01	7.8	334	90	2	231	75.2	0.01	0.05
9/29/2015	69	0.36	2	8	0.23	0.002	0.004	42.4	10	1.77	0.02	0.09	0.37	155	36	54	12	8.1		0.045	0.13	6.4	2.55	0.035	0.01	6.6	331	83	2	248	885	0.034	0.22
3/25/2016	75	0.25	2	2	0.08	0.002	0.004	45.9	10	1.95	0.01	0.029	0.03	154	4.27	8	9.6	7.56		0.014	0.06	6.65	1.37	0.035	0.01	8.1	333	84	2	234	168	0.01	0.04
9/1/2016	72	0.36	2	4	0.1	0.002	0.004	44.9	10	1.85	0.01	0.035	0.07	159	12.5	15	11.4	7.45		0.02	0.1	6.28	2.27	0.035	0.01	7.2	314	79	2	242	255	0.012	0.2
3/24/2017	77	0.1	2	2	0.06	0.002	0.004	45.3	10	2.21	0.01	0.021	0.03	154	6.94	6	10	6.51		0.012	0.16	6.54	1.11	0.035	0.01	6.4	348	84	2	240	120	0.01	0.04
9/18/2017	74	0.34	2	3	0.07	0.002	0.004	41.7	10	2.2	0.01	0.034	0.05	143	11.3	9	9.5	7.32		0.018	0.2	6.43	1.81	0.035	0.01	6.3	338	95	2	268	270	0.01	0.06
3/13/2018	68	0.1	2	2	0.03	0.002	0.004	42.5	10	2.41	0.01	0.011	0.01	144	1.91	2	9.2	5.32		0.011	0.2	6.39	1.19	0.035	0.01	6.7	330	89	2	230	45	0.01	0.02
9/17/2018	79	0.24	2	2	0.05	0.002	0.004	42.7	10	1.81	0.01	0.051	0.01	146	7.04	2	9.7	8.3		0.011	0.49	6.51	1.36	0.035	0.01	6.2	368	88	2	248	65	0.01	0.02
3/20/2019	85	0.1	2	2	0.05	0.002	0.004	55.3	10	3.57	0.01	0.023	0.02	189	5.28	4	12.4	8.96		0.012	0.42	6.58	1.96	0.035	0.01	8.9	423	116	2	300	80	0.01	0.03
9/4/2019	72	0.18	2	2	0.04	0.002	0.004	45.1	10	2.57	0.01	0.029	0.02	152	3.16	6	9.6	8.01		0.012	0.2	6.63	1.42	0.035	0.01	8.8	357	107	2	240	150	0.01	0.04
6/4/2020	49	0.12	1	1	0.055	0.001	0.002	35.5	10	2.83	0.01	0.018	0.007	124	7.68	1	8.56	5.38		0.015	0.03	6.17	1.8	0.02	0.005	6.9	303	95.1	0.2	232	140	0.006	0.029
9/29/2020	68	0.12	1	0.9	0.048	0.001	0.002	38.3	10	2.87	0.01	0.025	0.006	132	5.18	2.2	8.79	6.5		0.012	0.05	6.3	2.3	0.02	0.005	7	313	96.9	0.2	236	75	0.007	0.029
3/22/2021	42	0.1	1	1.2	0.044	0.001	0.002	34.5	10	3.11	0.01	0.011	0.006	120	4.62	2.5	8.33	4.03		0.012	0.09	5.98	1.9	0.02	0.005	6.3	293	92.6	0.2	222	50	0.005	0.024
8/24/2																																	

TABLE 4  
Amcelle Rubble Landfill  
Time Series  
Elements and Indicator Parameters

Sample Point MW-12

Lab Results	Alkalinity to ph 4.5	Ammonia nitrogen	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chemical oxygen demand	Chloride	Chromium	Cobalt	Copper	Hardness	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate nitrogen	pH	Potassium	Selenium	Silver	Sodium	Specific conductance	Sulfate	Thallium	Total dissolved solids	Turbidity	Vanadium	Zinc	
2/23/1995	83			10	0.12		0.0005		10	8	0.01				140	5			0.2		0.32	6.7				288							0.031	
3/12/1996					0.09					5.8					120	34						6.2												
1/24/1997					0.07					9.2					88							5.88												
4/30/1998	51			10	0.08		0.0005	27.9	10	5	0.01		102		10	7.9			0.2		0.05	7				238							0.024	
12/3/1998	152			10	0.31		0.0005	52.8	10	16	0.04		175		20	10.5			0.2		0.05	7.6				371							0.117	
3/30/1999	79			10	0.22		0.0005	37.3	15	7	0.02		130		13	9			0.2		0.05	7.4				280							0.079	
9/28/1999	136			10	0.28		0.0006	49.4	15	17	0.04		165		20	10.1			0.2		0.05	7.1				306							0.122	
3/28/2000	103			10	0.2		0.0005	45.3	15	14	0.02		153		10	9.6			0.2		0.05	6.5				329							0.067	
11/2/2000	182			10	0.06		0.0005	57.8	15	18	0.01		181		5	8.9			0.2		0.05	7.6	1.8		9	388	13						0.005	
4/25/2001	173			10	0.08		0.0005	55.2	15	11	0.01		185		5	11.4			0.2		0.05	7.5	3		8.6	401	26						0.013	
10/24/2001	177			10	0.05		0.0005	61.3	15	21	0.01		185		5	7.7			0.2		0.05	7.9	1.3		10.9	415	10						0.007	
3/21/2002	187			10	0.07		0.0005	54.7	15	13	0.01		182		5	11			0.2		0.05	8	2.9		8.7	390	10						0.005	
9/25/2002	173			10	0.04		0.0005	59.6	15	22	0.01		178		5	7.1			0.2		0.05	7.8	0.9		9.8	399	10						0.005	
3/25/2003	185			10	0.08		0.0005	55.7	15	11	0.01		187		5	11.7			0.2		0.05	7.4	3.1		9.1	420	27						0.005	
10/6/2003	224			10	0.11		0.0005	63.5	15	6	0.01		221		5	15			0.2		0.05	7.4	3.8		7.9	486	30						0.005	
3/24/2004	211			10	0.0965		0.005	0.1	10	6.93	0.01		269		5	0.1			0.2		0.05	7.18	3.14		6.72	488	58.2						0.01	
9/22/2004	223			10	0.11		0.005	67.6	10	7	0.01		228		5	14.3			0.2		0.05	7.18	3.8		7.8	460	34						0.01	
3/29/2005	211			10	0.09		0.002	66.9	10	6	0.01		226		5	14.2			0.2		0.05	7.47	3.6		0.2	405	13						0.01	
8/23/2005	170			10	0.06		0.002	64.1	10	19	0.01		194		5	8.2			0.2		0.05	6.75	1.8		10.9	385	21						0.01	
3/9/2006	190			10	0.07		0.005	55.8	10	18	0.01		183		5	10.6			0.2		0.13	8.15	3.3		10.3	421	11						0.01	
9/15/2006	174			10	0.04		0.005	65.6	10	22	0.01		193		5	7			0.2		0.05	7.35	1		12.1	390	16						0.01	
3/9/2007	183			10	0.05		0.005	62.2	10	17	0.01		187		5	7.6			0.2		0.05	7.76	1.7		11.2	384	10						0.01	
9/27/2007	177			10	0.05		0.005	49.9	10	20	0.01		148		5	5.8			0.2		0.05	7.65	0.9		9.5	383	11						0.02	
3/14/2008	183			10	0.07		0.005	58.7	10	14	0.01		190		5	10.6			0.2		0.05	8.2	2.7		10.6	402	15						0.01	
9/26/2008	211			10	0.07		0.005	58.2	10	13	0.01		191		5	11.2			0.2		0.05	7.58	2.5		9.3	417	12						0.01	
3/26/2009	181			10	0.09		0.005	61.6	10	14	0.01		204		5	12.1			0.2		0.05	7.33	3.5		10.7	387	22						0.01	
9/10/2009	201			10	0.08		0.005	67	10	11	0.01		220		5	12.9			0.2		0.05	7.52	3.2		9.6	426	17						0.01	
5/7/2010	193			6	0.1		0.004	68.6	10	6.72	0.01		223		2	12.6			0.2		0.06	7.48	3.28		7.9	441	35.7						0.01	
2/25/2011	191			2	0.07		0.004	67.3	10	14.6	0.01		214		2	11.2			0.2		0.06	7.73	2.9		11.4	435	15						0.01	
9/28/2011	173			2	0.06		0.004	68.6	10	18.8	0.01		206		2	8.4			0.2		0.06	7.49	1.51		11.6	437	14						0.01	
3/15/2012	157			2	0.09		0.004	59.5	10	5.76	0.01		198		2	12			0.2		0.17	8.28	3.39		7.7	412	40						0.01	
8/23/2012	214	0.33	2	4	0.1	0.002	0.004	73.7	10	5.56	0.01	0.01	0.01	245	16	2	14.8	0.96	0.2	0.011	0.06	8.02	3.75	0.035	0.01	8.2	440	21	2	304	124	0.01	0.01	
3/21/2013	191	0.21	2	2	0.08	0.002	0.004	68	10	6.73	0.01	0.01	0.01	221	4.17	2	12.4	0.76	0.2	0.011	0.12	8.4	3.6	0.035	0.01	8.4	458	21	2	264	26.7	0.01	0.01	
9/18/2013	195	0.21	2	2	0.08	0.002	0.004	66.4	10	12	0.01	0.01	0.01	218	4.8	2	12.6	0.67	0.2	0.011	0.06	7.99	3.13	0.035	0.01	9	435	20	2	264	39.6	0.01	0.01	
3/14/2014	189	0.14	2	2	0.08	0.002	0.004	66.1	10	14.2	0.01	0.01	0.01	218	3.89	2	12.7	0.77	0.2	0.011	0.06	8.1	3.28	0.035	0.01	11.5	437	21	2	248	20.3	0.01	0.01	
8/29/2014	208	0.1	2	2	0.09	0.002	0.006	67.6	10	10.8	0.01	0.01	0.01	235	7.48	2	16.1	0.89	0.2	0.011	0.06	7.83	4.23	0.035	0.01	11	477	29	2	160	46.4	0.01	0.01	
3/25/2015	193	0.28	2	2	0.07	0.002	0.004	65.4	10	15.4	0.01	0.01	0.01	214	3.11	2	12.3	0.72	0.2	0.011	0.06	7.82	3.39	0.035	0.01	11.5	430	19	2	254	21.4	0.01	0.01	
9/29/2015	178	0.1	2	2	0.05	0.002	0.004	71.7	10	18.9	0.01	0.01	0.01	211	0.78	2	7.7	1.11	0.2	0.011	0.06	7.69	1	0.035	0.01	12.2	436	22	2	264	4.2	0.01	0.01	
3/25/2016	187	0.26	2	2	0.08	0.002	0.004	66.6	10	17.5	0.01	0.01	0.01	219	4	2	12.8	0.83	0.2	0.011	0.06	7.96	3.58	0.035	0.01	12.9	427	19	2	248	14.4	0.01	0.01	
9/1/2016	180	0.1	2	2	0.05	0.002	0.004	73.6	10	19.4	0.01	0.01	0.01	217	1.42	2	8	1.22	0.2	0.011	0.05	7.64	1.01	0.035	0.01	12.3	436	23	2	258	5.2	0.01	0.01	
3/24/2017	190	0.29	2	2	0.08	0.002	0.004	65.9	10	17	0.01	0.01	0.01	214	3.3	2	12.1	0.89	0.2	0.011	0.05	8.03	2.88	0.035	0.01	11.8	458	20	2	262	21	0.01	0.01	
9/18/2017	197	0.33	2	2	0.07	0.002	0.004	63.1	10	14.6	0.01	0.01	0.01	212	3.75	2	13.2	0.78	0.2	0.011	0.05	7.83	3.42	0.035	0.01	10.2	449	24	2	282	55	0.01	0.01	
3/13/2018	195	0.28	2	2	0.08	0.002	0.004	69.8	10	17.1	0.01	0.01	0.01	230	2.53	2	13.4	0.91	0.2	0.011	0.05	7.7	3.52	0.035	0.01	12.6	463	20	2	284	30	0.01	0.01	
9/17/2018	158	0.22	2	2	0.09	0.002	0.004	63.3	10	12.8	0.01	0.01	0.01	214	10.4	2	13.6	1.19	0.2	0.011	0.05	7.47	2.64	0.035	0.01	10.4	412	34	2	278	65	0.01	0.01	
3/20/2019	63	0.1	2	2	0.09	0.002	0.004	29.7	10	2.8	0.01	0.01	0.01	101	4	2	6.6	0.98	0.2	0.011	0.06	6.5	3.64	0.035	0.01	5.1	248	54	2	200	8.6	0.01	0.01	
9/4/2019	249	0.28	2	2	0.09	0.002	0.004	87.4	10	5.61	0.01	0.01	0.01	268	11.6	2	12.1	1.32	0.2	0.011	0.06	7.91	3.89	0.035	0.01	6.5	546	40	2	340	120	0.01	0.01	
6/4/2020	82	0.07	1	1	0.122	0.0013	0.002	36.1	10	6.06	0.01	0.024	0.01	120	37.4	1	7.28	3.01	0.2	0.007	0.05	6.76	3.6	0.02	0.005	6.6	272	46.1	0.2	224	150	0.003	0.022	
9/29/2020	227	0.37	1	1.6	0.088	0.001	0.002	75.4	6	11.1	0.01	0.005	0.01	242	7.5	1	13.1	1.22	0.2	0.01	0.05	7.81	3.9	0.02	0.005	8.6	460	23.4	0.2	302	100	0.005</		

TABLE 4  
 Amcelle Rubble Landfill  
 Time Series  
 Elements and Indicator Parameters

Sample Point MW-13

Lab Results	Alkalinity to ph 4.5	Ammonia nitrogen	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chemical oxygen demand	Chloride	Chromium	Cobalt	Copper	Hardness	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate nitrogen	pH	Potassium	Selenium	Silver	Sodium	Specific conductance	Sulfate	Thallium	Total dissolved solids	Turbidity	Vanadium	Zinc	
2/23/1995	236			10	0.04		0.0005		10	12	0.01			100	5				0.2	0.22	7.3					1370							0.011	
3/12/1996					0.02					11				640								7.36												
1/24/1997					0.02					11				630								7.02												
4/30/1998	225			10	0.02		0.0005	183	11	12	0.01			547	5	21.6		0.2			0.05	7.9				1030							0.007	
12/2/1998	256			10	0.05		0.0005	297	10	11	0.01			918	5	42.8		0.2			0.05	7.6				1650							0.009	
3/30/1999	248			10	0.05		0.0005	315	15	11	0.01			953	5	40.2		0.2			0.05	7.9				1600							0.05	
9/28/1999	250			10	0.04		0.0005	263	15	10	0.01			814	5	38.1		0.2			0.05	7				1290							0.012	
3/28/2000	244			10	0.05		0.0005	335	15	11	0.01			1010	5	42.1		0.2			0.05	7.1				1670							0.013	
11/3/2000	203			10	0.07		0.0005	251	15	10	0.01			911	5	69.3		0.2			0.06	7.5	6.1		8	1510	840						0.016	
4/24/2001	212			10	0.04		0.0005	251	15	9	0.01			860	5	56.5		0.2			0.05	7.3	3.6			9.6	1450	680					0.023	
10/24/2001	194			10	0.05		0.0005	263	15	8	0.01			970	5	76.1		0.2			0.05	7.7	6.3			9.9	1640	833					0.005	
3/21/2002	195			10	0.04		0.0005	284	15	8	0.01			987	5	67.6		0.2			0.05	7.8	4.3			7	1460	838					0.005	
9/25/2002	188			10	0.04		0.0005	248	15	8	0.01			905	5	69		0.2			0.05	7.8	4.6			6.5	1500	780					0.005	
3/25/2003	206			10	0.05		0.0005	283	15	7	0.01			986	5	67.9		0.2			0.05	7.1	4			7	1510	723					0.005	
10/6/2003	190			10	0.04		0.0005	270	15	6	0.01			986	5	75.8		0.2			0.05	7.2	4.9			7	1620	919					0.013	
3/24/2004	191			10	0.0424		0.005	0.1	10	9.11	0.01			1040	5	0.1		0.2			0.05	7.3	4.87			7.07	1600	824					0.01	
9/22/2004	187			10	0.05		0.005	275	10	9	0.01			990	5	73.4		0.2			0.05	7.1	5.3			7.1	1550	757					0.01	
3/29/2005	201			10	0.05		0.002	283	10	7	0.01			996	5	70		0.2			0.05	7.41	4.5			0.2	1460	744					0.01	
8/23/2005	195			10	0.04		0.002	280	10	7	0.01			990	5	70.9		0.2			0.05	7.04	5.2			7.4	1440	801					0.02	
3/9/2006	211			10	0.05		0.005	267	10	11	0.01			916	5	60.8		0.2			0.14	7.98	4.2			8.1	1560	868					0.03	
9/15/2006	220			10	0.04		0.005	257	10	9	0.01			893	5	60.7		0.2			0.05	7.32	4.4			8.1	1370	770					0.01	
3/9/2007	217			10	0.05		0.005	256	10	8	0.01			834	5	47.2		0.2			0.05	7.11	3			9	1280	565					0.01	
9/27/2007	205			10	0.04		0.005	214	10	6	0.01			763	5	55.2		0.2			0.5	7.2	4.5			6.2	1310	684					0.01	
3/14/2008	224			10	0.03		0.005	256	10	9	0.01			862	5	53.7		0.2			0.05	7.27	3.7			8.4	1500	675					0.01	
9/26/2008	245			10	0.02		0.005	277	10	9	0.01			869	5	43.2		0.2			0.05	7	2			10.8	1430	621					0.01	
3/26/2009	218			10	0.05		0.005	266	10	11	0.01			877	5	51.9		0.2			0.05	7.15	3.7			8.8	1340	750					0.01	
9/10/2009	245			10	0.02		0.005	295	10	9	0.01			925	5	45.6		0.2			0.05	7.11	2.4			11.8	1390	616					0.01	
5/7/2010	243			3	0.03		0.004	274	10	8.71	0.01			866	2	44.1		0.2			0.06	7.18	2.13			10.8	1360	650					0.01	
2/25/2011	227			3	0.03		0.004	272	10	7.92	0.01			863	2	44.9		0.2			0.15	7.13	2.6			10.4	1420	636					0.01	
9/28/2011	248			8	0.03		0.004	309	10	8.66	0.01			958	2	45.3		0.2			0.06	7.23	2.16			11.5	1550	753					0.01	
3/15/2012	241			3	0.03		0.004	286	10	8.29	0.01			906	2	46.2		0.2			0.12	7.39	2.27			11.1	1520	665					0.01	
8/23/2012	239	0.25	2	2	0.03	0.002	0.004	305	10	7.74	0.01	0.01	0.01	960	12	2	48.2	11.3	0.2	0.011	0.06	7.59	2.01	0.035	0.01	11.8	1330	648	2	1320	72	0.01	0.01	
3/22/2013	235	0.1	2	3	0.03	0.002	0.004	288	10	6.91	0.01	0.01	0.01	926	19.1	2	50.3	11.7	0.2	0.011	0.2	8.32	2.3	0.035	0.01	10.7	1550	592	2	1280	162	0.01	0.01	
9/18/2013	239	0.1	2	4	0.03	0.002	0.004	278	10	9.67	0.01	0.01	0.01	884	17.6	2	46	10.9	0.2	0.011	0.22	7.08	2.33	0.035	0.01	12.4	1470	636	2	1220	60.6	0.01	0.01	
3/14/2014	225	0.28	2	4	0.04	0.002	0.004	287	10	8.41	0.01	0.01	0.01	911	21.8	2	47.5	12.9	0.2	0.011	0.06	7.6	2.38	0.035	0.01	11.9	1420	608	2	1120	91.5	0.01	0.01	
8/29/2014	244	0.1	2	6	0.04	0.002	0.004	271	10	9.61	0.01	0.01	0.01	876	28.6	2	48.4	13.2	0.2	0.011	0.06	7.11	2.4	0.035	0.01	13.2	1520	653	2	331	149	0.01	0.01	
3/25/2015	225	0.24	2	2	0.03	0.002	0.004	257	10	7.96	0.01	0.01	0.01	829	6.55	2	45.5	10.7	0.2	0.011	0.06	7.35	2.06	0.035	0.01	10	1400	562	2	675	63.8	0.01	0.01	
9/29/2015	241	0.19	2	3	0.02	0.002	0.004	292	10	8.38	0.01	0.01	0.01	922	7.81	2	46.8	10.6	0.2	0.011	0.06	7.25	2.22	0.035	0.01	11.4	1410	582	2	1200	34.7	0.01	0.01	
3/25/2016	235	0.36	2	2	0.04	0.002	0.004	293	10	9.8	0.01	0.01	0.01	929	18.7	2	47.9	8.26	0.2	0.011	0.06	7.52	2.68	0.035	0.01	12	1350	549	2	1080	110	0.01	0.01	
9/1/2016	242	0.14	2	2	0.02	0.002	0.004	300	10	9.26	0.01	0.01	0.01	941	5.17	2	46.8	11.5	0.2	0.011	0.05	7.26	2.28	0.035	0.01	11.7	1260	614	2	1230	27.4	0.01	0.01	
3/24/2017	233	0.1	2	3	0.03	0.002	0.004	283	10	9.87	0.01	0.01	0.01	902	15.3	2	47.2	10.5	0.2	0.011	0.05	7.53	2.05	0.035	0.01	11.2	1460	582	2	1220	100	0.01	0.01	
9/18/2017	244	0.1	2	2	0.02	0.002	0.004	287	10	11.3	0.01	0.01	0.01	894	6.17	2	43.1	10.1	0.2	0.011	0.05	7.4	2.2	0.035	0.01	11.9	1450	624	2	1220	22	0.01	0.01	
3/13/2018	246	0.12	2	2	0.03	0.002	0.004	287	10	9.6	0.01	0.01	0.01	902	5.36	2	45.2	9.58	0.2	0.011	0.05	7.71	2.5	0.035	0.01	11.9	1430	565	2	1150	65	0.01	0.01	
9/17/2018	246	0.14	2	2	0.03	0.002	0.004	291	10	9.4	0.01	0.01	0.01	915	7.38	2	45.8	10.4	0.2	0.011	0.06	7.6	2.34	0.035	0.01	12.8	1510	606	2	1250	25	0.01	0.01	
3/20/2019	248	0.1	2	2	0.03	0.002	0.004	334	10	11	0.01	0.01	0.01	1070	4.7	2	57.4	13	0.2	0.011	0.21	7.09	2.41	0.035	0.01	15.6	1680	820	2	1380	25	0.01	0.01	
9/4/2019	251	0.22	2	2	0.02	0.002	0.004	295	10	11.3	0.01	0.01	0.01	934	3.56	2	48	10.8	0.2	0.011	0.06	7.71	2.34	0.035	0.01	13.5	1560	673	2	1270	16	0.01	0.01	
6/5/2020	248	0.16	1	1	0.023	0.001	0.002	299	10	11.8	0.01	0.003	0.01	949	5.04	1	49.2	10.9	0.2	0.01	0.05	7.1	2.5	0.02	0.005	13.5	1550	709	0.2	1290	22	0.005	0.01	
9/30/2020	250	0.14	1	0.7	0.021	0.001	0.002	279	10	11	0.01	0.003	0.01	881	2.33	1	44.6	10.4	0.2	0.01	0.03	7.46	2.5	0.02	0.005	12								









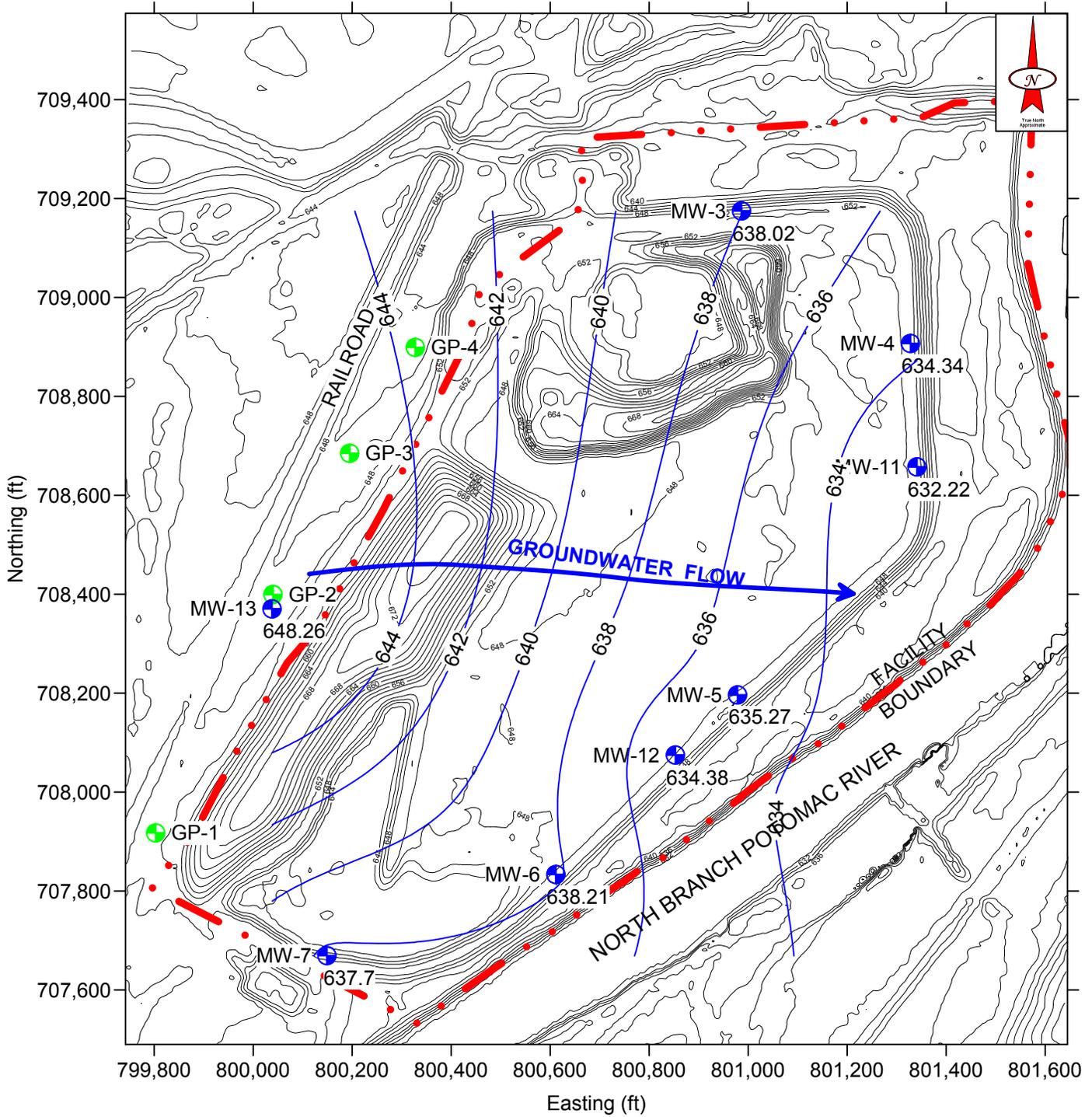












**Notes**

$i(MW-13 \text{ to } MW-11) = 0.0119 \text{ ft/ft}$

Potentiometric Contour Interval = 2 ft  
 Topographic Contour Interval = 2 ft

NAD 1983 US State Plane (Maryland)  
 coordinate system in US Survey feet.

**Legend**

- ⊕ Groundwater Monitoring Well
- ⊕ Gas Sampling Probe

DRN	PJH	6/10/25
DES	PJH	6/10/25
CHK	AXB	6/10/25
REV		
PROJ. MGR.	AXB	6/10/25

SCALE: 1 in = 300 ft

SOURCE: FEMA Region 3 2012 LiDAR

PREPARED FOR: ALLEGANY COUNTY

The Hutchinson Group, Ltd. 4280 Old William Penn Hwy Murrysville, Pennsylvania 15668 (724) 325-3996 Fax: (724) 733-7901 www.thgeophysics.com

**PROJECT:**  
 Amcelle Rubble Landfill  
 Allegany County, Maryland

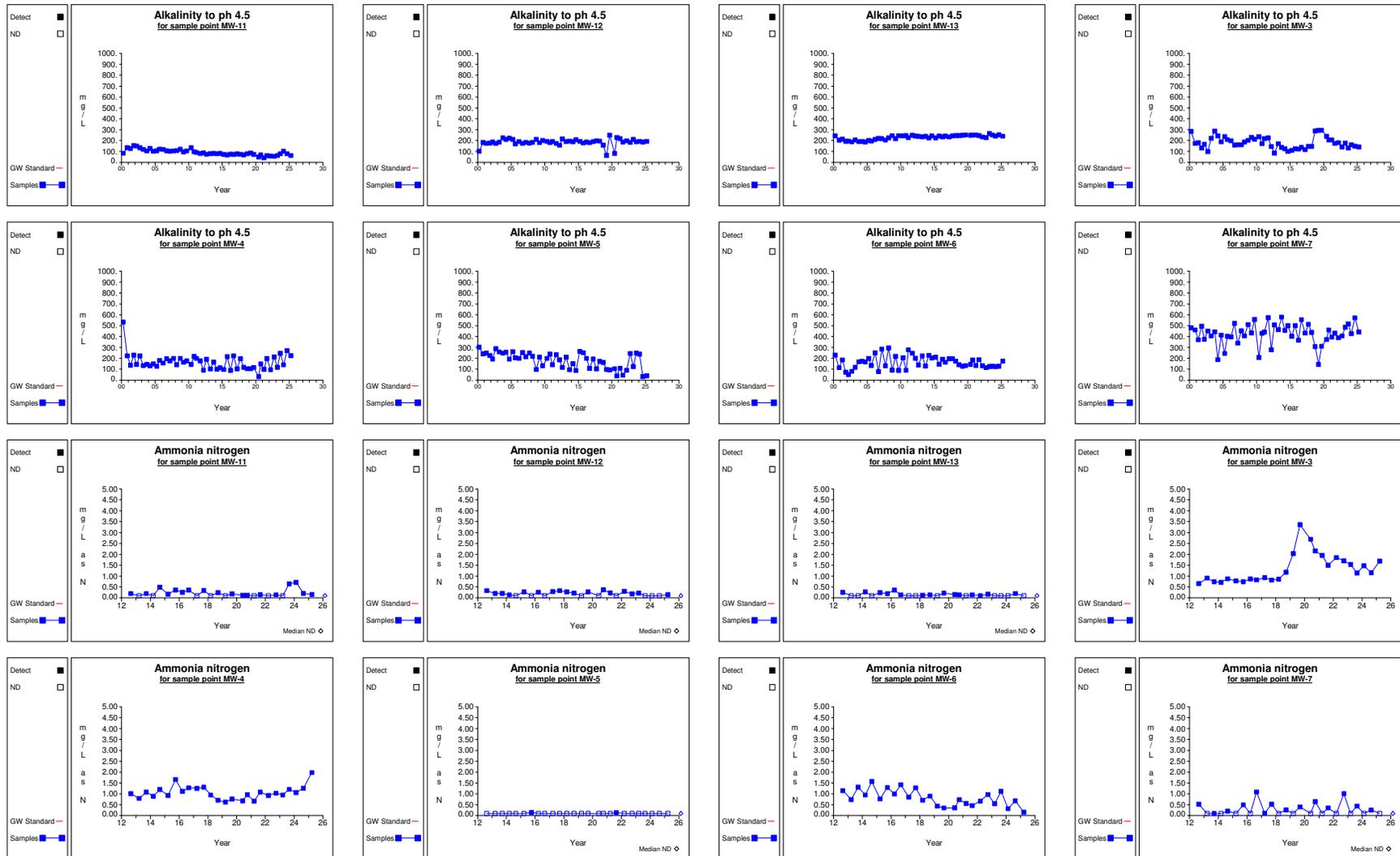
**DRAWING NO.:**  
 Figure 2  
 Uppermost Groundwater Zone  
 Potentiometric Map 3/25/2025

**PROJECT NO.:** 187-7029  
**SHEET TITLE:** DWG7029F2  
 Allegany County, MD

# Figure 3

## Time Series

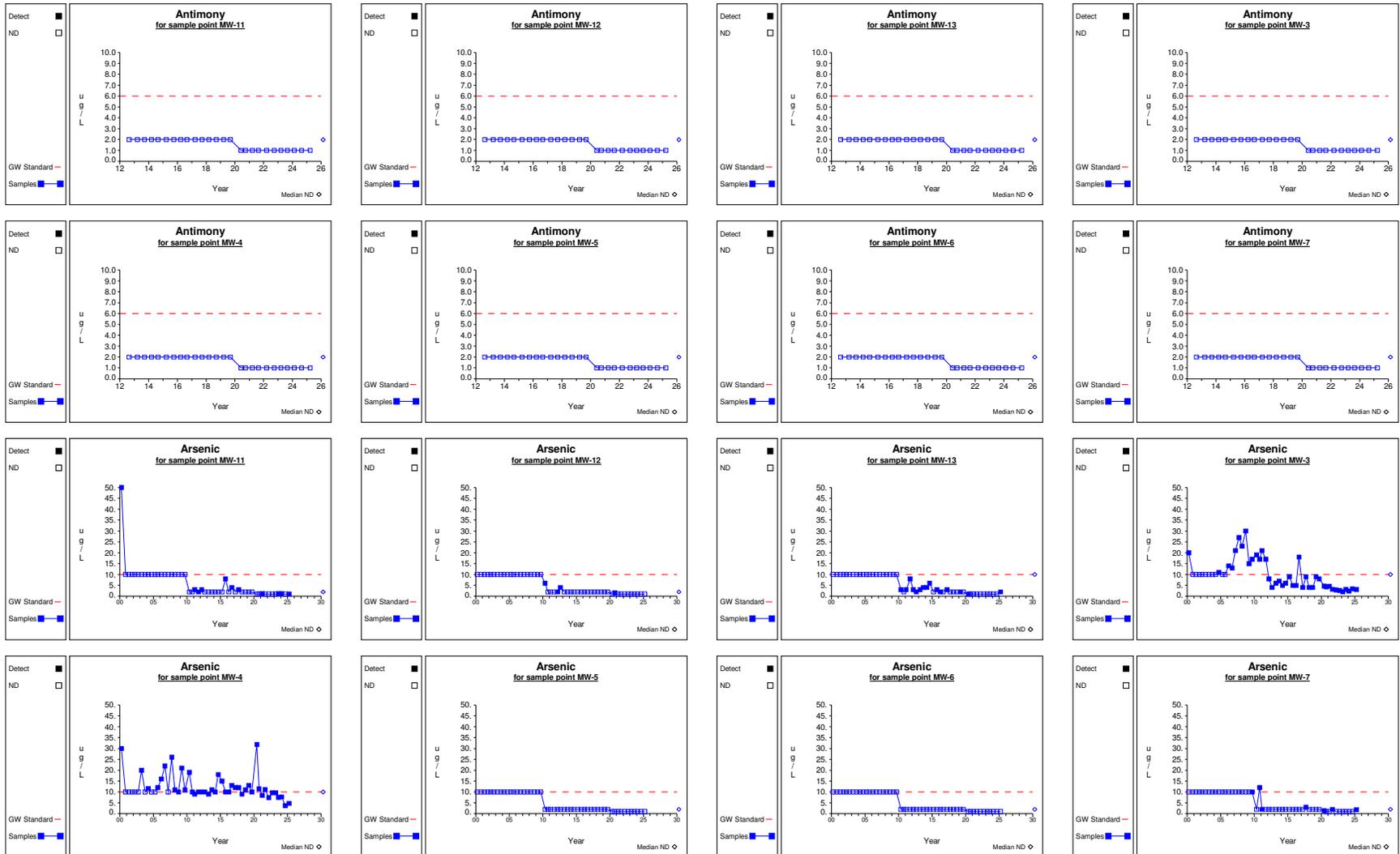
UPPERMOST AQUIFER



# Figure 3

## Time Series

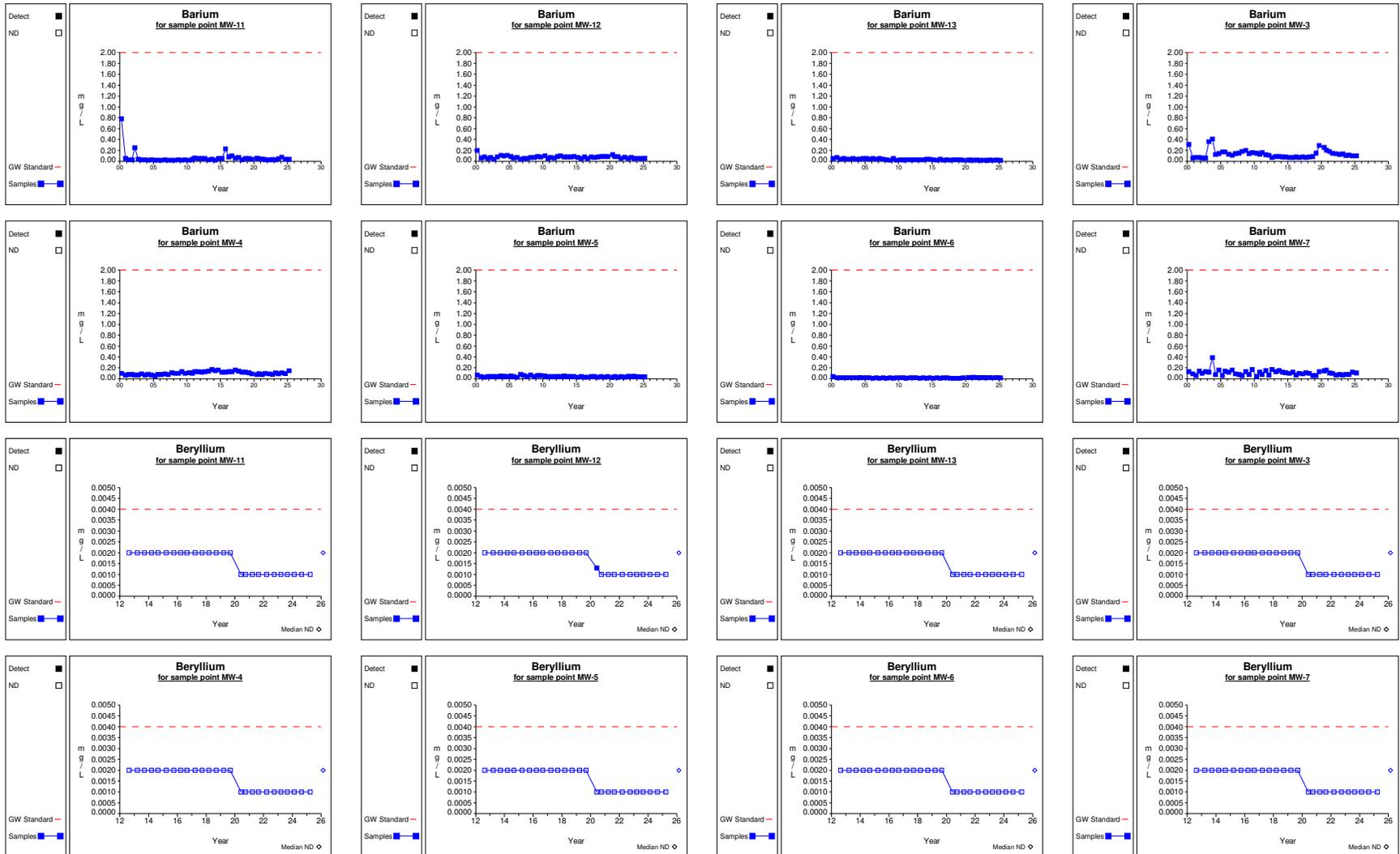
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# Figure 3

## Time Series

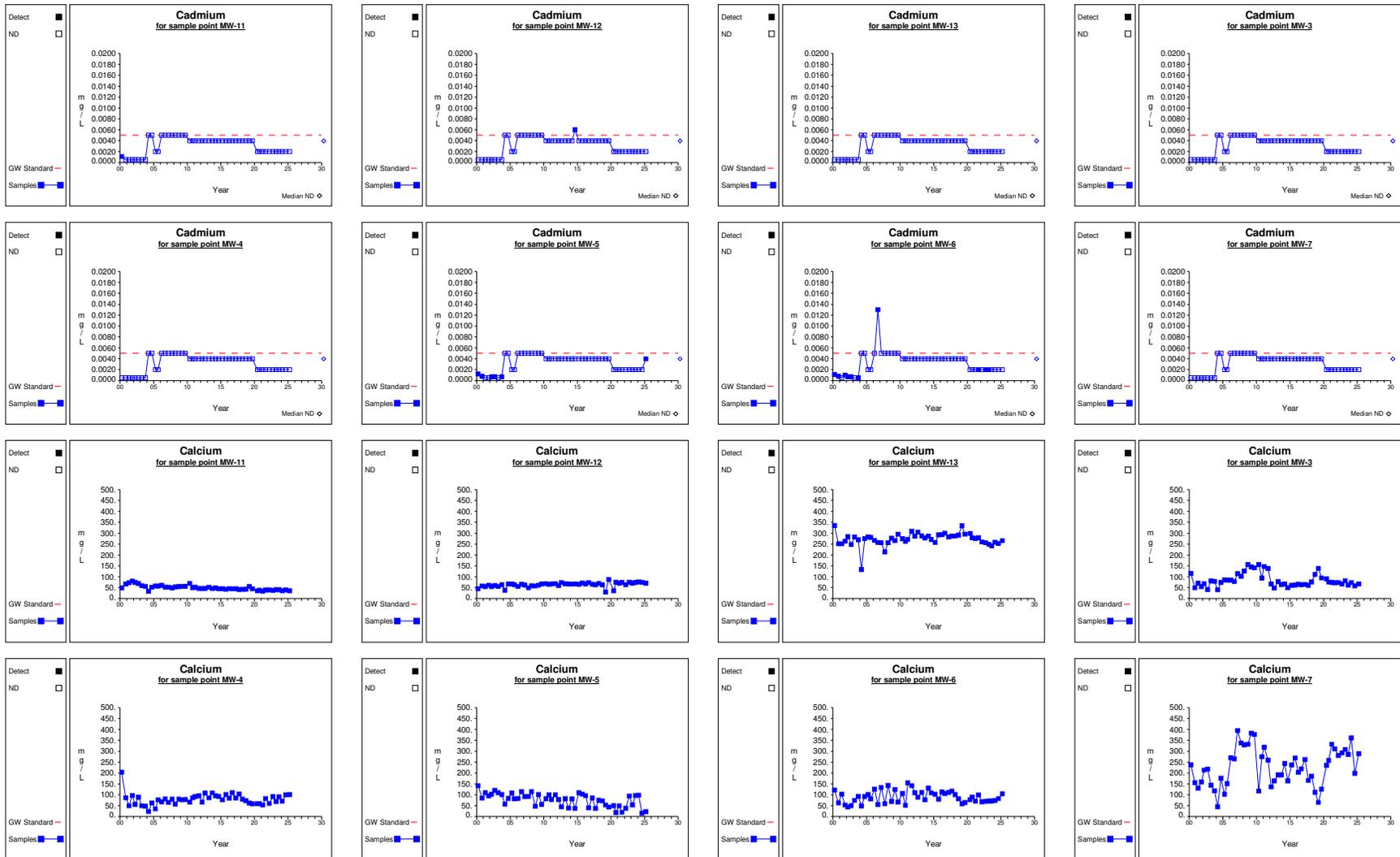
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# Figure 3

## Time Series

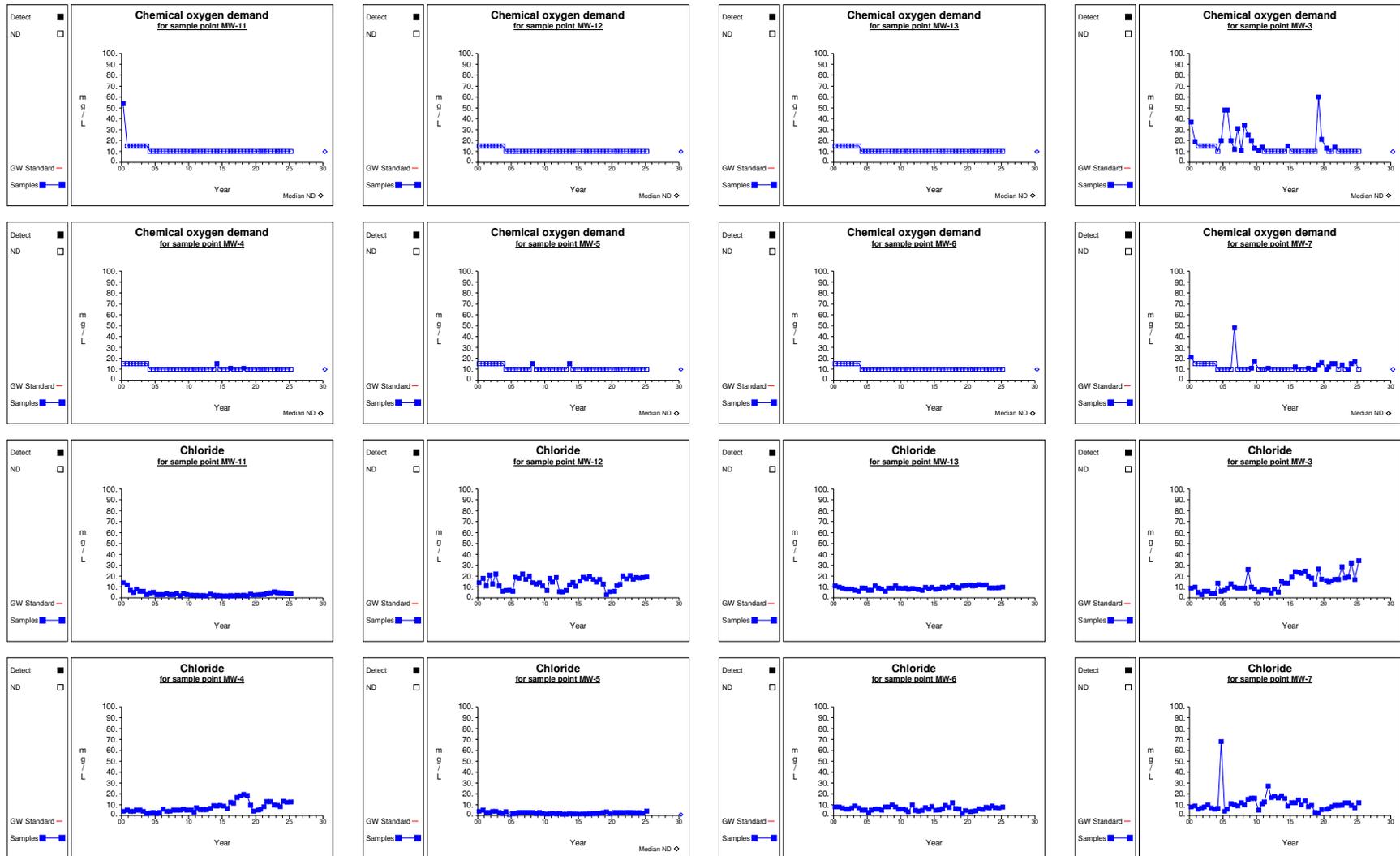
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# Figure 3

## Time Series

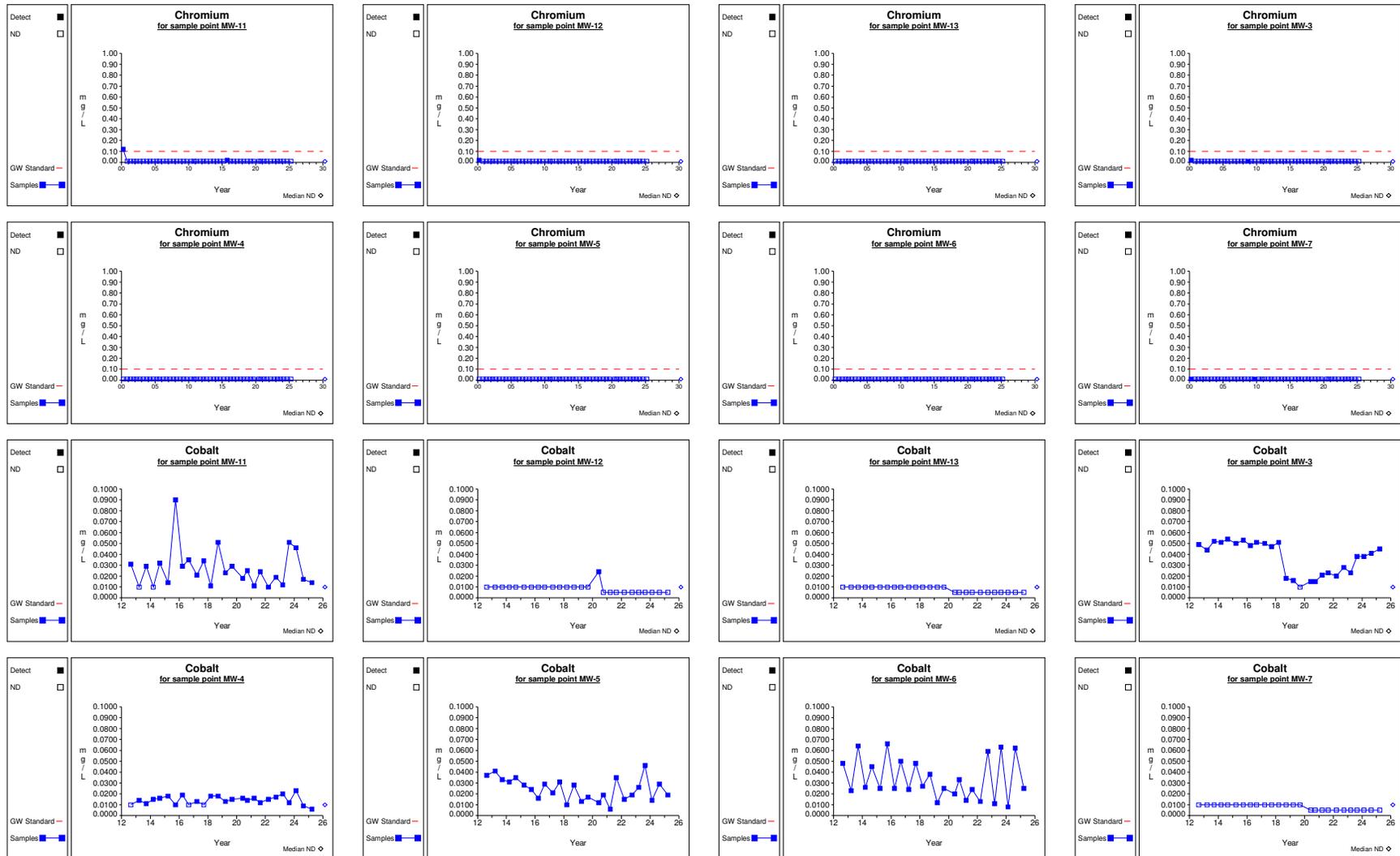
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# Figure 3

## Time Series

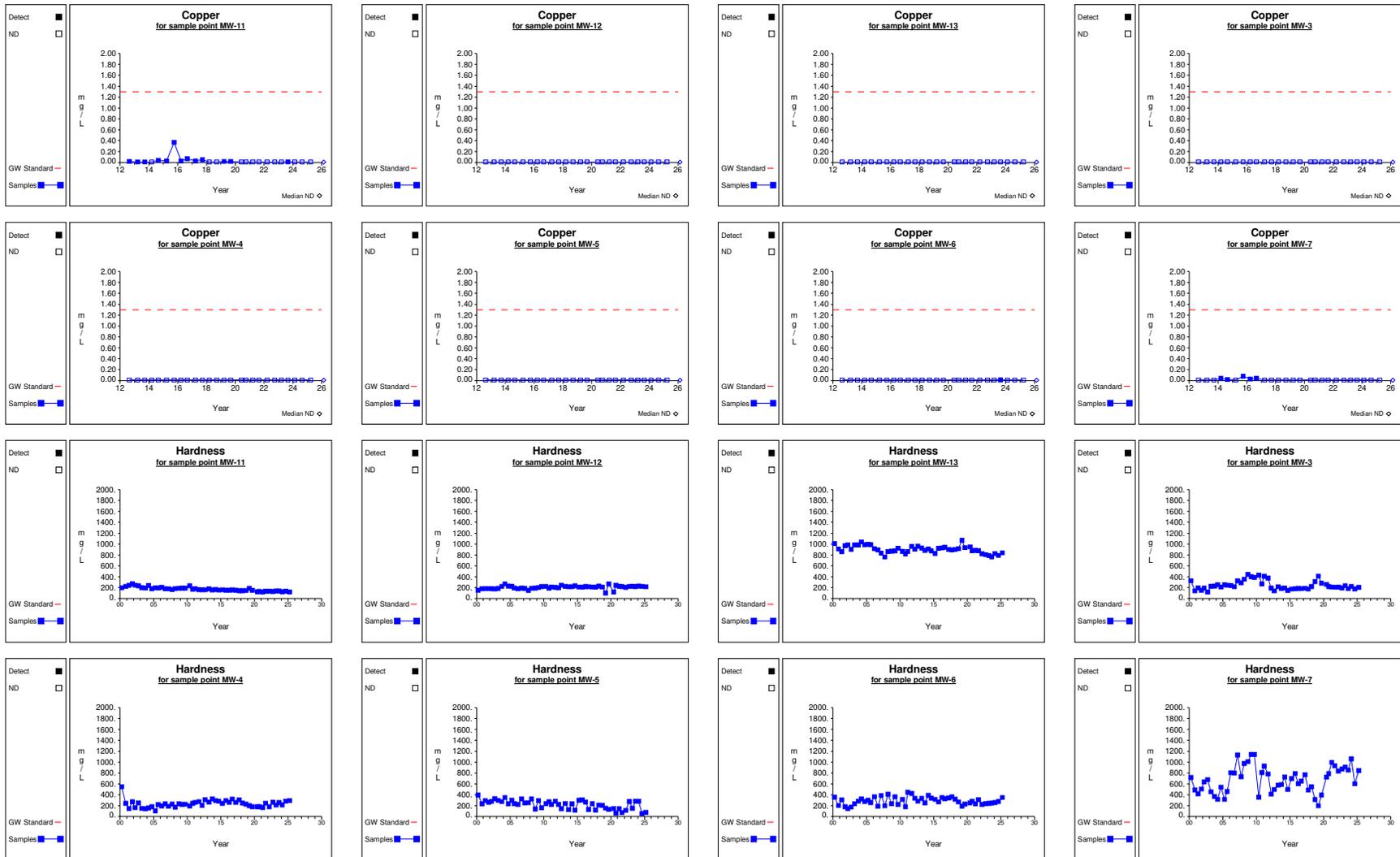
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# Figure 3

## Time Series

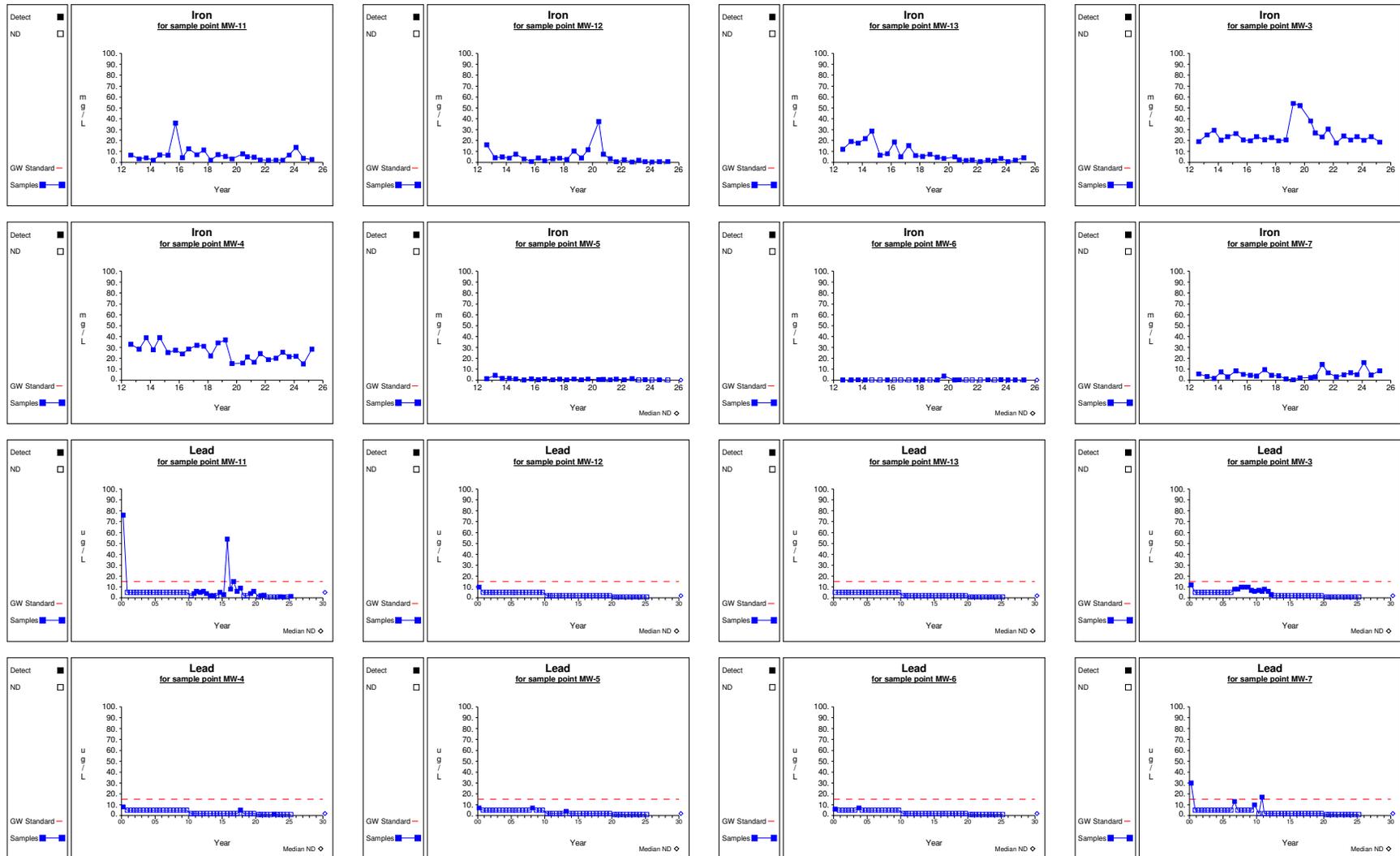
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# Figure 3

## Time Series

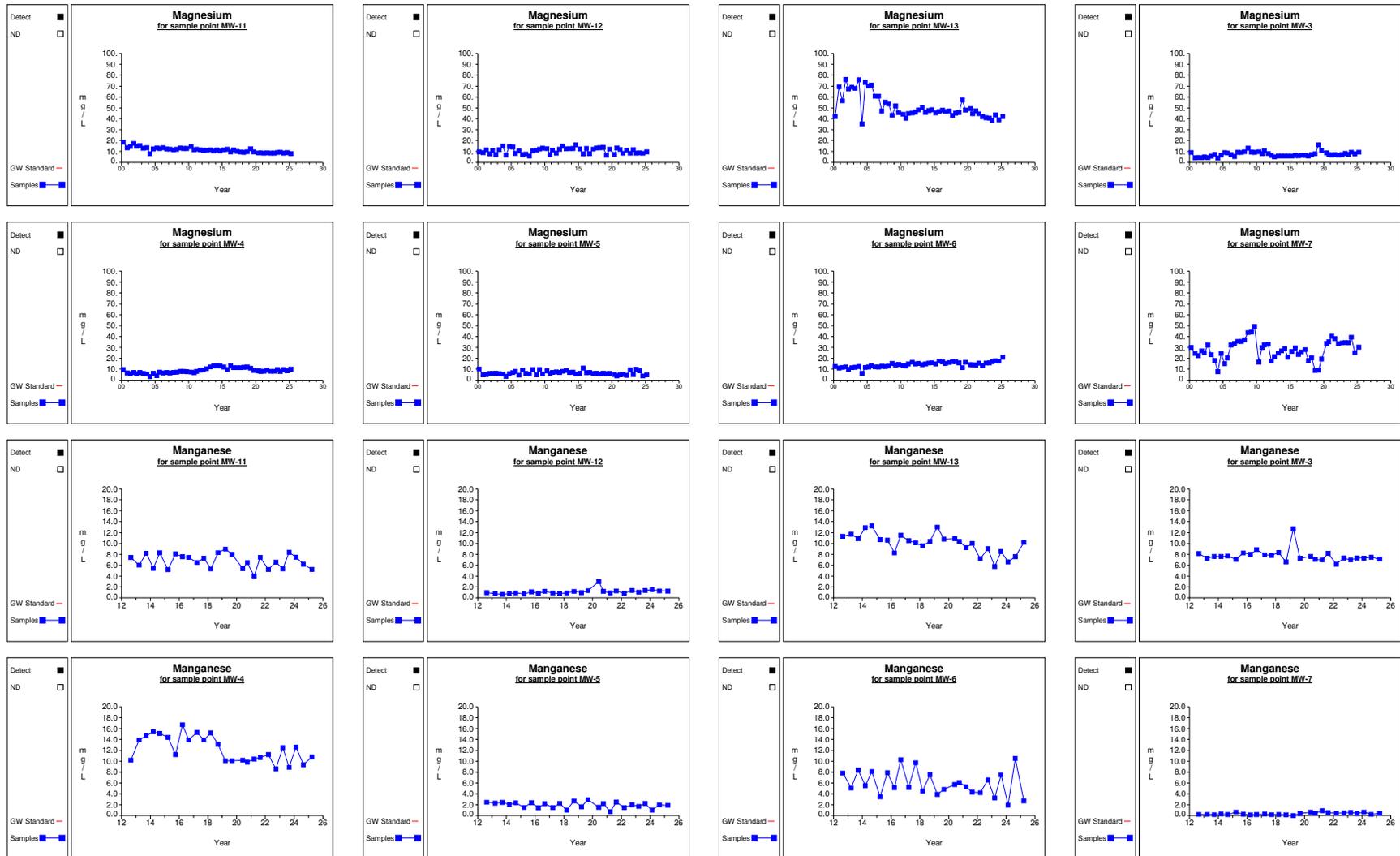
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# Figure 3

## Time Series

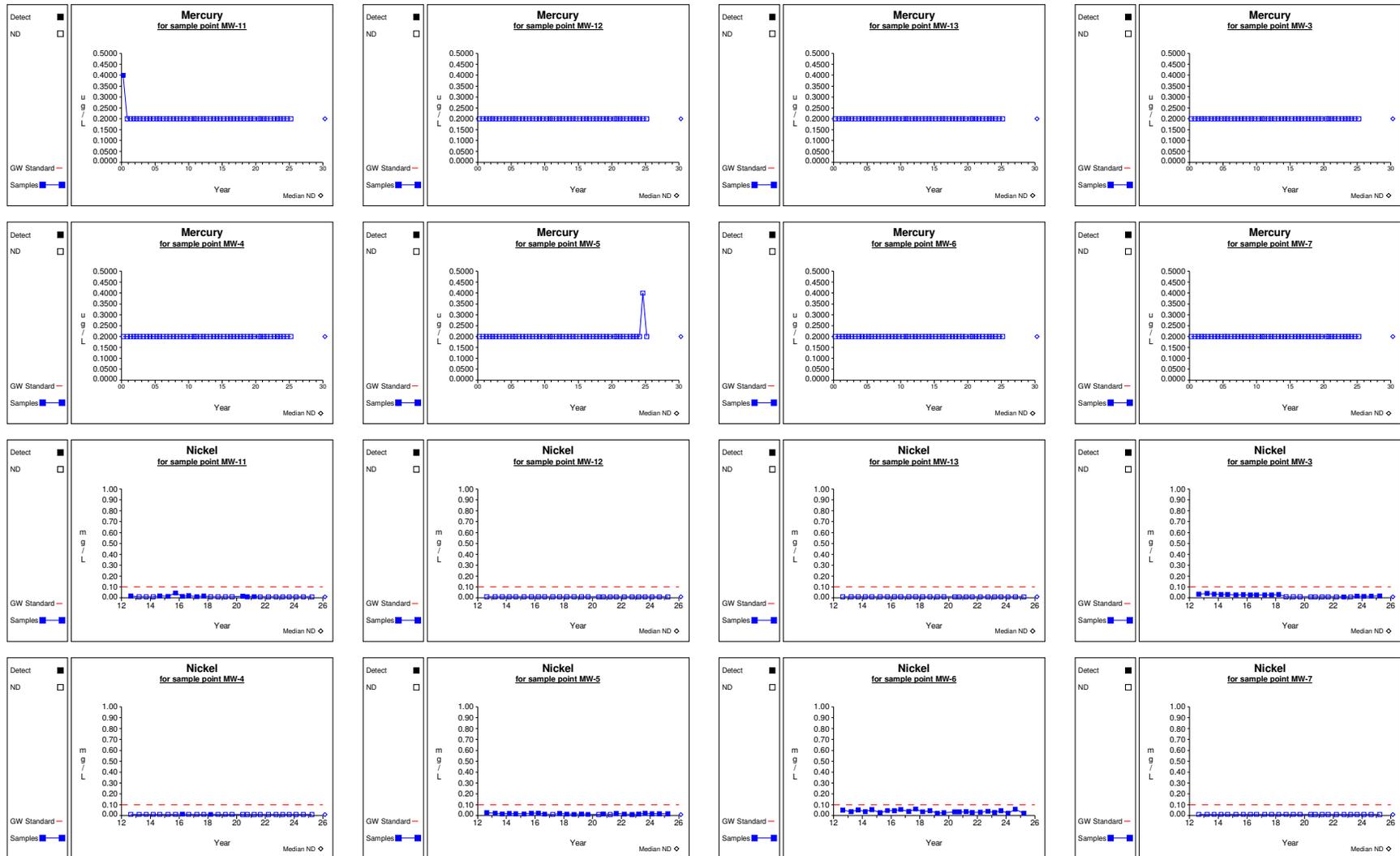
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# Figure 3

## Time Series

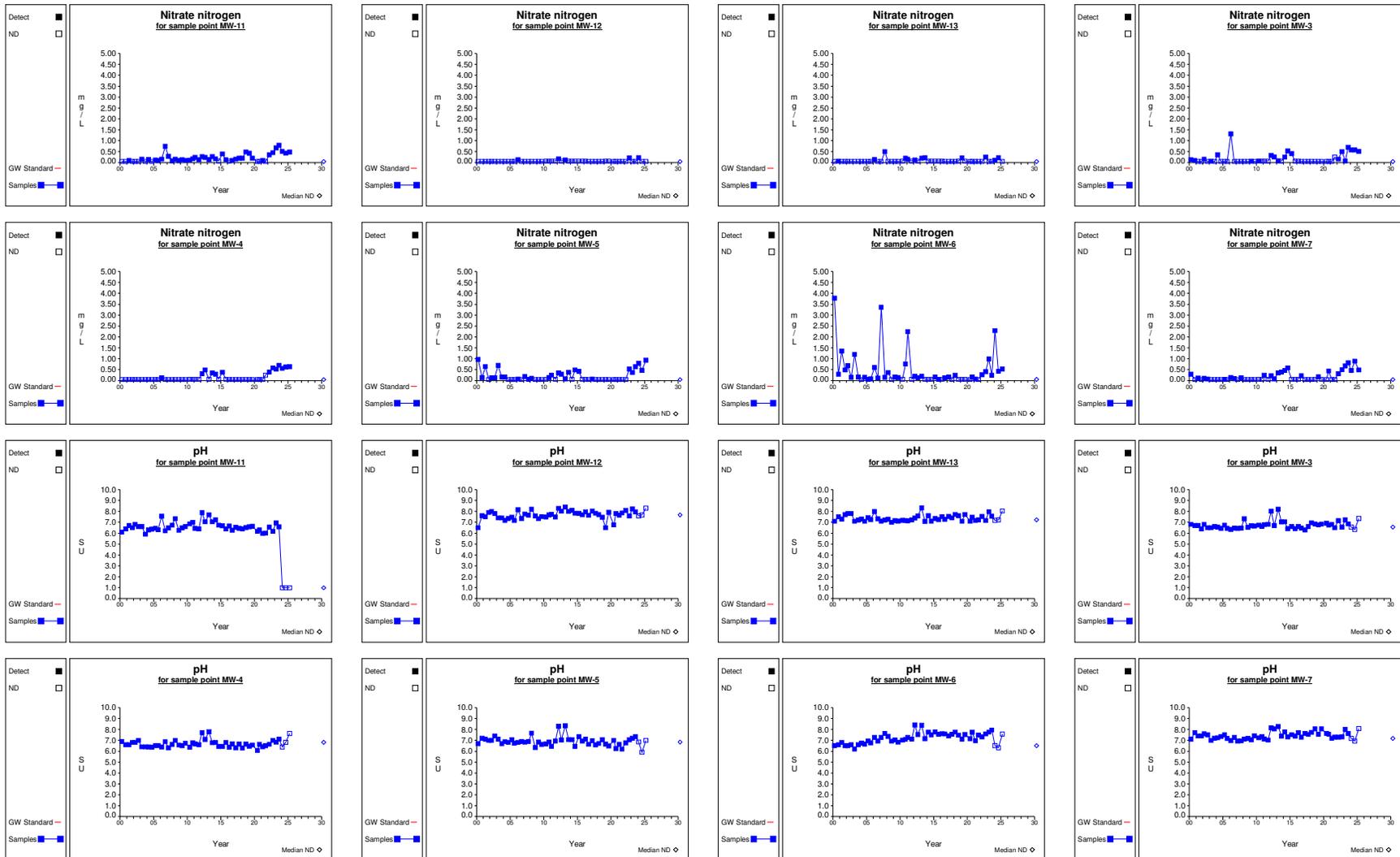
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# Figure 3

## Time Series

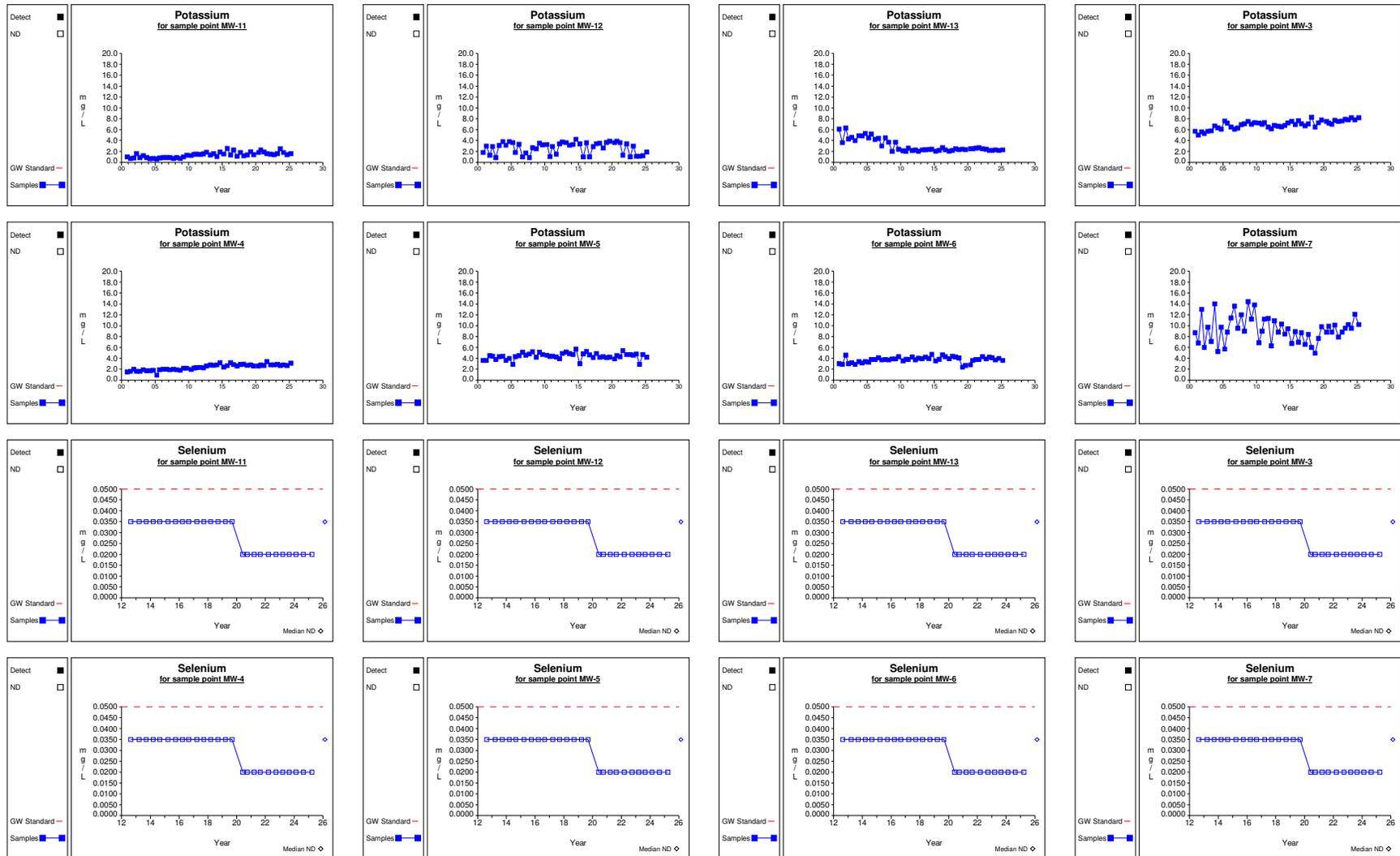
UPPERMOST AQUIFER



# Figure 3

## Time Series

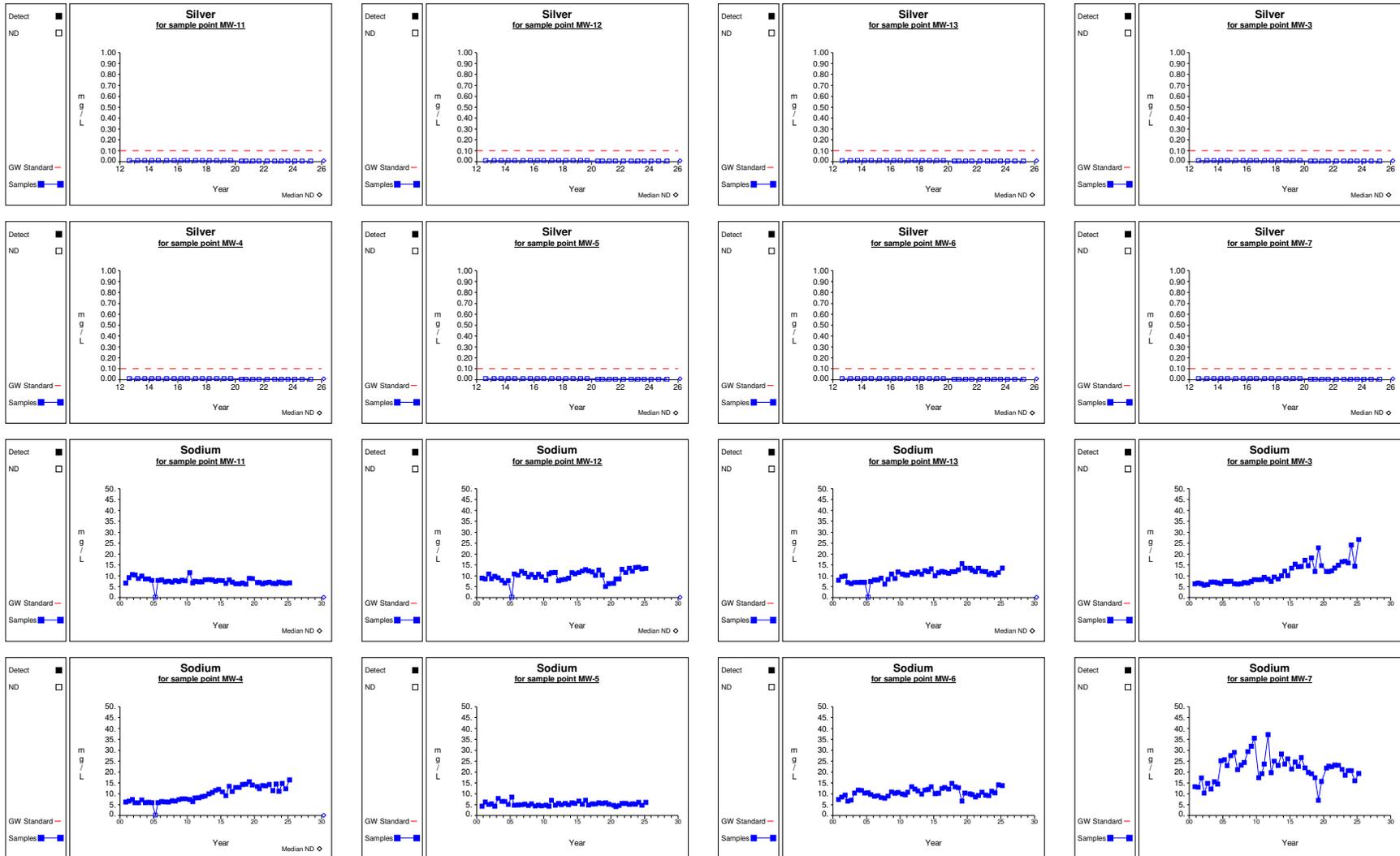
UPPERMOST AQUIFER



# Figure 3

## Time Series

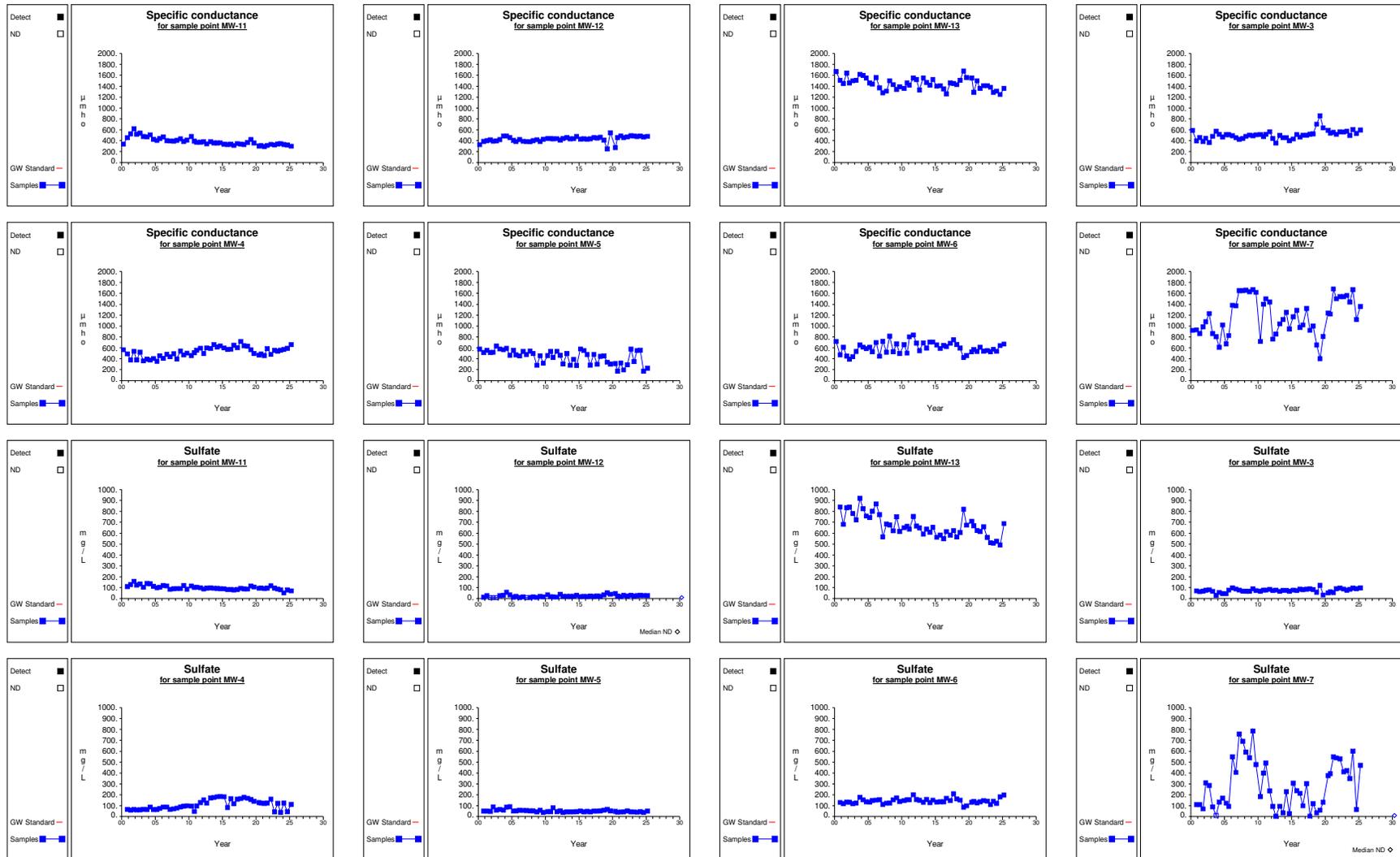
UPPERMOST AQUIFER



# Figure 3

## Time Series

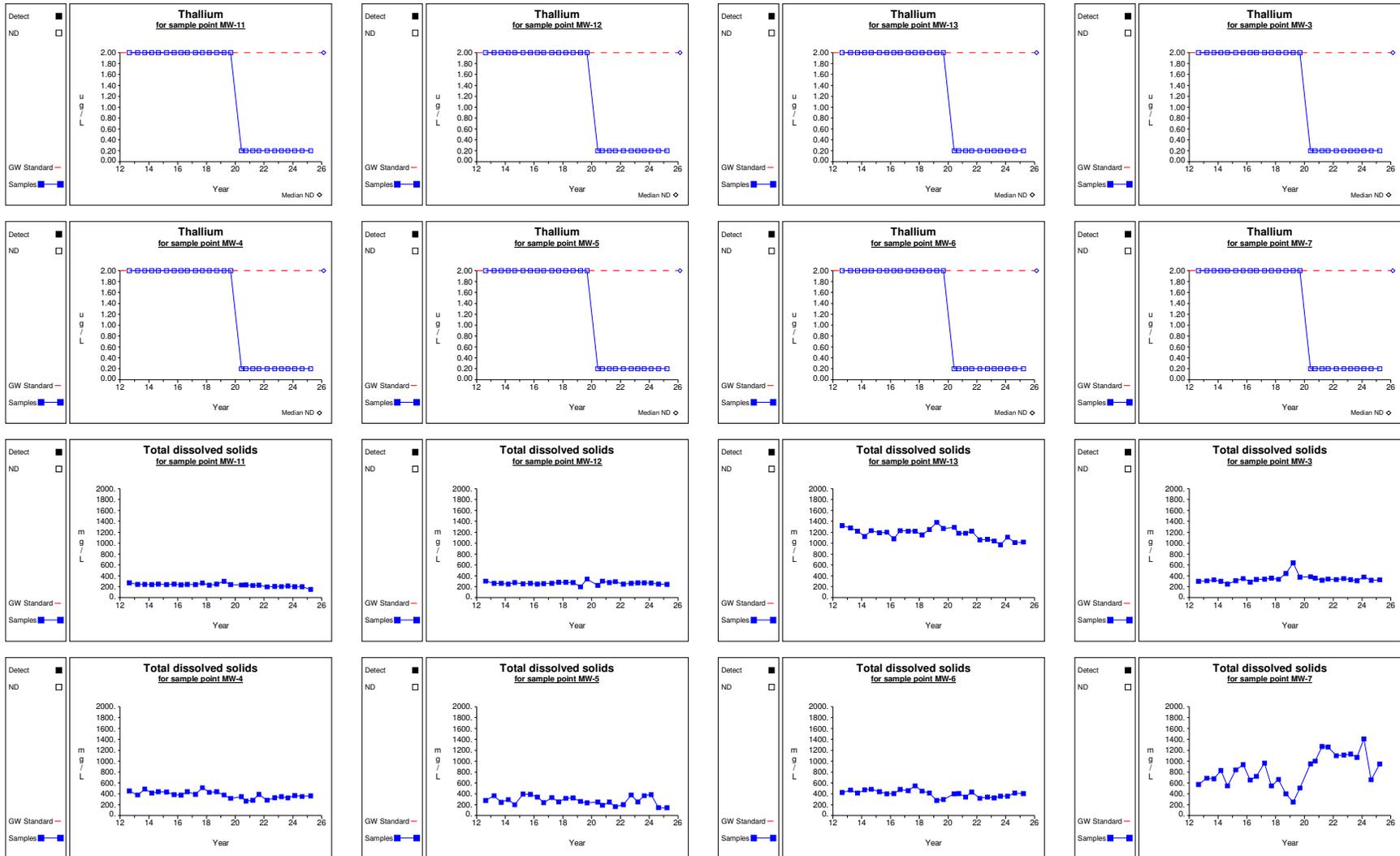
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# Figure 3

## Time Series

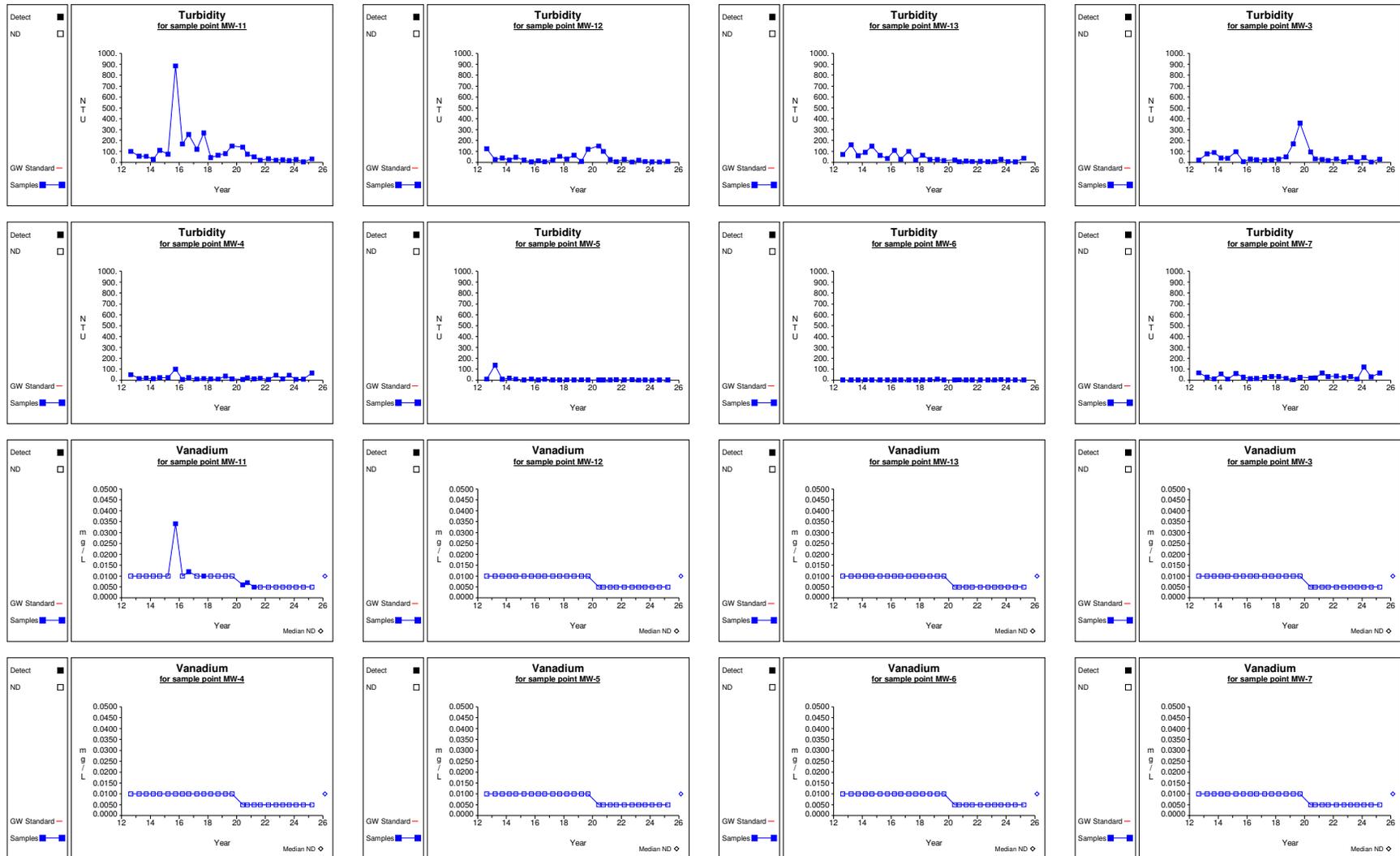
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# Figure 3

## Time Series

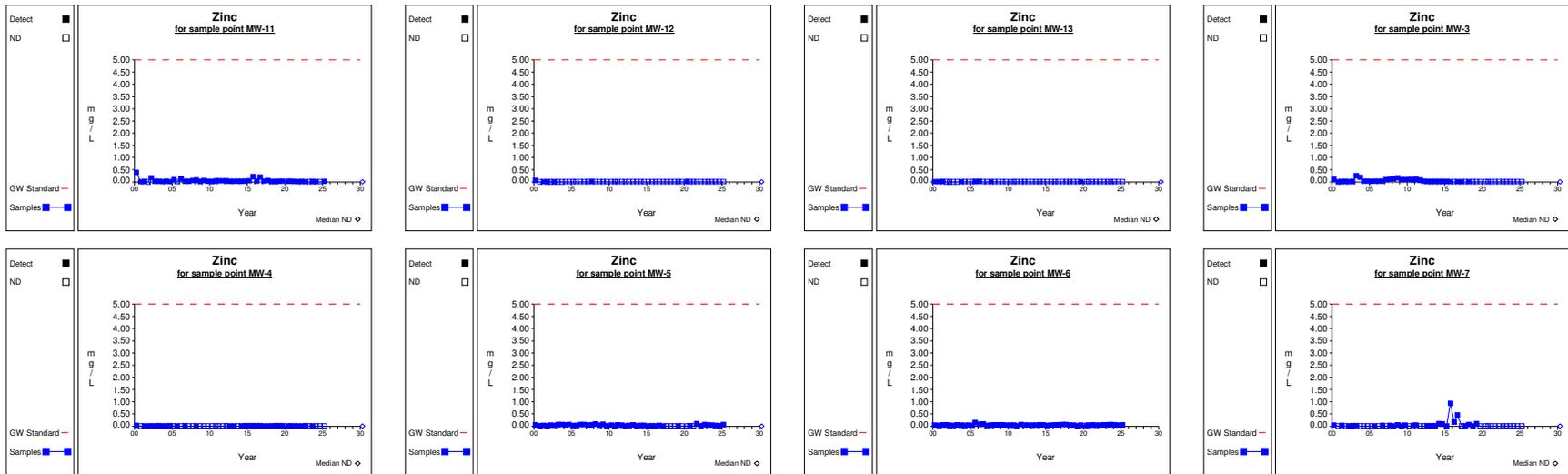
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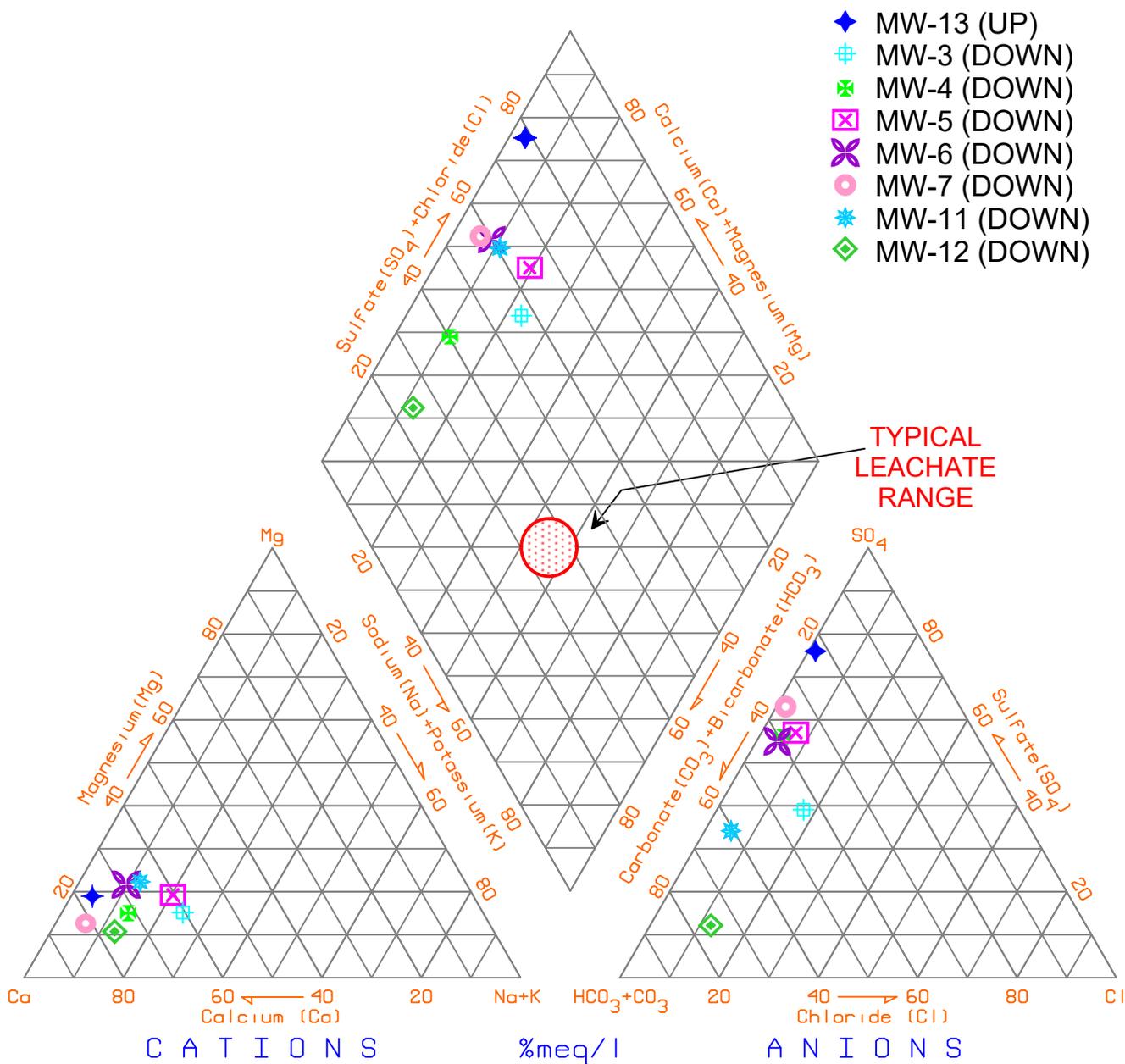


# Figure 3

## Time Series

UPPERMOST AQUIFER





The **Hutchinson** Group, Ltd.  
 Geophysical and Environmental Services  
 4280 Old William Penn Hwy  
 Murrysville, Pennsylvania 15668  
 (724) 325-3996 Fax: (724) 733-7901  
 www.thggeophysics.com

DRN	PJH	6/10/25
DES	PJH	6/10/25
CHK	AXB	6/10/25
REV		
PROJ. MGR.	AXB	6/10/25

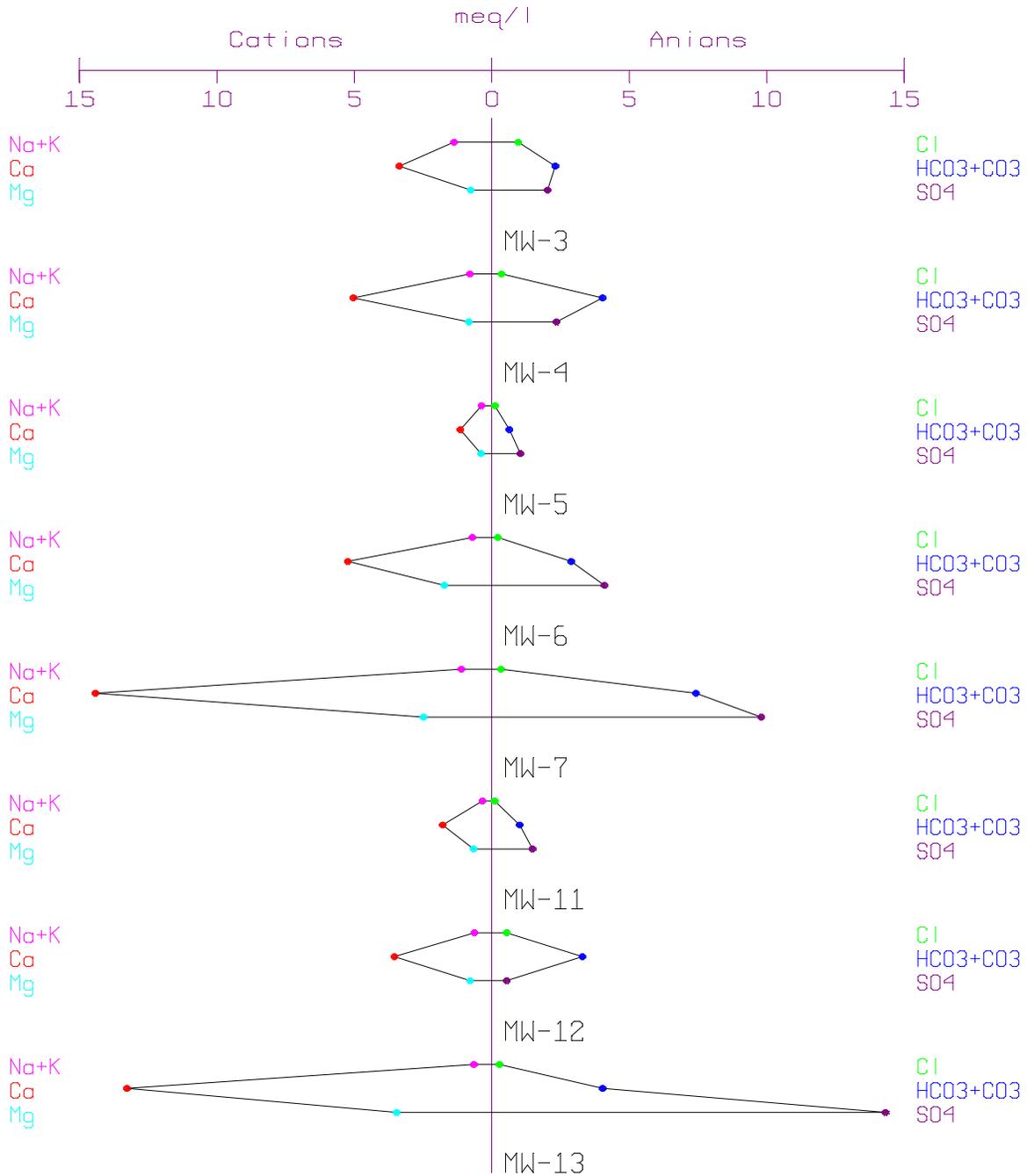
**PROJECT:**  
 Amcelle Rubble Landfill  
 Allegany County, Maryland  
 1st Semi-Annual 2025 Report

**Sample Date:**  
 August 20, 2025

**DRAWING NO.:**  
**Figure 4**  
**Trilinear Diagram**

**PREPARED FOR:**  
 Allegany County  
 Department of Public Works

**PROJECT NO.:**  
 187-7029  
**SHEET TITLE:**  
 DWG7029F4



The Hutchinson Group, Ltd.  
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DRN	PJH	6/10/25
DES	PJH	6/10/25
CHK	AXB	6/10/25
REV		
PROJ. MGR.	AXB	6/10/25

**PROJECT:**  
 Amcelle Rubble Landfill  
 Allegany County, Maryland  
 1st Semi-Annual 2025 Report

**Sample Date:**  
 March 20, 2025

**DRAWING NO.:**  
**Figure 5**  
**Stiff Diagram**

**PREPARED FOR:**  
 Allegany County  
 Department of Public Works

**PROJECT NO.:**  
 187-7029  
**SHEET TITLE:**  
 DWG7029F4

**AMCELLE RUBBLE FILL**  
Permit No. 1999-WRF-0206

APPENDIX A

ANALYTICAL RESULTS

FIRST SEMI-ANNUAL 2025

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-3
<b>Lab Order:</b>	G2503D43		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 12:30:00 PM
<b>Lab ID:</b>	G2503D43-001	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>Date Received:</b>	3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>FIELD PARAMETERS</b>			Analyst:				<b>FIELD</b>	
pH (Field)	5.76		0		S.U.			03/24/25 12:30 PM
Specific Conductance (Field)	616		0		µmhos/cm			03/24/25 12:30 PM
Temperature (Field)	12.4		0		deg C			03/24/25 12:30 PM
Turbidity (Field)	49.15		0		NTU			03/24/25 12:30 PM
<b>INORGANIC NON METALS</b>			Analyst: <b>GMG</b>				<b>SM 4500-CO2D</b>	
Bicarbonate	141		5.0	10	mg/L CaCO3	1		03/27/25 12:02 AM
<b>PHYSICAL TESTS</b>			Analyst: <b>GMG</b>				<b>EPA 120.1</b>	
Specific Conductance	595		2.0	5	µmhos/cm	1		03/27/25 12:02 AM
<b>PH BY SM 4500 H+B</b>			Analyst: <b>GMG</b>				<b>SM 4500-H+ B-11</b>	
Lab pH	7.34	H	0		S.U.	1		03/27/25 12:02 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>LAP</b>				<b>SM 2540 C-15</b>	<b>SM 2540 C-15</b>
Total dissolved solids	326		10	20	mg/L	1	03/26/25 11:20 AM	03/26/25 11:28 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>GMG</b>				<b>ASTM D1067-16</b>	
Alkalinity to pH 4.5	141		5.0	10	mg/L CaCO3	1		03/27/25 12:02 AM
<b>INDICATOR ORGANIC PARAMETERS</b>			Analyst: <b>EMF</b>				<b>Hach 8000</b>	<b>HACH 8000</b>
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/28/25 8:36 AM	03/28/25 1:38 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>
Nitrate Nitrogen	0.51		0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	03/25/25 12:44 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>
Chloride	34.2		0.200	1.00	mg/L	1	03/25/25 10:58 AM	03/25/25 12:44 PM
Sulfate	97.5		0.50	2.0	mg/L	1	03/25/25 10:58 AM	03/25/25 12:44 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>DMM</b>				<b>EPA 350.1 REV 2.0</b>	
Ammonia Nitrogen	1.69		0.040	0.10	mg/L as N	1		03/26/25 11:09 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>KCS</b>				<b>EPA 180.1 Rev 2.</b>	<b>EPA 180.1 REV 2.0</b>
Turbidity	29		0.10	0.1	NTU	1	03/25/25 1:03 PM	03/25/25 1:21 PM
<b>INORGANIC METALS</b>			Analyst: <b>LMH</b>				<b>SM 3112 B-11</b>	<b>SM 3112 B-11</b>
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	03/27/25 8:27 AM
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Barium	0.100		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-001  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-3  
**Collection Date:** 3/24/2025 12:30:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Calcium	67.4		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Cobalt	0.045		0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Iron	18.6		0.020	0.05	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Magnesium	9.31		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Manganese	7.14		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Nickel	0.019		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Potassium	8.2		0.20	0.5	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Sodium	26.7		0.10	0.2	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Zinc	0.009	J	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:35 AM
Hardness (SM 2340B)	207		0.50	1.0	mg/L CaCO3	1	03/27/25 7:00 AM	03/28/25 9:35 AM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:53 AM
Arsenic	3.1		0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:53 AM
Lead	0.20	U	0.20	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:53 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/27/25 7:00 AM	03/28/25 10:53 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>				<b>EPA 8011</b>	<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 8:19 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 8:19 PM
Surr: 1,1,2,2-Tetrachloroethane	89.0		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 8:19 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-001  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-3  
**Collection Date:** 3/24/2025 12:30:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: MEG			EPA 8260 D		
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 2:58 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 8:25 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/27/25 2:58 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 8:25 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 8:25 AM
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 8:25 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/27/25 2:58 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 8:25 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 8:25 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 8:25 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:25 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 8:25 AM
Surr: 1,2-Dichloroethane-d4	101		0	70-130	%REC	1		03/26/25 8:25 AM
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	1		03/26/25 8:25 AM
Surr: Dibromofluoromethane	99.8		0	70-130	%REC	1		03/26/25 8:25 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-001  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-3  
**Collection Date:** 3/24/2025 12:30:00 PM  
**Sampled By:** The Hutchinson Group  
**DateReceived:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
Surr: Toluene-d8	103		0	70-130	%REC	1		03/26/25 8:25 AM
<b>SUBCONTRACT</b>			Analyst: <b>SUB</b>				<b>Subcontract</b>	<b>SUBCONTRACT</b>
Subcontract	Subcontract		1.0	1.0		1	03/31/25 10:05 AM	04/05/25 11:24 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-4
<b>Lab Order:</b>	G2503D43		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 1:15:00 PM
<b>Lab ID:</b>	G2503D43-002	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>Date Received:</b>	3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed	
<b>FIELD PARAMETERS</b>			Analyst:				<b>FIELD</b>		
pH (Field)	5.88		0		S.U.			03/24/25 1:15 PM	
Specific Conductance (Field)	656		0		µmhos/cm			03/24/25 1:15 PM	
Temperature (Field)	12.7		0		deg C			03/24/25 1:15 PM	
Turbidity (Field)	38.1		0		NTU			03/24/25 1:15 PM	
<b>INORGANIC NON METALS</b>			Analyst: <b>GMG</b>				<b>SM 4500-CO2D</b>		
Bicarbonate	223		5.0	10	mg/L CaCO3	1		03/27/25 12:10 AM	
<b>PHYSICAL TESTS</b>			Analyst: <b>GMG</b>				<b>EPA 120.1</b>		
Specific Conductance	661		2.0	5	µmhos/cm	1		03/27/25 12:10 AM	
<b>PH BY SM 4500 H+B</b>			Analyst: <b>GMG</b>				<b>SM 4500-H+ B-11</b>		
Lab pH	7.62	H	0		S.U.	1		03/27/25 12:10 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>LAP</b>				<b>SM 2540 C-15</b>	<b>SM 2540 C-15</b>	
Total dissolved solids	362		10	20	mg/L	1	03/26/25 11:20 AM	03/26/25 11:28 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>GMG</b>				<b>ASTM D1067-16</b>		
Alkalinity to pH 4.5	224		5.0	10	mg/L CaCO3	1		03/27/25 12:10 AM	
<b>INDICATOR ORGANIC PARAMETERS</b>			Analyst: <b>EMF</b>				<b>Hach 8000</b>	<b>HACH 8000</b>	
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/28/25 8:36 AM	03/28/25 1:38 PM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>	
Nitrate Nitrogen	0.63		0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	03/25/25 12:56 PM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>	
Chloride	12.6		0.200	1.00	mg/L	1	03/25/25 10:58 AM	03/25/25 12:56 PM	
Sulfate	113		0.50	2.0	mg/L	1	03/25/25 10:58 AM	03/25/25 12:56 PM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>DMM</b>				<b>EPA 350.1 REV 2.0</b>		
Ammonia Nitrogen	1.98		0.040	0.10	mg/L as N	1		03/26/25 11:18 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>KCS</b>				<b>EPA 180.1 Rev 2.</b>	<b>EPA 180.1 REV 2.0</b>	
Turbidity	65		0.20	0.2	NTU	2	03/25/25 1:03 PM	03/25/25 1:21 PM	
<b>INORGANIC METALS</b>			Analyst: <b>LMH</b>				<b>SM 3112 B-11</b>	<b>SM 3112 B-11</b>	
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	03/27/25 8:29 AM	
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>	
Barium	0.146		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM	



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-002  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-4  
**Collection Date:** 3/24/2025 1:15:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Calcium	101		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Cobalt	0.006		0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Iron	28.4		0.020	0.05	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Magnesium	10.1		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Manganese	10.8		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Potassium	3.1		0.20	0.5	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Sodium	16.4		0.10	0.2	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Zinc	0.008	J	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:37 AM
Hardness (SM 2340B)	293		0.50	1.0	mg/L CaCO3	1	03/27/25 7:00 AM	03/28/25 9:37 AM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:55 AM
Arsenic	4.7		0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:55 AM
Lead	0.20	U	0.20	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:55 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/27/25 7:00 AM	03/28/25 10:55 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>				<b>EPA 8011</b>	<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 8:44 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 8:44 PM
Surr: 1,1,2,2-Tetrachloroethane	88.1		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 8:44 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-002  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-4  
**Collection Date:** 3/24/2025 1:15:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
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**VOLATILE ORGANIC COMPOUNDS**

Analyst: MEG

EPA 8260 D

1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 3:21 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 8:48 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/27/25 3:21 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 8:48 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 8:48 AM
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 8:48 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/27/25 3:21 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 8:48 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 8:48 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 8:48 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:48 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 8:48 AM
Surr: 1,2-Dichloroethane-d4	99.7		0	70-130	%REC	1		03/26/25 8:48 AM
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	1		03/26/25 8:48 AM
Surr: Dibromofluoromethane	99.2		0	70-130	%REC	1		03/26/25 8:48 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-002  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-4  
**Collection Date:** 3/24/2025 1:15:00 PM  
**Sampled By:** The Hutchinson Group  
**DateReceived:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
Surr: Toluene-d8	102		0	70-130	%REC	1		03/26/25 8:48 AM
<b>SUBCONTRACT</b>			Analyst: <b>SUB</b>				<b>Subcontract</b>	<b>SUBCONTRACT</b>
Subcontract	Subcontract		1.0	1.0		1	03/31/25 10:05 AM	04/05/25 11:37 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-5
<b>Lab Order:</b>	G2503D43		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 2:55:00 PM
<b>Lab ID:</b>	G2503D43-005	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>Date Received:</b>	3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>FIELD PARAMETERS</b>			Analyst:			<b>FIELD</b>		
pH (Field)	5.54		0		S.U.			03/24/25 2:55 PM
Specific Conductance (Field)	345		0		µmhos/cm			03/24/25 2:55 PM
Temperature (Field)	12.3		0		deg C			03/24/25 2:55 PM
Turbidity (Field)	0		0		NTU			03/24/25 2:55 PM
<b>INORGANIC NON METALS</b>			Analyst: <b>GMG</b>			<b>SM 4500-CO2D</b>		
Bicarbonate	39		5.0	10	mg/L CaCO3	1		03/27/25 12:30 AM
<b>PHYSICAL TESTS</b>			Analyst: <b>GMG</b>			<b>EPA 120.1</b>		
Specific Conductance	226		2.0	5	µmhos/cm	1		03/27/25 12:30 AM
<b>PH BY SM 4500 H+B</b>			Analyst: <b>GMG</b>			<b>SM 4500-H+ B-11</b>		
Lab pH	6.99	H	0		S.U.	1		03/27/25 12:30 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>LAP</b>			<b>SM 2540 C-15</b>		<b>SM 2540 C-15</b>
Total dissolved solids	144		10	20	mg/L	1	03/26/25 11:20 AM	03/26/25 11:28 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>GMG</b>			<b>ASTM D1067-16</b>		
Alkalinity to pH 4.5	39		5.0	10	mg/L CaCO3	1		03/27/25 12:30 AM
<b>INDICATOR ORGANIC PARAMETERS</b>			Analyst: <b>EMF</b>			<b>Hach 8000</b>		<b>HACH 8000</b>
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/28/25 8:36 AM	03/28/25 1:38 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>			<b>EPA 300.0 Rev 2.</b>		<b>EPA 300.0 REV 2.1</b>
Nitrate Nitrogen	0.93		0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	03/25/25 1:55 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>			<b>EPA 300.0 Rev 2.</b>		<b>EPA 300.0 REV 2.1</b>
Chloride	4.21		0.200	1.00	mg/L	1	03/25/25 10:58 AM	03/25/25 1:55 PM
Sulfate	50.1		0.50	2.0	mg/L	1	03/25/25 10:58 AM	03/25/25 1:55 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>DMM</b>			<b>EPA 350.1 REV 2.0</b>		<b>EPA 350.1 REV 2.0</b>
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		03/26/25 11:22 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>KCS</b>			<b>EPA 180.1 Rev 2.</b>		<b>EPA 180.1 REV 2.0</b>
Turbidity	0.45		0.10	0.1	NTU	1	03/25/25 1:03 PM	03/25/25 1:21 PM
<b>INORGANIC METALS</b>			Analyst: <b>LMH</b>			<b>SM 3112 B-11</b>		<b>SM 3112 B-11</b>
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	03/27/25 8:35 AM
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>			<b>EPA 200.2 Rev 2.</b>		<b>EPA 200.7 REV 4.4</b>
Barium	0.036		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-005  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-5  
**Collection Date:** 3/24/2025 2:55:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Beryllium	0.0005	J	0.00050	0.0010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Cadmium	0.004		0.0010	0.002	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Calcium	22.9		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Cobalt	0.019		0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Iron	0.020	U	0.020	0.05	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Magnesium	4.76		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Manganese	1.88		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Nickel	0.018		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Potassium	4.2		0.20	0.5	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Sodium	6.1		0.10	0.2	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Zinc	0.062		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:45 AM
Hardness (SM 2340B)	76.9		0.50	1.0	mg/L CaCO3	1	03/27/25 7:00 AM	03/28/25 9:45 AM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 11:03 AM
Arsenic	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 11:03 AM
Lead	0.20	U	0.20	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 11:03 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/27/25 7:00 AM	03/28/25 11:03 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>				<b>EPA 8011</b>	<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 10:00 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 10:00 PM
Surr: 1,1,2,2-Tetrachloroethane	93.3		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 10:00 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-005  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-5  
**Collection Date:** 3/24/2025 2:55:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: MEG			EPA 8260 D		
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 4:30 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 9:58 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/27/25 4:30 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 9:58 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 9:58 AM
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 9:58 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/27/25 4:30 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 9:58 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 9:58 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 9:58 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:58 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 9:58 AM
Surr: 1,2-Dichloroethane-d4	97.1		0	70-130	%REC	1		03/26/25 9:58 AM
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	1		03/26/25 9:58 AM
Surr: Dibromofluoromethane	98.8		0	70-130	%REC	1		03/26/25 9:58 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-005  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-5  
**Collection Date:** 3/24/2025 2:55:00 PM  
**Sampled By:** The Hutchinson Group  
**DateReceived:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
Surr: Toluene-d8	102		0	70-130	%REC	1		03/26/25 9:58 AM
<b>SUBCONTRACT</b>			Analyst: <b>SUB</b>				<b>Subcontract</b>	<b>SUBCONTRACT</b>
Subcontract	Subcontract		1.0	1.0		1	03/31/25 10:05 AM	04/05/25 12:05 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-6
<b>Lab Order:</b>	G2503D42		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 4:40:00 PM
<b>Lab ID:</b>	G2503D42-002	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>Date Received:</b>	3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>FIELD PARAMETERS</b>			Analyst:				<b>FIELD</b>	
pH (Field)	6.18		0		S.U.			03/24/25 4:40 PM
Specific Conductance (Field)	631		0		µmhos/cm			03/24/25 4:40 PM
Temperature (Field)	11.7		0		deg C			03/24/25 4:40 PM
Turbidity (Field)	3.77		0		NTU			03/24/25 4:40 PM
<b>INORGANIC NON METALS</b>			Analyst: <b>GMG</b>				<b>SM 4500-CO2D</b>	
Bicarbonate	173		5.0	10	mg/L CaCO3	1		03/26/25 11:02 PM
<b>PHYSICAL TESTS</b>			Analyst: <b>GMG</b>				<b>EPA 120.1</b>	
Specific Conductance	669		2.0	5	µmhos/cm	1		03/26/25 11:02 PM
<b>PH BY SM 4500 H+B</b>			Analyst: <b>GMG</b>				<b>SM 4500-H+ B-11</b>	
Lab pH	7.57	H	0		S.U.	1		03/26/25 11:02 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>LAP</b>				<b>SM 2540 C-15</b>	<b>SM 2540 C-15</b>
Total dissolved solids	404		10	20	mg/L	1	03/26/25 11:20 AM	03/26/25 11:28 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>GMG</b>				<b>ASTM D1067-16</b>	
Alkalinity to pH 4.5	174		5.0	10	mg/L CaCO3	1		03/26/25 11:02 PM
<b>INDICATOR ORGANIC PARAMETERS</b>			Analyst: <b>EMF</b>				<b>Hach 8000</b>	<b>HACH 8000</b>
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/28/25 7:12 AM	03/28/25 1:34 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>
Nitrate Nitrogen	0.53		0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	03/25/25 11:44 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>
Chloride	7.83		0.200	1.00	mg/L	1	03/25/25 10:58 AM	03/25/25 11:44 AM
Sulfate	197		0.50	2.0	mg/L	1	03/25/25 10:58 AM	03/25/25 11:44 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>DMM</b>				<b>EPA 350.1 REV 2.0</b>	
Ammonia Nitrogen	0.16		0.040	0.10	mg/L as N	1		03/26/25 11:01 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>KCS</b>				<b>EPA 180.1 Rev 2.</b>	<b>EPA 180.1 REV 2.0</b>
Turbidity	1.5		0.10	0.1	NTU	1	03/25/25 1:03 PM	03/25/25 1:21 PM
<b>INORGANIC METALS</b>			Analyst: <b>LMH</b>				<b>SM 3112 B-11</b>	<b>SM 3112 B-11</b>
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	03/27/25 8:15 AM
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Barium	0.017		0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-002  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-6  
  
**Collection Date:** 3/24/2025 4:40:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Cadmium	0.001	J	0.0010	0.002	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Calcium	105		0.050	0.10	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Cobalt	0.025		0.0020	0.005	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Iron	0.11		0.020	0.05	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Magnesium	21.0		0.050	0.10	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Manganese	2.73		0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Nickel	0.023		0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Potassium	3.6		0.20	0.5	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/26/25 11:00 AM	04/01/25 10:19 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Sodium	13.8		0.10	0.2	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Zinc	0.058		0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:18 PM
Hardness (SM 2340B)	350		0.50	1.0	mg/L CaCO3	1	03/26/25 11:00 AM	03/27/25 5:18 PM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/26/25 11:00 AM	03/27/25 11:24 AM
Arsenic	0.50	U	0.50	1.0	µg/L	1	03/26/25 11:00 AM	03/27/25 11:24 AM
Lead	0.3	J	0.20	1.0	µg/L	1	03/26/25 11:00 AM	03/27/25 11:24 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/26/25 11:00 AM	03/27/25 11:24 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>				<b>EPA 8011</b>	<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 5:20 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 5:20 PM
Surr: 1,1,2,2-Tetrachloroethane	90.2		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 5:20 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-002  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-6  
**Collection Date:** 3/24/2025 4:40:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>			EPA 8260 D		
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 6:06 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 6:28 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/26/25 5:05 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 6:28 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 6:28 AM
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 6:28 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 5:05 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 6:28 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 6:28 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 6:28 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:28 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 6:28 AM
Surr: 1,2-Dichloroethane-d4	102		0	70-130	%REC	1		03/26/25 6:28 AM
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	1		03/26/25 6:28 AM
Surr: Dibromofluoromethane	101		0	70-130	%REC	1		03/26/25 6:28 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

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<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-6
<b>Lab Order:</b>	G2503D42		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 4:40:00 PM
<b>Lab ID:</b>	G2503D42-002	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>DateReceived:</b>	3/25/2025 9:08:27 AM

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Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>								
Surr: Toluene-d8	102		0	70-130	%REC	1		

Analyst: MEG

EPA 8260 D

03/26/25 6:28 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-7
<b>Lab Order:</b>	G2503D42		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 5:30:00 PM
<b>Lab ID:</b>	G2503D42-003	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>Date Received:</b>	3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed	
<b>FIELD PARAMETERS</b>			Analyst:				<b>FIELD</b>		
pH (Field)	6.08		0		S.U.			03/24/25 5:30 PM	
Specific Conductance (Field)	1030		0		µmhos/cm			03/24/25 5:30 PM	
Temperature (Field)	11.5		0		deg C			03/24/25 5:30 PM	
Turbidity (Field)	2.54		0		NTU			03/24/25 5:30 PM	
<b>INORGANIC NON METALS</b>			Analyst: <b>GMG</b>				<b>SM 4500-CO2D</b>		
Bicarbonate	438		5.0	10	mg/L CaCO3	1		03/26/25 11:11 PM	
<b>PHYSICAL TESTS</b>			Analyst: <b>GMG</b>				<b>EPA 120.1</b>		
Specific Conductance	1360		2.0	5	µmhos/cm	1		03/26/25 11:11 PM	
<b>PH BY SM 4500 H+B</b>			Analyst: <b>GMG</b>				<b>SM 4500-H+ B-11</b>		
Lab pH	8.08	H	0		S.U.	1		03/26/25 11:11 PM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>LAP</b>				<b>SM 2540 C-15</b>	<b>SM 2540 C-15</b>	
Total dissolved solids	948		10	20	mg/L	1	03/26/25 11:20 AM	03/26/25 11:28 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>GMG</b>				<b>ASTM D1067-16</b>		
Alkalinity to pH 4.5	443		5.0	10	mg/L CaCO3	1		03/26/25 11:11 PM	
<b>INDICATOR ORGANIC PARAMETERS</b>			Analyst: <b>EMF</b>				<b>Hach 8000</b>	<b>HACH 8000</b>	
Chemical Oxygen Demand	5	J	5.0	10	mg/L	1	03/28/25 7:12 AM	03/28/25 1:34 PM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>	
Nitrate Nitrogen	0.49		0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	03/25/25 11:56 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>	
Chloride	11.9		0.200	1.00	mg/L	1	03/25/25 10:58 AM	03/25/25 11:56 AM	
Sulfate	471		0.50	2.0	mg/L	1	03/25/25 10:58 AM	03/25/25 11:56 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>DMM</b>				<b>EPA 350.1 REV 2.0</b>		
Ammonia Nitrogen	0.05	J	0.040	0.10	mg/L as N	1		03/26/25 11:03 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>KCS</b>				<b>EPA 180.1 Rev 2.</b>	<b>EPA 180.1 REV 2.0</b>	
Turbidity	65		0.20	0.2	NTU	2	03/25/25 1:03 PM	03/25/25 1:21 PM	
<b>INORGANIC METALS</b>			Analyst: <b>LMH</b>				<b>SM 3112 B-11</b>	<b>SM 3112 B-11</b>	
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	03/27/25 8:16 AM	
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>	
Barium	0.108		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM	



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-003  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-7  
**Collection Date:** 3/24/2025 5:30:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Calcium	289		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Iron	8.51		0.020	0.05	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Magnesium	30.2		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Manganese	0.414		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Potassium	10.2		0.20	0.5	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Sodium	19.4		0.10	0.2	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:06 AM
Hardness (SM 2340B)	846		0.50	1.0	mg/L CaCO3	1	03/27/25 7:00 AM	03/28/25 9:06 AM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:13 AM
Arsenic	1.8		0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:13 AM
Lead	0.20	U	0.20	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:13 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/27/25 7:00 AM	03/28/25 10:13 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>				<b>EPA 8011</b>	<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 6:36 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 6:36 PM
Surr: 1,1,2,2-Tetrachloroethane	86.3		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 6:36 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND

**Client Sample ID:** MW-7

**Lab Order:** G2503D42

**Project:** Rubble L.F. 200 S

**Collection Date:** 3/24/2025 5:30:00 PM

**Lab ID:** G2503D42-003

**Sampled By:** The Hutchinson Group

**Matrix:** GROUNDWATER

**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: MEG			EPA 8260 D		
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 6:30 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 6:52 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/26/25 5:29 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 6:52 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 6:52 AM
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 6:52 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 5:29 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 6:52 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 6:52 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 6:52 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:52 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 6:52 AM
Surr: 1,2-Dichloroethane-d4	102		0	70-130	%REC	1		03/26/25 6:52 AM
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	1		03/26/25 6:52 AM
Surr: Dibromofluoromethane	99.3		0	70-130	%REC	1		03/26/25 6:52 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

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<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-7
<b>Lab Order:</b>	G2503D42		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 5:30:00 PM
<b>Lab ID:</b>	G2503D42-003	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>DateReceived:</b>	3/25/2025 9:08:27 AM

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Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>								
Surr: Toluene-d8	103		0	70-130	%REC	1		

Analyst: MEG

EPA 8260 D

03/26/25 6:52 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-11
<b>Lab Order:</b>	G2503D43		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 2:00:00 PM
<b>Lab ID:</b>	G2503D43-003	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>Date Received:</b>	3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed	
<b>FIELD PARAMETERS</b>			Analyst:				<b>FIELD</b>		
pH (Field)	5.86		0		S.U.			03/24/25 2:00 PM	
Specific Conductance (Field)	418		0		µmhos/cm			03/24/25 2:00 PM	
Temperature (Field)	13.3		0		deg C			03/24/25 2:00 PM	
Turbidity (Field)	0		0		NTU			03/24/25 2:00 PM	
<b>INORGANIC NON METALS</b>			Analyst: <b>GMG</b>				<b>SM 4500-CO2D</b>		
Bicarbonate	62		5.0	10	mg/L CaCO3	1		03/27/25 12:19 AM	
<b>PHYSICAL TESTS</b>			Analyst: <b>GMG</b>				<b>EPA 120.1</b>		
Specific Conductance	300		2.0	5	µmhos/cm	1		03/27/25 12:19 AM	
<b>PH BY SM 4500 H+B</b>			Analyst: <b>GMG</b>				<b>SM 4500-H+ B-11</b>		
Lab pH	7.22	H	1.00	1.00	S.U.	1		03/27/25 12:19 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>LAP</b>				<b>SM 2540 C-15</b>	<b>SM 2540 C-15</b>	
Total dissolved solids	152		10	20	mg/L	1	03/26/25 11:20 AM	03/26/25 11:28 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>GMG</b>				<b>ASTM D1067-16</b>		
Alkalinity to pH 4.5	62		5.0	10	mg/L CaCO3	1		03/27/25 12:19 AM	
<b>INDICATOR ORGANIC PARAMETERS</b>			Analyst: <b>EMF</b>				<b>Hach 8000</b>	<b>HACH 8000</b>	
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/28/25 8:36 AM	03/28/25 1:38 PM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>	
Nitrate Nitrogen	0.48		0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	03/25/25 1:08 PM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>	
Chloride	3.76		0.200	1.00	mg/L	1	03/25/25 10:58 AM	03/25/25 1:08 PM	
Sulfate	71.2		0.50	2.0	mg/L	1	03/25/25 10:58 AM	03/25/25 1:08 PM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>DMM</b>				<b>EPA 350.1 REV 2.0</b>		
Ammonia Nitrogen	0.16		0.040	0.10	mg/L as N	1		03/26/25 11:19 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>KCS</b>				<b>EPA 180.1 Rev 2.</b>	<b>EPA 180.1 REV 2.0</b>	
Turbidity	32		0.10	0.1	NTU	1	03/25/25 1:03 PM	03/25/25 1:21 PM	
<b>INORGANIC METALS</b>			Analyst: <b>LMH</b>				<b>SM 3112 B-11</b>	<b>SM 3112 B-11</b>	
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	03/27/25 8:30 AM	
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>	
Barium	0.037		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM	



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-003  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-11  
**Collection Date:** 3/24/2025 2:00:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Calcium	35.8		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Cobalt	0.014		0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Iron	2.65		0.020	0.05	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Magnesium	8.03		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Manganese	5.23		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Nickel	0.008	J	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Potassium	1.6		0.20	0.5	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Sodium	6.8		0.10	0.2	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Zinc	0.024		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:40 AM
Hardness (SM 2340B)	123		0.50	1.0	mg/L CaCO3	1	03/27/25 7:00 AM	03/28/25 9:40 AM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:58 AM
Arsenic	1.1		0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:58 AM
Lead	1.4		0.20	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:58 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/27/25 7:00 AM	03/28/25 10:58 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>				<b>EPA 8011</b>	<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 9:09 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 9:09 PM
Surr: 1,1,2,2-Tetrachloroethane	102		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 9:09 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-003  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-11  
**Collection Date:** 3/24/2025 2:00:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>			<b>EPA 8260 D</b>		
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 3:44 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 9:12 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/27/25 3:44 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 9:12 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 9:12 AM
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 9:12 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/27/25 3:44 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 9:12 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 9:12 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 9:12 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:12 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 9:12 AM
Surr: 1,2-Dichloroethane-d4	99.3		0	70-130	%REC	1		03/26/25 9:12 AM
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	1		03/26/25 9:12 AM
Surr: Dibromofluoromethane	98.7		0	70-130	%REC	1		03/26/25 9:12 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-003  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-11  
**Collection Date:** 3/24/2025 2:00:00 PM  
**Sampled By:** The Hutchinson Group  
**DateReceived:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
Surr: Toluene-d8	101		0	70-130	%REC	1		03/26/25 9:12 AM
<b>SUBCONTRACT</b>			Analyst: <b>SUB</b>				<b>Subcontract</b>	<b>SUBCONTRACT</b>
Subcontract	Subcontract		1.0	1.0		1	03/31/25 10:05 AM	04/05/25 11:51 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-12
<b>Lab Order:</b>	G2503D42		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 4:00:00 PM
<b>Lab ID:</b>	G2503D42-001	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>Date Received:</b>	3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed	
<b>FIELD PARAMETERS</b>			Analyst:				<b>FIELD</b>		
pH (Field)	6.49		0		S.U.			03/24/25 4:00 PM	
Specific Conductance (Field)	507		0		µmhos/cm			03/24/25 4:00 PM	
Temperature (Field)	12.6		0		deg C			03/24/25 4:00 PM	
Turbidity (Field)	0		0		NTU			03/24/25 4:00 PM	
<b>INORGANIC NON METALS</b>			Analyst: <b>GMG</b>				<b>SM 4500-CO2D</b>		
Bicarbonate	189		5.0	10	mg/L CaCO3	1		03/26/25 10:54 PM	
<b>PHYSICAL TESTS</b>			Analyst: <b>GMG</b>				<b>EPA 120.1</b>		
Specific Conductance	479		2.0	5	µmhos/cm	1		03/26/25 10:54 PM	
<b>PH BY SM 4500 H+B</b>			Analyst: <b>GMG</b>				<b>SM 4500-H+ B-11</b>		
Lab pH	8.29	H	0		S.U.	1		03/26/25 10:54 PM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>LAP</b>				<b>SM 2540 C-15</b>	<b>SM 2540 C-15</b>	
Total dissolved solids	244		10	20	mg/L	1	03/26/25 11:20 AM	03/26/25 11:28 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>GMG</b>				<b>ASTM D1067-16</b>		
Alkalinity to pH 4.5	193		5.0	10	mg/L CaCO3	1		03/26/25 10:54 PM	
<b>INDICATOR ORGANIC PARAMETERS</b>			Analyst: <b>EMF</b>				<b>Hach 8000</b>	<b>HACH 8000</b>	
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/28/25 7:12 AM	03/28/25 1:34 PM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>	
Nitrate Nitrogen	0.020	U	0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	03/25/25 11:09 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	<b>EPA 300.0 REV 2.1</b>	
Chloride	19.2		0.200	1.00	mg/L	1	03/25/25 10:58 AM	03/25/25 11:09 AM	
Sulfate	26.2		0.50	2.0	mg/L	1	03/25/25 10:58 AM	03/25/25 11:09 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>DMM</b>				<b>EPA 350.1 REV 2.0</b>		
Ammonia Nitrogen	0.15		0.040	0.10	mg/L as N	1		03/26/25 10:57 AM	
<b>INORGANIC NON-METALS</b>			Analyst: <b>KCS</b>				<b>EPA 180.1 Rev 2.</b>	<b>EPA 180.1 REV 2.0</b>	
Turbidity	9.2		0.10	0.1	NTU	1	03/25/25 1:03 PM	03/25/25 1:21 PM	
<b>INORGANIC METALS</b>			Analyst: <b>LMH</b>				<b>SM 3112 B-11</b>	<b>SM 3112 B-11</b>	
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	03/27/25 8:08 AM	
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>	
Barium	0.056		0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM	



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-001  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-12  
**Collection Date:** 3/24/2025 4:00:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Calcium	71.0		0.050	0.10	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Iron	0.70		0.020	0.05	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Magnesium	9.55		0.050	0.10	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Manganese	1.24		0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Potassium	1.9		0.20	0.5	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/26/25 11:00 AM	04/01/25 10:17 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Sodium	13.4		0.10	0.2	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/26/25 11:00 AM	03/27/25 5:15 PM
Hardness (SM 2340B)	217		0.50	1.0	mg/L CaCO3	1	03/26/25 11:00 AM	03/27/25 5:15 PM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/26/25 11:00 AM	03/27/25 11:22 AM
Arsenic	0.50	U	0.50	1.0	µg/L	1	03/26/25 11:00 AM	03/27/25 11:22 AM
Lead	0.20	U	0.20	1.0	µg/L	1	03/26/25 11:00 AM	03/27/25 11:22 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/26/25 11:00 AM	03/27/25 11:22 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>				<b>EPA 8011</b>	<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 4:55 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 4:55 PM
Surr: 1,1,2,2-Tetrachloroethane	91.1		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 4:55 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-001  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-12  
**Collection Date:** 3/24/2025 4:00:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>			<b>EPA 8260 D</b>		
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 5:43 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 6:05 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/26/25 4:41 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 6:05 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 6:05 AM
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 6:05 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 4:41 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 6:05 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 6:05 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 6:05 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:05 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 6:05 AM
Surr: 1,2-Dichloroethane-d4	101		0	70-130	%REC	1		03/26/25 6:05 AM
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	1		03/26/25 6:05 AM
Surr: Dibromofluoromethane	101		0	70-130	%REC	1		03/26/25 6:05 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

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<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-12
<b>Lab Order:</b>	G2503D42		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 4:00:00 PM
<b>Lab ID:</b>	G2503D42-001	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>DateReceived:</b>	3/25/2025 9:08:27 AM

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Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>								
Surr: Toluene-d8	102		0	70-130	%REC	1		

Analyst: MEG

EPA 8260 D

03/26/25 6:05 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-13
<b>Lab Order:</b>	G2503D42		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 7:20:00 PM
<b>Lab ID:</b>	G2503D42-004	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>Date Received:</b>	3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>FIELD PARAMETERS</b>			Analyst:			<b>FIELD</b>		
pH (Field)	6.69		0		S.U.			03/24/25 7:20 PM
Specific Conductance (Field)	956		0		µmhos/cm			03/24/25 7:20 PM
Temperature (Field)	11.6		0		deg C			03/24/25 7:20 PM
Turbidity (Field)	42.69		0		NTU			03/24/25 7:20 PM
<b>INORGANIC NON METALS</b>			Analyst: <b>GMG</b>			<b>SM 4500-CO2D</b>		
Bicarbonate	237		5.0	10	mg/L CaCO3	1		03/26/25 11:36 PM
<b>PHYSICAL TESTS</b>			Analyst: <b>GMG</b>			<b>EPA 120.1</b>		
Specific Conductance	1360		2.0	5	µmhos/cm	1		03/26/25 11:36 PM
<b>PH BY SM 4500 H+B</b>			Analyst: <b>GMG</b>			<b>SM 4500-H+ B-11</b>		
Lab pH	8.04	H	0		S.U.	1		03/26/25 11:36 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>LAP</b>			<b>SM 2540 C-15</b>		<b>SM 2540 C-15</b>
Total dissolved solids	1020		10	20	mg/L	1	03/26/25 11:20 AM	03/26/25 11:28 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>GMG</b>			<b>ASTM D1067-16</b>		
Alkalinity to pH 4.5	240		5.0	10	mg/L CaCO3	1		03/26/25 11:36 PM
<b>INDICATOR ORGANIC PARAMETERS</b>			Analyst: <b>EMF</b>			<b>Hach 8000</b>		<b>HACH 8000</b>
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/28/25 7:12 AM	03/28/25 1:34 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>			<b>EPA 300.0 Rev 2.</b>		<b>EPA 300.0 REV 2.1</b>
Nitrate Nitrogen	0.020	U	0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	03/25/25 12:08 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>ACB</b>			<b>EPA 300.0 Rev 2.</b>		<b>EPA 300.0 REV 2.1</b>
Chloride	9.93		0.200	1.00	mg/L	1	03/25/25 10:58 AM	03/25/25 12:08 PM
Sulfate	688		0.50	2.0	mg/L	1	03/25/25 10:58 AM	03/25/25 12:08 PM
<b>INORGANIC NON-METALS</b>			Analyst: <b>DMM</b>					<b>EPA 350.1 REV 2.0</b>
Ammonia Nitrogen	0.06	J	0.040	0.10	mg/L as N	1		03/26/25 11:04 AM
<b>INORGANIC NON-METALS</b>			Analyst: <b>KCS</b>			<b>EPA 180.1 Rev 2.</b>		<b>EPA 180.1 REV 2.0</b>
Turbidity	38		0.10	0.1	NTU	1	03/25/25 1:03 PM	03/25/25 1:21 PM
<b>INORGANIC METALS</b>			Analyst: <b>LMH</b>			<b>SM 3112 B-11</b>		<b>SM 3112 B-11</b>
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	03/27/25 8:18 AM
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>			<b>EPA 200.2 Rev 2.</b>		<b>EPA 200.7 REV 4.4</b>
Barium	0.019		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-004  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-13  
**Collection Date:** 3/24/2025 7:20:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Calcium	266		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Cobalt	0.004	J	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Iron	4.19		0.020	0.05	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Magnesium	42.1		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Manganese	10.2		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Potassium	2.3		0.20	0.5	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Sodium	13.6		0.10	0.2	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:14 AM
Hardness (SM 2340B)	838		0.50	1.0	mg/L CaCO3	1	03/27/25 7:00 AM	03/28/25 9:14 AM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:46 AM
Arsenic	2.0		0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:46 AM
Lead	0.20	U	0.20	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:46 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/27/25 7:00 AM	03/28/25 10:46 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>				<b>EPA 8011</b>	<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 7:02 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 7:02 PM
Surr: 1,1,2,2-Tetrachloroethane	91.9		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 7:02 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-004  
**Matrix:** GROUNDWATER

**Client Sample ID:** MW-13  
**Collection Date:** 3/24/2025 7:20:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>			<b>EPA 8260 D</b>		
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 6:54 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 7:15 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/26/25 5:53 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 7:15 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 7:15 AM
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 7:15 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 5:53 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 7:15 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 7:15 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 7:15 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:15 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 7:15 AM
Surr: 1,2-Dichloroethane-d4	102		0	70-130	%REC	1		03/26/25 7:15 AM
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	1		03/26/25 7:15 AM
Surr: Dibromofluoromethane	99.9		0	70-130	%REC	1		03/26/25 7:15 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

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<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	MW-13
<b>Lab Order:</b>	G2503D42		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 7:20:00 PM
<b>Lab ID:</b>	G2503D42-004	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>DateReceived:</b>	3/25/2025 9:08:27 AM

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Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>								
Surr: Toluene-d8	102		0	70-130	%REC	1		

Analyst: MEG

EPA 8260 D

03/26/25 7:15 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	FIELD DUP
<b>Lab Order:</b>	G2503D43		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 2:00:00 PM
<b>Lab ID:</b>	G2503D43-004	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	GROUNDWATER	<b>Date Received:</b>	3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC NON METALS</b>								
Bicarbonate	72		5.0	10	mg/L CaCO3	1		03/27/25 12:24 AM
			Analyst: <b>GMG</b>				<b>SM 4500-CO2D</b>	
<b>PHYSICAL TESTS</b>								
Specific Conductance	312		2.0	5	µmhos/cm	1		03/27/25 12:24 AM
			Analyst: <b>GMG</b>				<b>EPA 120.1</b>	
<b>PH BY SM 4500 H+B</b>								
Lab pH	7.29	H	0		S.U.	1		03/27/25 12:24 AM
			Analyst: <b>GMG</b>				<b>SM 4500-H+ B-11</b>	
<b>INORGANIC NON-METALS</b>								
Total dissolved solids	164		10	20	mg/L	1	03/26/25 11:20 AM	03/26/25 11:28 AM
			Analyst: <b>LAP</b>				<b>SM 2540 C-15</b>	
<b>INORGANIC NON-METALS</b>								
Alkalinity to pH 4.5	72		5.0	10	mg/L CaCO3	1		03/27/25 12:24 AM
			Analyst: <b>GMG</b>				<b>ASTM D1067-16</b>	
<b>INDICATOR ORGANIC PARAMETERS</b>								
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/28/25 8:36 AM	03/28/25 1:38 PM
			Analyst: <b>EMF</b>				<b>Hach 8000</b>	
<b>INORGANIC NON-METALS</b>								
Nitrate Nitrogen	0.52		0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	03/25/25 1:19 PM
			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	
<b>INORGANIC NON-METALS</b>								
Chloride	3.74		0.200	1.00	mg/L	1	03/25/25 10:58 AM	03/25/25 1:19 PM
Sulfate	71.2		0.50	2.0	mg/L	1	03/25/25 10:58 AM	03/25/25 1:19 PM
			Analyst: <b>ACB</b>				<b>EPA 300.0 Rev 2.</b>	
<b>INORGANIC NON-METALS</b>								
Ammonia Nitrogen	0.12		0.040	0.10	mg/L as N	1		03/26/25 11:21 AM
			Analyst: <b>DMM</b>				<b>EPA 350.1 REV 2.0</b>	
<b>INORGANIC NON-METALS</b>								
Turbidity	34		0.10	0.1	NTU	1	03/25/25 1:03 PM	03/25/25 1:21 PM
			Analyst: <b>KCS</b>				<b>EPA 180.1 Rev 2.</b>	
<b>INORGANIC METALS</b>								
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	03/27/25 8:32 AM
			Analyst: <b>LMH</b>				<b>SM 3112 B-11</b>	
<b>INORGANIC METALS</b>								
Barium	0.038		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Calcium	35.1		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Cobalt	0.013		0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-004  
**Matrix:** GROUNDWATER

**Client Sample ID:** FIELD DUP  
**Collection Date:** 3/24/2025 2:00:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>			<b>EPA 200.2 Rev 2.</b>		<b>EPA 200.7 REV 4.4</b>
Iron	2.70		0.020	0.05	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Magnesium	7.98		0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Manganese	4.84		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Nickel	0.009	J	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Potassium	1.7		0.20	0.5	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Sodium	6.9		0.10	0.2	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Zinc	0.021		0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:42 AM
Hardness (SM 2340B)	121		0.50	1.0	mg/L CaCO3	1	03/27/25 7:00 AM	03/28/25 9:42 AM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>			<b>EPA 200.2 Rev 2.</b>		<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 11:00 AM
Arsenic	1.2		0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 11:00 AM
Lead	1.1		0.20	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 11:00 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/27/25 7:00 AM	03/28/25 11:00 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>			<b>EPA 8011</b>		<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 9:35 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 9:35 PM
Surr: 1,1,2,2-Tetrachloroethane	85.1		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 9:35 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>			<b>EPA 8260 D</b>		
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 4:07 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 9:35 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/27/25 4:07 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 9:35 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 9:35 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D43  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D43-004  
**Matrix:** GROUNDWATER

**Client Sample ID:** FIELD DUP  
**Collection Date:** 3/24/2025 2:00:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:37:41 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: MEG			EPA 8260 D		
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 9:35 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/27/25 4:07 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 9:35 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 9:35 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 9:35 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 9:35 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 9:35 AM
Surr: 1,2-Dichloroethane-d4	97.7		0	70-130	%REC	1		03/26/25 9:35 AM
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	1		03/26/25 9:35 AM
Surr: Dibromofluoromethane	98.5		0	70-130	%REC	1		03/26/25 9:35 AM
Surr: Toluene-d8	103		0	70-130	%REC	1		03/26/25 9:35 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	FIELD BLANK
<b>Lab Order:</b>	G2503D42		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/24/2025 5:40:00 PM
<b>Lab ID:</b>	G2503D42-006	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	AQUEOUS	<b>Date Received:</b>	3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC NON METALS</b>								
Bicarbonate	5.0	U	5.0	10	mg/L CaCO3	1		<b>SM 4500-CO2D</b> 03/26/25 11:59 PM
			Analyst: <b>GMG</b>					
<b>PHYSICAL TESTS</b>								
Specific Conductance	17		2.0	5	µmhos/cm	1		<b>EPA 120.1</b> 03/26/25 11:59 PM
			Analyst: <b>GMG</b>					
<b>PH BY SM 4500 H+B</b>								
Lab pH	6.26	H	0	0.10	S.U.	1		<b>SM 4500-H+ B-11</b> 03/26/25 11:59 PM
			Analyst: <b>GMG</b>					
<b>INORGANIC NON-METALS</b>								
Total dissolved solids	10	U	10	20	mg/L	1	03/26/25 11:20 AM	<b>SM 2540 C-15</b> 03/26/25 11:28 AM
			Analyst: <b>LAP</b>					
<b>INORGANIC NON-METALS</b>								
Alkalinity to pH 4.5	5.0	U	5.0	10	mg/L CaCO3	1		<b>ASTM D1067-16</b> 03/26/25 11:59 PM
			Analyst: <b>GMG</b>					
<b>INDICATOR ORGANIC PARAMETERS</b>								
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/28/25 7:12 AM	<b>Hach 8000</b> 03/28/25 1:34 PM
			Analyst: <b>EMF</b>					
<b>INORGANIC NON-METALS</b>								
Nitrate Nitrogen	0.020	U	0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	<b>EPA 300.0 Rev 2.</b> 03/25/25 12:32 PM
			Analyst: <b>ACB</b>					
<b>INORGANIC NON-METALS</b>								
Chloride	0.200	U	0.200	1.00	mg/L	1	03/25/25 10:58 AM	<b>EPA 300.0 Rev 2.</b> 03/25/25 12:32 PM
Sulfate	0.50	U	0.50	2.0	mg/L	1	03/25/25 10:58 AM	<b>EPA 300.0 Rev 2.1</b> 03/25/25 12:32 PM
			Analyst: <b>ACB</b>					
<b>INORGANIC NON-METALS</b>								
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		<b>EPA 350.1 REV 2.0</b> 03/26/25 11:07 AM
			Analyst: <b>DMM</b>					
<b>INORGANIC NON-METALS</b>								
Turbidity	0.25		0.10	0.1	NTU	1	03/25/25 1:03 PM	<b>EPA 180.1 Rev 2.</b> 03/25/25 1:21 PM
			Analyst: <b>KCS</b>					
<b>INORGANIC METALS</b>								
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	<b>SM 3112 B-11</b> 03/27/25 8:25 AM
			Analyst: <b>LMH</b>					
<b>INORGANIC METALS</b>								
Barium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	<b>EPA 200.2 Rev 2.</b> 03/28/25 9:19 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/27/25 7:00 AM	<b>EPA 200.7 REV 4.4</b> 03/28/25 9:19 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Calcium	0.050	U	0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-006  
**Matrix:** AQUEOUS

**Client Sample ID:** FIELD BLANK  
**Collection Date:** 3/24/2025 5:40:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Iron	0.020	U	0.020	0.05	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Magnesium	0.050	U	0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Manganese	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Potassium	0.20	U	0.20	0.5	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Sodium	0.1	J	0.10	0.2	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:19 AM
Hardness (SM 2340B)	0.50	U	0.50	1.0	mg/L CaCO3	1	03/27/25 7:00 AM	03/28/25 9:19 AM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:51 AM
Arsenic	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:51 AM
Lead	0.20	U	0.20	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:51 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/27/25 7:00 AM	03/28/25 10:51 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>				<b>EPA 8011</b>	<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 7:53 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 7:53 PM
Surr: 1,1,2,2-Tetrachloroethane	90.5		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 7:53 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 7:41 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 8:02 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:41 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 8:02 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 8:02 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-006  
**Matrix:** AQUEOUS

**Client Sample ID:** FIELD BLANK  
**Collection Date:** 3/24/2025 5:40:00 PM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>			<b>EPA 8260 D</b>		
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 8:02 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 6:41 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 8:02 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 8:02 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 8:02 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 8:02 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 8:02 AM
Surr: 1,2-Dichloroethane-d4	98.7		0	70-130	%REC	1		03/26/25 8:02 AM
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	1		03/26/25 8:02 AM
Surr: Dibromofluoromethane	98.6		0	70-130	%REC	1		03/26/25 8:02 AM
Surr: Toluene-d8	102		0	70-130	%REC	1		03/26/25 8:02 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

<b>CLIENT:</b>	ALLEGANY COUNTY MARYLAND	<b>Client Sample ID:</b>	TRIP BLANK
<b>Lab Order:</b>	G2503D42		
<b>Project:</b>	Rubble L.F. 200 S	<b>Collection Date:</b>	3/25/2025 9:07:00 AM
<b>Lab ID:</b>	G2503D42-005	<b>Sampled By:</b>	The Hutchinson Group
<b>Matrix:</b>	AQUEOUS	<b>Date Received:</b>	3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC NON METALS</b>								
Bicarbonate	5.0	U	5.0	10	mg/L CaCO3	1		<b>SM 4500-CO2D</b> 03/26/25 11:56 PM
			Analyst: <b>GMG</b>					
<b>PHYSICAL TESTS</b>								
Specific Conductance	13		2.0	5	µmhos/cm	1		<b>EPA 120.1</b> 03/26/25 11:56 PM
			Analyst: <b>GMG</b>					
<b>PH BY SM 4500 H+B</b>								
Lab pH	5.55	H	0		S.U.	1		<b>SM 4500-H+ B-11</b> 03/26/25 11:56 PM
			Analyst: <b>GMG</b>					
<b>INORGANIC NON-METALS</b>								
Total dissolved solids	10	U	10	20	mg/L	1	03/26/25 11:20 AM	<b>SM 2540 C-15</b> 03/26/25 11:28 AM
			Analyst: <b>LAP</b>					
<b>INORGANIC NON-METALS</b>								
Alkalinity to pH 4.5	5.0	U	5.0	10	mg/L CaCO3	1		<b>ASTM D1067-16</b> 03/26/25 11:56 PM
			Analyst: <b>GMG</b>					
<b>INDICATOR ORGANIC PARAMETERS</b>								
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/28/25 7:12 AM	<b>Hach 8000</b> 03/28/25 1:34 PM
			Analyst: <b>EMF</b>					
<b>INORGANIC NON-METALS</b>								
Nitrate Nitrogen	0.020	U	0.020	0.05	mg/L as N	1	03/25/25 10:58 AM	<b>EPA 300.0 Rev 2.</b> 03/25/25 12:20 PM
			Analyst: <b>ACB</b>					
<b>INORGANIC NON-METALS</b>								
Chloride	0.200	U	0.200	1.00	mg/L	1	03/25/25 10:58 AM	<b>EPA 300.0 Rev 2.</b> 03/25/25 12:20 PM
Sulfate	0.50	U	0.50	2.0	mg/L	1	03/25/25 10:58 AM	<b>EPA 300.0 Rev 2.1</b> 03/25/25 12:20 PM
			Analyst: <b>ACB</b>					
<b>INORGANIC NON-METALS</b>								
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		<b>EPA 350.1 REV 2.0</b> 03/26/25 11:06 AM
			Analyst: <b>DMM</b>					
<b>INORGANIC NON-METALS</b>								
Turbidity	0.45		0.10	0.1	NTU	1	03/25/25 1:03 PM	<b>EPA 180.1 Rev 2.</b> 03/25/25 1:21 PM
			Analyst: <b>KCS</b>					
<b>INORGANIC METALS</b>								
Mercury	0.100	U	0.100	0.20	µg/L	1	03/26/25 12:45 PM	<b>SM 3112 B-11</b> 03/27/25 8:20 AM
			Analyst: <b>LMH</b>					
<b>INORGANIC METALS</b>								
Barium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	<b>EPA 200.2 Rev 2.</b> 03/28/25 9:17 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/27/25 7:00 AM	<b>EPA 200.7 REV 4.4</b> 03/28/25 9:17 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Calcium	0.050	U	0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM



# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-005  
**Matrix:** AQUEOUS

**Client Sample ID:** TRIP BLANK  
**Collection Date:** 3/25/2025 9:07:00 AM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>INORGANIC METALS</b>			Analyst: <b>TMS</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.7 REV 4.4</b>
Iron	0.020	U	0.020	0.05	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Magnesium	0.050	U	0.050	0.10	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Manganese	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Potassium	0.20	U	0.20	0.5	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Sodium	0.10	U	0.10	0.2	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/27/25 7:00 AM	03/28/25 9:17 AM
Hardness (SM 2340B)	0.50	U	0.50	1.0	mg/L CaCO3	1	03/27/25 7:00 AM	03/28/25 9:17 AM
<b>INORGANIC METALS</b>			Analyst: <b>RLR</b>				<b>EPA 200.2 Rev 2.</b>	<b>EPA 200.8 REV 5.4</b>
Antimony	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:48 AM
Arsenic	0.50	U	0.50	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:48 AM
Lead	0.20	U	0.20	1.0	µg/L	1	03/27/25 7:00 AM	03/28/25 10:48 AM
Thallium	0.10	U	0.10	0.2	µg/L	1	03/27/25 7:00 AM	03/28/25 10:48 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>HKR</b>				<b>EPA 8011</b>	<b>EPA 8011</b>
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 7:27 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/26/25 10:22 AM	03/26/25 7:27 PM
Surr: 1,1,2,2-Tetrachloroethane	89.3		0	60-140	%REC	1	03/26/25 10:22 AM	03/26/25 7:27 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>					<b>EPA 8260 D</b>
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,3-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
2-Chloroethylvinyl ether	0.50	U	0.50	1.0	µg/L	1		03/27/25 7:18 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/26/25 7:38 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/27/25 7:18 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/26/25 7:38 AM
Acrolein	5.00	U	5.00	10	µg/L	1		03/26/25 7:38 AM



I.D. 56-00306 PA DEP

# Laboratory Results

## Geochemical Testing

Date: 17-Apr-25

**CLIENT:** ALLEGANY COUNTY MARYLAND  
**Lab Order:** G2503D42  
**Project:** Rubble L.F. 200 S  
**Lab ID:** G2503D42-005  
**Matrix:** AQUEOUS

**Client Sample ID:** TRIP BLANK  
**Collection Date:** 3/25/2025 9:07:00 AM  
**Sampled By:** The Hutchinson Group  
**Date Received:** 3/25/2025 9:08:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			Analyst: <b>MEG</b>			EPA 8260 D		
Acrylonitrile	2.00	U	2.00	5.0	µg/L	1		03/26/25 7:38 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/27/25 7:18 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Dichlorobromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/26/25 7:38 AM
Methyl Ethyl Ketone	1.00	U	1.00	5.0	µg/L	1		03/26/25 7:38 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/26/25 7:38 AM
Tribromomethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/26/25 7:38 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/26/25 7:38 AM
Surr: 1,2-Dichloroethane-d4	101		0	70-130	%REC	1		03/26/25 7:38 AM
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	1		03/26/25 7:38 AM
Surr: Dibromofluoromethane	99.0		0	70-130	%REC	1		03/26/25 7:38 AM
Surr: Toluene-d8	103		0	70-130	%REC	1		03/26/25 7:38 AM



I.D. 56-00306 PA DEP

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: James R Krents  
Geochemical Testing  
2005 North Center Avenue  
Somerset, Pennsylvania 15501

Generated 4/7/2025 8:16:28 AM

**JOB DESCRIPTION**

ACM Rubble

**JOB NUMBER**

410-214131-1

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

## Authorization



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Authorized for release by  
Dana Kauffman, Project Manager  
[Dana.Kauffman@et.eurofinsus.com](mailto:Dana.Kauffman@et.eurofinsus.com)  
(717)556-7219

## Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

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

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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# Definitions/Glossary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214131-1

## Qualifiers

### LCMS

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Geochemical Testing  
Project: ACM Rubble

Job ID: 410-214131-1

**Job ID: 410-214131-1**

**Eurofins Lancaster Laboratories Environment**

## **Job Narrative 410-214131-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### **Receipt**

The samples were received on 3/27/2025 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C.

### **Receipt Exceptions**

Limited sample volume was received. Less than 25ml in the one container and 50 ml in the other container G2503D42-001 (410-214131-1).

All backup containers for water samples received for 1633 PFAS analysis were frozen after receipt.

### **PFAS**

Method 1633\_Final: Analyte Perfluorononanoic acid (PFNA) was marked as non-detect for sample G2503D42-003 (410-214131-3) and G2503D42-004 (410-214131-4) due to a detection below RL and failing ion ratio.

Method 1633\_Final: Target analyte(s): Perfluorononanoic acid (PFNA) were detected in the method blank associated with the following samples: G2503D42-001 (410-214131-1), G2503D42-002 (410-214131-2), G2503D42-003 (410-214131-3) and G2503D42-004 (410-214131-4). Since the native analyte is not detected in the sample, the data is reported.

Method 1633\_Final: Reporting limits were raised for the following sample: G2503D42-001 (410-214131-1) due to limited sample volume.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Detection Summary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214131-1

## Client Sample ID: G2503D42-001

Lab Sample ID: 410-214131-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	2.8	J cn	5.5	2.5	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	8.2	cn	5.5	1.4	ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	13	cn	5.5	2.2	ng/L	1		1633	Total/NA

## Client Sample ID: G2503D42-002

Lab Sample ID: 410-214131-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	1.8		1.7	0.41	ng/L	1		1633	Total/NA

## Client Sample ID: G2503D42-003

Lab Sample ID: 410-214131-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	2.2		1.6	0.70	ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.72	J	1.6	0.39	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.2		1.6	0.39	ng/L	1		1633	Total/NA

## Client Sample ID: G2503D42-004

Lab Sample ID: 410-214131-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

# Client Sample Results

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214131-1

**Client Sample ID: G2503D42-001**

**Lab Sample ID: 410-214131-1**

Date Collected: 03/24/25 16:00

Matrix: Water

Date Received: 03/27/25 09:30

**Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorooctanoic acid (PFOA)</b>	<b>2.8</b>	<b>J cn</b>	5.5	2.5	ng/L		03/31/25 06:21	04/02/25 20:53	1
Perfluorobutanesulfonic acid (PFBS)	ND	cn	5.5	1.4	ng/L		03/31/25 06:21	04/02/25 20:53	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>8.2</b>	<b>cn</b>	5.5	1.4	ng/L		03/31/25 06:21	04/02/25 20:53	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND	cn	5.5	2.1	ng/L		03/31/25 06:21	04/02/25 20:53	1
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	<b>13</b>	<b>cn</b>	5.5	2.2	ng/L		03/31/25 06:21	04/02/25 20:53	1
Perfluorononanoic acid (PFNA)	ND	cn	5.5	1.4	ng/L		03/31/25 06:21	04/02/25 20:53	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 PFOA	91.2	cn	40 - 130				03/31/25 06:21	04/02/25 20:53	1
13C3 PFBS	90.5	cn	40 - 135				03/31/25 06:21	04/02/25 20:53	1
13C8 PFOS	96.3	cn	40 - 130				03/31/25 06:21	04/02/25 20:53	1
13C3 HFPO-DA	92.2	cn	40 - 130				03/31/25 06:21	04/02/25 20:53	1
13C9 PFNA	90.0	cn	40 - 130				03/31/25 06:21	04/02/25 20:53	1
13C3 PFHxS	91.6	cn	40 - 130				03/31/25 06:21	04/02/25 20:53	1

**Client Sample ID: G2503D42-002**

**Lab Sample ID: 410-214131-2**

Date Collected: 03/24/25 16:40

Matrix: Water

Date Received: 03/27/25 09:30

**Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		1.7	0.74	ng/L		03/31/25 06:21	04/02/25 21:06	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.41	ng/L		03/31/25 06:21	04/02/25 21:06	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>1.8</b>		1.7	0.41	ng/L		03/31/25 06:21	04/02/25 21:06	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.7	0.62	ng/L		03/31/25 06:21	04/02/25 21:06	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.66	ng/L		03/31/25 06:21	04/02/25 21:06	1
Perfluorononanoic acid (PFNA)	ND	cn	1.7	0.41	ng/L		03/31/25 06:21	04/02/25 21:06	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 PFOA	93.7		40 - 130				03/31/25 06:21	04/02/25 21:06	1
13C3 PFBS	93.6		40 - 135				03/31/25 06:21	04/02/25 21:06	1
13C8 PFOS	94.2		40 - 130				03/31/25 06:21	04/02/25 21:06	1
13C3 HFPO-DA	88.0		40 - 130				03/31/25 06:21	04/02/25 21:06	1
13C9 PFNA	82.9		40 - 130				03/31/25 06:21	04/02/25 21:06	1
13C3 PFHxS	91.6		40 - 130				03/31/25 06:21	04/02/25 21:06	1

**Client Sample ID: G2503D42-003**

**Lab Sample ID: 410-214131-3**

Date Collected: 03/24/25 17:30

Matrix: Water

Date Received: 03/27/25 09:30

**Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorooctanoic acid (PFOA)</b>	<b>2.2</b>		1.6	0.70	ng/L		03/31/25 06:21	04/02/25 21:34	1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>0.72</b>	<b>J</b>	1.6	0.39	ng/L		03/31/25 06:21	04/02/25 21:34	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>2.2</b>		1.6	0.39	ng/L		03/31/25 06:21	04/02/25 21:34	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.6	0.58	ng/L		03/31/25 06:21	04/02/25 21:34	1

Eurofins Lancaster Laboratories Environment Testing, LLC

# Client Sample Results

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214131-1

**Client Sample ID: G2503D42-003**

**Lab Sample ID: 410-214131-3**

Date Collected: 03/24/25 17:30

Matrix: Water

Date Received: 03/27/25 09:30

**Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.62	ng/L		03/31/25 06:21	04/02/25 21:34	1
Perfluorononanoic acid (PFNA)	ND	cn	0.50	0.50	ng/L		03/31/25 06:21	04/02/25 21:34	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 PFOA	94.7		40 - 130				03/31/25 06:21	04/02/25 21:34	1
13C3 PFBS	92.3		40 - 135				03/31/25 06:21	04/02/25 21:34	1
13C8 PFOS	91.5		40 - 130				03/31/25 06:21	04/02/25 21:34	1
13C3 HFPO-DA	84.8		40 - 130				03/31/25 06:21	04/02/25 21:34	1
13C9 PFNA	84.5		40 - 130				03/31/25 06:21	04/02/25 21:34	1
13C3 PFHxS	93.4		40 - 130				03/31/25 06:21	04/02/25 21:34	1

**Client Sample ID: G2503D42-004**

**Lab Sample ID: 410-214131-4**

Date Collected: 03/24/25 17:40

Matrix: Water

Date Received: 03/27/25 09:30

**Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		1.5	0.68	ng/L		03/31/25 06:21	04/02/25 21:47	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.5	0.38	ng/L		03/31/25 06:21	04/02/25 21:47	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.5	0.38	ng/L		03/31/25 06:21	04/02/25 21:47	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.5	0.56	ng/L		03/31/25 06:21	04/02/25 21:47	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.5	0.60	ng/L		03/31/25 06:21	04/02/25 21:47	1
Perfluorononanoic acid (PFNA)	ND	cn	0.60	0.60	ng/L		03/31/25 06:21	04/02/25 21:47	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 PFOA	93.2		40 - 130				03/31/25 06:21	04/02/25 21:47	1
13C3 PFBS	98.0		40 - 135				03/31/25 06:21	04/02/25 21:47	1
13C8 PFOS	94.6		40 - 130				03/31/25 06:21	04/02/25 21:47	1
13C3 HFPO-DA	88.9		40 - 130				03/31/25 06:21	04/02/25 21:47	1
13C9 PFNA	91.6		40 - 130				03/31/25 06:21	04/02/25 21:47	1
13C3 PFHxS	101		40 - 130				03/31/25 06:21	04/02/25 21:47	1

# Isotope Dilution Summary

Client: Geochemical Testing  
 Project/Site: ACM Rubble

Job ID: 410-214131-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)					
		C8PFOA (40-130)	C3PFBS (40-135)	C8PFOS (40-130)	HFPODA (40-130)	C9PFNA (40-130)	C3PFHS (40-130)
410-214131-1	G2503D42-001	91.2 cn	90.5 cn	96.3 cn	92.2 cn	90.0 cn	91.6 cn
410-214131-2	G2503D42-002	93.7	93.6	94.2	88.0	82.9	91.6
410-214131-3	G2503D42-003	94.7	92.3	91.5	84.8	84.5	93.4
410-214131-4	G2503D42-004	93.2	98.0	94.6	88.9	91.6	101
LCS 410-623805/13-A	Lab Control Sample	89.0	83.7	95.6	82.2	79.0	90.1
LLCS 410-623805/14-A	Lab Control Sample	76.4	75.9	76.0	85.6	65.8	72.9

### Surrogate Legend

- C8PFOA = 13C8 PFOA
- C3PFBS = 13C3 PFBS
- C8PFOS = 13C8 PFOS
- HFPODA = 13C3 HFPO-DA
- C9PFNA = 13C9 PFNA
- C3PFHS = 13C3 PFHxS



# QC Sample Results

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214131-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

**Lab Sample ID: LCS 410-623805/13-A**

**Matrix: Water**

**Analysis Batch: 624177**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 623805**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanoic acid (PFOA)	40.0	36.0		ng/L		90	70 - 150
Perfluorobutanesulfonic acid (PFBS)	35.5	28.5		ng/L		80	60 - 145
Perfluorooctanesulfonic acid (PFOS)	37.2	29.5		ng/L		79	55 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	21.9		ng/L		73	70 - 140
Perfluorohexanesulfonic acid (PFHxS)	36.5	26.5		ng/L		73	65 - 145
Perfluorononanoic acid (PFNA)	40.0	43.7		ng/L		109	70 - 150

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C8 PFOA	89.0		40 - 130
13C3 PFBS	83.7		40 - 135
13C8 PFOS	95.6		40 - 130
13C3 HFPO-DA	82.2		40 - 130
13C9 PFNA	79.0		40 - 130
13C3 PFHxS	90.1		40 - 130

**Lab Sample ID: LLCS 410-623805/14-A**

**Matrix: Water**

**Analysis Batch: 624899**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 623805**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanoic acid (PFOA)	4.00	3.67		ng/L		92	70 - 150
Perfluorobutanesulfonic acid (PFBS)	3.55	3.54		ng/L		100	60 - 145
Perfluorooctanesulfonic acid (PFOS)	3.72	3.57		ng/L		96	55 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.00	2.74		ng/L		91	70 - 140
Perfluorohexanesulfonic acid (PFHxS)	3.65	4.35		ng/L		119	65 - 145
Perfluorononanoic acid (PFNA)	4.00	4.23		ng/L		106	70 - 150

Isotope Dilution	LLCS LLCS		Limits
	%Recovery	Qualifier	
13C8 PFOA	76.4		40 - 130
13C3 PFBS	75.9		40 - 135
13C8 PFOS	76.0		40 - 130
13C3 HFPO-DA	85.6		40 - 130
13C9 PFNA	65.8		40 - 130
13C3 PFHxS	72.9		40 - 130

# QC Association Summary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214131-1

## LCMS

### Prep Batch: 623805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-214131-1	G2503D42-001	Total/NA	Water	1633	
410-214131-2	G2503D42-002	Total/NA	Water	1633	
410-214131-3	G2503D42-003	Total/NA	Water	1633	
410-214131-4	G2503D42-004	Total/NA	Water	1633	
LCS 410-623805/13-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 410-623805/14-A	Lab Control Sample	Total/NA	Water	1633	

### Analysis Batch: 624177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-623805/13-A	Lab Control Sample	Total/NA	Water	1633	623805

### Analysis Batch: 624899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 410-623805/14-A	Lab Control Sample	Total/NA	Water	1633	623805

### Analysis Batch: 625420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-214131-1	G2503D42-001	Total/NA	Water	1633	623805
410-214131-2	G2503D42-002	Total/NA	Water	1633	623805
410-214131-3	G2503D42-003	Total/NA	Water	1633	623805
410-214131-4	G2503D42-004	Total/NA	Water	1633	623805

# Lab Chronicle

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214131-1

**Client Sample ID: G2503D42-001**

**Lab Sample ID: 410-214131-1**

Date Collected: 03/24/25 16:00

Matrix: Water

Date Received: 03/27/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			623805	M4QQ	ELLE	03/31/25 06:21
Total/NA	Analysis	1633		1	625420	RPU6	ELLE	04/02/25 20:53

**Client Sample ID: G2503D42-002**

**Lab Sample ID: 410-214131-2**

Date Collected: 03/24/25 16:40

Matrix: Water

Date Received: 03/27/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			623805	M4QQ	ELLE	03/31/25 06:21
Total/NA	Analysis	1633		1	625420	RPU6	ELLE	04/02/25 21:06

**Client Sample ID: G2503D42-003**

**Lab Sample ID: 410-214131-3**

Date Collected: 03/24/25 17:30

Matrix: Water

Date Received: 03/27/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			623805	M4QQ	ELLE	03/31/25 06:21
Total/NA	Analysis	1633		1	625420	RPU6	ELLE	04/02/25 21:34

**Client Sample ID: G2503D42-004**

**Lab Sample ID: 410-214131-4**

Date Collected: 03/24/25 17:40

Matrix: Water

Date Received: 03/27/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			623805	M4QQ	ELLE	03/31/25 06:21
Total/NA	Analysis	1633		1	625420	RPU6	ELLE	04/02/25 21:47

**Laboratory References:**

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

# Accreditation/Certification Summary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214131-1

## Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460182	06-14-25

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# Method Summary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214131-1

Method	Method Description	Protocol	Laboratory
1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	ELLE
1633	Solid-Phase Extraction (SPE)	EPA	ELLE

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300



# Sample Summary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214131-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-214131-1	G2503D42-001	Water	03/24/25 16:00	03/27/25 09:30
410-214131-2	G2503D42-002	Water	03/24/25 16:40	03/27/25 09:30
410-214131-3	G2503D42-003	Water	03/24/25 17:30	03/27/25 09:30
410-214131-4	G2503D42-004	Water	03/24/25 17:40	03/27/25 09:30

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410-214131-02 Chain of Custody

### MDE MONITORING PARAMETERS - TABLE I (cont.)

Per- and Polyfluoroalkyl Substances (PFAS)	Units	PQL	MCL	HI MCL <sup>1</sup>	HBWC
Perfluorooctanoic acid (PFOA)	ng/L	2.0	4.0		
Perfluorooctanesulfonic acid (PFOS)	ng/L	2.0	4.0		
Perfluorononanoic acid (PFNA)	ng/L	2.0		1.0 (unitless)	10
Perfluorohexanesulfonic acid (PFHxS)	ng/L	2.0			9.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	2.0			2000
Hexafluoropropylene oxide dimer acid (HFPO-DA, GenX)	ng/L	2.0			10

PQL = Practical Quantitation Limit (Method 1633)

MCL = Maximum Contaminant Level

HI MCL = Hazard Index MCL

HBWC = Health Based Water Concentrations

Note:

1 - A running annual average hazard index value greater than 1.0 is a violation of the HI MCL.

Formula: Hazard Index Value = (GenX ng/L ÷ 10 ng/L) + ((PFBS ng/L) ÷ (2000 ng/L)) + ((PFNA ng/L) ÷ (10 ng/L)) + ((PFHxS ng/L) ÷ (9 ng/L))

## Login Sample Receipt Checklist

Client: Geochemical Testing

Job Number: 410-214131-1

**Login Number: 214131**

**List Source: Eurofins Lancaster Laboratories Environment Testing, LLC**

**List Number: 1**

**Creator: Santiago, Nathaniel**

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required (<math>\leq 6^{\circ}\text{C}</math>, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required (<math>\leq 6^{\circ}\text{C}</math>, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	Limited volume received.
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: James R Krents  
Geochemical Testing  
2005 North Center Avenue  
Somerset, Pennsylvania 15501

Generated 4/11/2025 2:13:03 AM

**JOB DESCRIPTION**

ACM Rubble

**JOB NUMBER**

410-214129-1

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

## Authorization



Generated  
4/11/2025 2:13:03 AM

Authorized for release by  
Dana Kauffman, Project Manager  
[Dana.Kauffman@et.eurofinsus.com](mailto:Dana.Kauffman@et.eurofinsus.com)  
(717)556-7219

## Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

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

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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# Definitions/Glossary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214129-1

## Qualifiers

### LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Geochemical Testing  
Project: ACM Rubble

Job ID: 410-214129-1

**Job ID: 410-214129-1**

**Eurofins Lancaster Laboratories Environment**

## **Job Narrative 410-214129-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### **Receipt**

The samples were received on 3/27/2025 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C.

### **Receipt Exceptions**

All backup containers for water samples received for 1633 PFAS analysis were frozen after receipt.

### **PFAS**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Detection Summary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214129-1

**Client Sample ID: G2503D43-001**

**Lab Sample ID: 410-214129-1**

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	0.39	J	1.6	0.39	ng/L	1		1633	Total/NA

**Client Sample ID: G2503D43-002**

**Lab Sample ID: 410-214129-2**

No Detections.

**Client Sample ID: G2503D43-003**

**Lab Sample ID: 410-214129-3**

No Detections.

**Client Sample ID: G2503D43-005**

**Lab Sample ID: 410-214129-4**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC



# Client Sample Results

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214129-1

**Client Sample ID: G2503D43-001**

**Lab Sample ID: 410-214129-1**

Date Collected: 03/24/25 12:30

Matrix: Water

Date Received: 03/27/25 09:30

**Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		1.6	0.71	ng/L		03/31/25 10:05	04/05/25 11:24	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.39	ng/L		03/31/25 10:05	04/05/25 11:24	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>0.39</b>	<b>J</b>	1.6	0.39	ng/L		03/31/25 10:05	04/05/25 11:24	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.6	0.59	ng/L		03/31/25 10:05	04/05/25 11:24	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.63	ng/L		03/31/25 10:05	04/05/25 11:24	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.39	ng/L		03/31/25 10:05	04/05/25 11:24	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 PFOA	98.2		40 - 130				03/31/25 10:05	04/05/25 11:24	1
13C3 PFBS	105		40 - 135				03/31/25 10:05	04/05/25 11:24	1
13C8 PFOS	108		40 - 130				03/31/25 10:05	04/05/25 11:24	1
13C3 HFPO-DA	97.2		40 - 130				03/31/25 10:05	04/05/25 11:24	1
13C9 PFNA	93.6		40 - 130				03/31/25 10:05	04/05/25 11:24	1
13C3 PFHxS	105		40 - 130				03/31/25 10:05	04/05/25 11:24	1

**Client Sample ID: G2503D43-002**

**Lab Sample ID: 410-214129-2**

Date Collected: 03/24/25 13:15

Matrix: Water

Date Received: 03/27/25 09:30

**Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		1.6	0.73	ng/L		03/31/25 10:05	04/05/25 11:37	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.41	ng/L		03/31/25 10:05	04/05/25 11:37	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.41	ng/L		03/31/25 10:05	04/05/25 11:37	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.6	0.61	ng/L		03/31/25 10:05	04/05/25 11:37	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.65	ng/L		03/31/25 10:05	04/05/25 11:37	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.41	ng/L		03/31/25 10:05	04/05/25 11:37	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 PFOA	91.5		40 - 130				03/31/25 10:05	04/05/25 11:37	1
13C3 PFBS	90.7		40 - 135				03/31/25 10:05	04/05/25 11:37	1
13C8 PFOS	105		40 - 130				03/31/25 10:05	04/05/25 11:37	1
13C3 HFPO-DA	86.3		40 - 130				03/31/25 10:05	04/05/25 11:37	1
13C9 PFNA	85.7		40 - 130				03/31/25 10:05	04/05/25 11:37	1
13C3 PFHxS	90.5		40 - 130				03/31/25 10:05	04/05/25 11:37	1

**Client Sample ID: G2503D43-003**

**Lab Sample ID: 410-214129-3**

Date Collected: 03/24/25 14:00

Matrix: Water

Date Received: 03/27/25 09:30

**Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		1.6	0.72	ng/L		03/31/25 10:05	04/05/25 11:51	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.40	ng/L		03/31/25 10:05	04/05/25 11:51	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.40	ng/L		03/31/25 10:05	04/05/25 11:51	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.6	0.60	ng/L		03/31/25 10:05	04/05/25 11:51	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.64	ng/L		03/31/25 10:05	04/05/25 11:51	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.40	ng/L		03/31/25 10:05	04/05/25 11:51	1

# Client Sample Results

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214129-1

**Client Sample ID: G2503D43-003**

**Lab Sample ID: 410-214129-3**

Date Collected: 03/24/25 14:00

Matrix: Water

Date Received: 03/27/25 09:30

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C8 PFOA	99.9		40 - 130	03/31/25 10:05	04/05/25 11:51	1
13C3 PFBS	103		40 - 135	03/31/25 10:05	04/05/25 11:51	1
13C8 PFOS	106		40 - 130	03/31/25 10:05	04/05/25 11:51	1
13C3 HFPO-DA	102		40 - 130	03/31/25 10:05	04/05/25 11:51	1
13C9 PFNA	93.8		40 - 130	03/31/25 10:05	04/05/25 11:51	1
13C3 PFHxS	103		40 - 130	03/31/25 10:05	04/05/25 11:51	1

**Client Sample ID: G2503D43-005**

**Lab Sample ID: 410-214129-4**

Date Collected: 03/24/25 14:55

Matrix: Water

Date Received: 03/27/25 09:30

**Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		1.5	0.67	ng/L		03/31/25 10:05	04/05/25 12:05	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.5	0.37	ng/L		03/31/25 10:05	04/05/25 12:05	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.5	0.37	ng/L		03/31/25 10:05	04/05/25 12:05	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.5	0.56	ng/L		03/31/25 10:05	04/05/25 12:05	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.5	0.60	ng/L		03/31/25 10:05	04/05/25 12:05	1
Perfluorononanoic acid (PFNA)	ND		1.5	0.37	ng/L		03/31/25 10:05	04/05/25 12:05	1

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C8 PFOA	95.9		40 - 130	03/31/25 10:05	04/05/25 12:05	1
13C3 PFBS	87.2		40 - 135	03/31/25 10:05	04/05/25 12:05	1
13C8 PFOS	103		40 - 130	03/31/25 10:05	04/05/25 12:05	1
13C3 HFPO-DA	89.9		40 - 130	03/31/25 10:05	04/05/25 12:05	1
13C9 PFNA	84.7		40 - 130	03/31/25 10:05	04/05/25 12:05	1
13C3 PFHxS	93.7		40 - 130	03/31/25 10:05	04/05/25 12:05	1

# Isotope Dilution Summary

Client: Geochemical Testing  
 Project/Site: ACM Rubble

Job ID: 410-214129-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)					
		C8PFOA (40-130)	C3PFBS (40-135)	C8PFOS (40-130)	HFPODA (40-130)	C9PFNA (40-130)	C3PFHS (40-130)
410-214129-1	G2503D43-001	98.2	105	108	97.2	93.6	105
410-214129-2	G2503D43-002	91.5	90.7	105	86.3	85.7	90.5
410-214129-3	G2503D43-003	99.9	103	106	102	93.8	103
410-214129-4	G2503D43-005	95.9	87.2	103	89.9	84.7	93.7
LCS 410-623983/20-A	Lab Control Sample	91.0	90.6	96.1	91.9	82.4	89.7
LCSD 410-623983/21-A	Lab Control Sample Dup	84.7	84.6	91.9	80.0	84.5	88.6
LLCS 410-623983/22-A	Lab Control Sample	86.4	92.2	95.0	85.9	80.9	92.2
MB 410-623983/19-A	Method Blank	89.9	92.2	93.8	93.1	84.8	95.2

### Surrogate Legend

- C8PFOA = 13C8 PFOA
- C3PFBS = 13C3 PFBS
- C8PFOS = 13C8 PFOS
- HFPODA = 13C3 HFPO-DA
- C9PFNA = 13C9 PFNA
- C3PFHS = 13C3 PFHxS



# QC Sample Results

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214129-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

**Lab Sample ID: MB 410-623983/19-A**  
**Matrix: Water**  
**Analysis Batch: 626531**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 623983**

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorooctanoic acid (PFOA)	ND		2.0	0.90	ng/L		03/31/25 10:05	04/05/25 08:13	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		03/31/25 10:05	04/05/25 08:13	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		03/31/25 10:05	04/05/25 08:13	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	0.75	ng/L		03/31/25 10:05	04/05/25 08:13	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.80	ng/L		03/31/25 10:05	04/05/25 08:13	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		03/31/25 10:05	04/05/25 08:13	1
MB MB									
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 PFOA	89.9		40 - 130				03/31/25 10:05	04/05/25 08:13	1
13C3 PFBS	92.2		40 - 135				03/31/25 10:05	04/05/25 08:13	1
13C8 PFOS	93.8		40 - 130				03/31/25 10:05	04/05/25 08:13	1
13C3 HFPO-DA	93.1		40 - 130				03/31/25 10:05	04/05/25 08:13	1
13C9 PFNA	84.8		40 - 130				03/31/25 10:05	04/05/25 08:13	1
13C3 PFHxS	95.2		40 - 130				03/31/25 10:05	04/05/25 08:13	1

**Lab Sample ID: LCS 410-623983/20-A**  
**Matrix: Water**  
**Analysis Batch: 626531**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 623983**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Perfluorooctanoic acid (PFOA)	40.0	32.3		ng/L		81	70 - 150	
Perfluorobutanesulfonic acid (PFBS)	35.5	29.1		ng/L		82	60 - 145	
Perfluorooctanesulfonic acid (PFOS)	37.2	31.1		ng/L		83	55 - 150	
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	24.6		ng/L		82	70 - 140	
Perfluorohexanesulfonic acid (PFHxS)	36.5	29.7		ng/L		81	65 - 145	
Perfluorononanoic acid (PFNA)	40.0	36.1		ng/L		90	70 - 150	
LCS LCS								
Isotope Dilution	%Recovery	Qualifier	Limits					
13C8 PFOA	91.0		40 - 130					
13C3 PFBS	90.6		40 - 135					
13C8 PFOS	96.1		40 - 130					
13C3 HFPO-DA	91.9		40 - 130					
13C9 PFNA	82.4		40 - 130					
13C3 PFHxS	89.7		40 - 130					

**Lab Sample ID: LCSD 410-623983/21-A**  
**Matrix: Water**  
**Analysis Batch: 627913**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 623983**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
Perfluorooctanoic acid (PFOA)	40.0	36.0		ng/L		90	70 - 150	11	30	
Perfluorobutanesulfonic acid (PFBS)	35.5	25.7		ng/L		72	60 - 145	12	30	
Perfluorooctanesulfonic acid (PFOS)	37.2	29.7		ng/L		80	55 - 150	4	30	

# QC Sample Results

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214129-1

## Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

**Lab Sample ID: LCSD 410-623983/21-A**

**Matrix: Water**

**Analysis Batch: 627913**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 623983**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	28.0		ng/L		93	70 - 140	13	30
Perfluorohexanesulfonic acid (PFHxS)	36.5	27.8		ng/L		76	65 - 145	7	30
Perfluorononanoic acid (PFNA)	40.0	38.8		ng/L		97	70 - 150	7	30
<b>LCSD LCSD</b>									
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
13C8 PFOA	84.7		40 - 130						
13C3 PFBS	84.6		40 - 135						
13C8 PFOS	91.9		40 - 130						
13C3 HFPO-DA	80.0		40 - 130						
13C9 PFNA	84.5		40 - 130						
13C3 PFHxS	88.6		40 - 130						

**Lab Sample ID: LLCS 410-623983/22-A**

**Matrix: Water**

**Analysis Batch: 626531**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 623983**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanoic acid (PFOA)	4.00	3.61		ng/L		90	70 - 150		
Perfluorobutanesulfonic acid (PFBS)	3.55	2.98		ng/L		84	60 - 145		
Perfluorooctanesulfonic acid (PFOS)	3.72	3.12		ng/L		84	55 - 150		
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.00	2.86		ng/L		95	70 - 140		
Perfluorohexanesulfonic acid (PFHxS)	3.65	3.47		ng/L		95	65 - 145		
Perfluorononanoic acid (PFNA)	4.00	3.59		ng/L		90	70 - 150		
<b>LLCS LLCS</b>									
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
13C8 PFOA	86.4		40 - 130						
13C3 PFBS	92.2		40 - 135						
13C8 PFOS	95.0		40 - 130						
13C3 HFPO-DA	85.9		40 - 130						
13C9 PFNA	80.9		40 - 130						
13C3 PFHxS	92.2		40 - 130						

# QC Association Summary

Client: Geochemical Testing  
 Project/Site: ACM Rubble

Job ID: 410-214129-1

## LCMS

### Prep Batch: 623983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-214129-1	G2503D43-001	Total/NA	Water	1633	
410-214129-2	G2503D43-002	Total/NA	Water	1633	
410-214129-3	G2503D43-003	Total/NA	Water	1633	
410-214129-4	G2503D43-005	Total/NA	Water	1633	
MB 410-623983/19-A	Method Blank	Total/NA	Water	1633	
LCS 410-623983/20-A	Lab Control Sample	Total/NA	Water	1633	
LCSD 410-623983/21-A	Lab Control Sample Dup	Total/NA	Water	1633	
LLCS 410-623983/22-A	Lab Control Sample	Total/NA	Water	1633	

### Analysis Batch: 626531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-214129-1	G2503D43-001	Total/NA	Water	1633	623983
410-214129-2	G2503D43-002	Total/NA	Water	1633	623983
410-214129-3	G2503D43-003	Total/NA	Water	1633	623983
410-214129-4	G2503D43-005	Total/NA	Water	1633	623983
MB 410-623983/19-A	Method Blank	Total/NA	Water	1633	623983
LCS 410-623983/20-A	Lab Control Sample	Total/NA	Water	1633	623983
LLCS 410-623983/22-A	Lab Control Sample	Total/NA	Water	1633	623983

### Analysis Batch: 627913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 410-623983/21-A	Lab Control Sample Dup	Total/NA	Water	1633	623983



# Lab Chronicle

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214129-1

**Client Sample ID: G2503D43-001**

**Lab Sample ID: 410-214129-1**

Date Collected: 03/24/25 12:30

Matrix: Water

Date Received: 03/27/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			623983	W2FB	ELLE	03/31/25 10:05
Total/NA	Analysis	1633		1	626531	RPU6	ELLE	04/05/25 11:24

**Client Sample ID: G2503D43-002**

**Lab Sample ID: 410-214129-2**

Date Collected: 03/24/25 13:15

Matrix: Water

Date Received: 03/27/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			623983	W2FB	ELLE	03/31/25 10:05
Total/NA	Analysis	1633		1	626531	RPU6	ELLE	04/05/25 11:37

**Client Sample ID: G2503D43-003**

**Lab Sample ID: 410-214129-3**

Date Collected: 03/24/25 14:00

Matrix: Water

Date Received: 03/27/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			623983	W2FB	ELLE	03/31/25 10:05
Total/NA	Analysis	1633		1	626531	RPU6	ELLE	04/05/25 11:51

**Client Sample ID: G2503D43-005**

**Lab Sample ID: 410-214129-4**

Date Collected: 03/24/25 14:55

Matrix: Water

Date Received: 03/27/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			623983	W2FB	ELLE	03/31/25 10:05
Total/NA	Analysis	1633		1	626531	RPU6	ELLE	04/05/25 12:05

**Laboratory References:**

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

# Accreditation/Certification Summary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214129-1

## Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460182	06-14-25

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Method Summary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214129-1

Method	Method Description	Protocol	Laboratory
1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	ELLE
1633	Solid-Phase Extraction (SPE)	EPA	ELLE

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300



# Sample Summary

Client: Geochemical Testing  
Project/Site: ACM Rubble

Job ID: 410-214129-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-214129-1	G2503D43-001	Water	03/24/25 12:30	03/27/25 09:30
410-214129-2	G2503D43-002	Water	03/24/25 13:15	03/27/25 09:30
410-214129-3	G2503D43-003	Water	03/24/25 14:00	03/27/25 09:30
410-214129-4	G2503D43-005	Water	03/24/25 14:55	03/27/25 09:30

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410-214129-02 Chain of Custody

### MDE MONITORING PARAMETERS - TABLE I (cont.)

Per- and Polyfluoroalkyl Substances (PFAS)	Units	PQL	MCL	HI MCL <sup>1</sup>	HBWC
Perfluorooctanoic acid (PFOA)	ng/L	2.0	4.0		
Perfluorooctanesulfonic acid (PFOS)	ng/L	2.0	4.0		
Perfluorononanoic acid (PFNA)	ng/L	2.0		1.0 (unitless)	10
Perfluorohexanesulfonic acid (PFHxS)	ng/L	2.0			9.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	2.0			2000
Hexafluoropropylene oxide dimer acid (HFPO-DA; GenX)	ng/L	2.0			10

PQL = Practical Quantitation Limit (Method 1633)

MCL = Maximum Contaminant Level

HI MCL = Hazard Index MCL

HBWC = Health Based Water Concentrations

**Note:**

1 - A running annual average hazard index value greater than 1.0 is a violation of the HI MCL.

Formula: Hazard Index Value = (GenX ng/L)/(10 ng/L) + ((PFBS ng/L)/(2000 ng/L)) + ((PFNA ng/L)/(10 ng/L)) + ((PFHxS ng/L)/(9 ng/L))



## Login Sample Receipt Checklist

Client: Geochemical Testing

Job Number: 410-214129-1

**Login Number: 214129**

**List Source: Eurofins Lancaster Laboratories Environment Testing, LLC**

**List Number: 1**

**Creator: Santiago, Nathaniel**

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required (<math>\leq 6^{\circ}\text{C}</math>, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required (<math>\leq 6^{\circ}\text{C}</math>, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	



**AMCELLE RUBBLE FILL**  
Permit No. 1999-WRF-0206

APPENDIX B

QUALITY ASSURANCE REPORT  
&  
FIELD FORMS

FIRST SEMI-ANNUAL 2025



Quality Assurance Project Report  
Prepared for  
ALLEGANY COUNTY MARYLAND  
4/17/2025

David M. Glessner  
Quality Assurance Coordinator

### **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.

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

<b>SampleID:</b> G2503C48-004ADUP	<b>SampType:</b> DUP	<b>TestNo:</b> ASTM D1067-16	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411177

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Alkalinity to pH 4.5	30	mg/L CaCO3	10						29	3.4%	20		

<b>SampleID:</b> G2503D42-004ADUP	<b>SampType:</b> DUP	<b>TestNo:</b> ASTM D1067-16	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411259

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Alkalinity to pH 4.5	239	mg/L CaCO3	10						240	0.4%	20		

<b>SampleID:</b> ALK LCS	<b>SampType:</b> LCS	<b>TestNo:</b> ASTM D1067-16	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8410896

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Alkalinity to pH 4.5	49	mg/L CaCO3	10	47.5		103.2%	85	115					

<b>SampleID:</b> ALK LCS	<b>SampType:</b> LCS	<b>TestNo:</b> ASTM D1067-16	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8410944

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					

<b>SampleID:</b> ALK LCS	<b>SampType:</b> LCS	<b>TestNo:</b> ASTM D1067-16	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411040

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					

<b>SampleID:</b> ALK LCS	<b>SampType:</b> LCS	<b>TestNo:</b> ASTM D1067-16	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411166

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

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					

<b>SampleID:</b> ALK LCS	<b>SampType:</b> LCS	<b>TestNo:</b> ASTM D1067-16	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411243

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					

<b>SampleID:</b> ALK LCS	<b>SampType:</b> LCS	<b>TestNo:</b> ASTM D1067-16	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8411328

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					

<b>SampleID:</b> G2503C48-004ADUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 120.1	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411173

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Specific Conductance	170	µmhos/cm	5						172	1.2%	20		

<b>SampleID:</b> G2503D42-004ADUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 120.1	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411256

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Specific Conductance	1360	µmhos/cm	5						1360	0.7%	20		

<b>SampleID:</b> COND LCS	<b>SampType:</b> LCS	<b>TestNo:</b> EPA 120.1	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8410898

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Specific Conductance	1380	µmhos/cm	5	1410		98.2%	90	110					

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

<b>SampleID:</b> COND LCS	<b>SampType:</b> LCS	<b>TestNo:</b> EPA 120.1	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411042

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Specific Conductance	1400	µmhos/cm	5	1410		99.0%	90	110					

<b>SampleID:</b> COND LCS	<b>SampType:</b> LCS	<b>TestNo:</b> EPA 120.1	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411245

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Specific Conductance	1400	µmhos/cm	5	1410		99.5%	90	110					

<b>SampleID:</b> COND LCS	<b>SampType:</b> LCS	<b>TestNo:</b> EPA 120.1	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8411330

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Specific Conductance	1440	µmhos/cm	5	1410		102.3%	90	110					

<b>SampleID:</b> LRB-268426	<b>SampType:</b> BLANK	<b>TestNo:</b> EPA 180.1 Rev 2.0	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318416
	<b>BatchID:</b> 268426		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8409327

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Turbidity	< 0.1	NTU	0.1										

<b>SampleID:</b> G2503D43-003DDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 180.1 Rev 2.0	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318416
	<b>BatchID:</b> 268426		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8409342

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Turbidity	32	NTU	0.1						32		20		32

<b>SampleID:</b> G2503D48-001HDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 180.1 Rev 2.0	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318416
	<b>BatchID:</b> 268426		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8409351

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Turbidity	72	NTU	0.2						72		20		72

Client: ALLEGANY COUNTY MARYLAND  
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## Analytical QC Summary Report

<b>SampleID:</b> ICV-268426	<b>SampType:</b> LCS	<b>TestNo:</b> EPA 180.1 Rev 2.0	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318416
	<b>BatchID:</b> 268426		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8409329

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Turbidity	41	NTU	0.1	40		101.3%	90	110					

<b>SampleID:</b> CB-268426	<b>SampType:</b> MBLK	<b>TestNo:</b> EPA 180.1 Rev 2.0	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318416
	<b>BatchID:</b> 268426		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8409326

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Turbidity	< 0.1	NTU	0.1										

<b>SampleID:</b> G2503D31-023BDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318528
	<b>BatchID:</b> 268473		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413865

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Barium	0.0166	mg/L	0.01						0.0167	0.6%	20		
Beryllium	< 0.001	mg/L	0.001								20		
Cadmium	< 0.002	mg/L	0.002								20		
Calcium	22.5	mg/L	0.1						22.5	0.1%	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	0.63	mg/L	0.05						0.721	13.6%	20		
Magnesium	17.2	mg/L	0.1						17.2	0.1%	20		
Manganese	0.0985	mg/L	0.01						0.106	7.0%	20		
Nickel	< 0.01	mg/L	0.01								20		
Potassium	1.47	mg/L	0.5						1.48	0.8%	20		
Selenium	< 0.02	mg/L	0.02								20		
Silver	< 0.005	mg/L	0.005								20		
Sodium	1.22	mg/L	0.2						1.22	0.4%	20		
Vanadium	< 0.005	mg/L	0.005								20		
Zinc	< 0.01	mg/L	0.01								20		
Hardness (SM 2340B)	127	mg/L CaCO3	1						127		20		

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

<b>SampleID:</b> G2503D42-003EDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/27/2025	<b>RunNo:</b> 318584
	<b>BatchID:</b> 268525		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8416094

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Barium	0.107	mg/L	0.01						0.108	0.5%	20		
Beryllium	< 0.001	mg/L	0.001								20		
Cadmium	< 0.002	mg/L	0.002								20		
Calcium	287	mg/L	0.1						289	0.5%	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	8.45	mg/L	0.05						8.51	0.6%	20		
Magnesium	30.1	mg/L	0.1						30.2	0.6%	20		
Manganese	0.411	mg/L	0.01						0.414	0.7%	20		
Nickel	< 0.01	mg/L	0.01								20		
Potassium	10.2	mg/L	0.5						10.2	0.7%	20		
Selenium	< 0.02	mg/L	0.02								20		
Silver	< 0.005	mg/L	0.005								20		
Sodium	19.2	mg/L	0.2						19.4	0.9%	20		
Vanadium	< 0.005	mg/L	0.005								20		
Zinc	< 0.01	mg/L	0.01								20		
Hardness (SM 2340B)	842	mg/L CaCO3	1						846		20		

<b>SampleID:</b> LCS1-268473	<b>SampType:</b> LCS1	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318528
	<b>BatchID:</b> 268473		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413845

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		101.7%	85	115					
Beryllium	0.185	mg/L	0.001	0.2		92.6%	85	115					
Cadmium	0.431	mg/L	0.002	0.4		107.7%	85	115					
Calcium	9.9	mg/L	0.1	10		99.0%	85	115					
Chromium	1.01	mg/L	0.01	1		100.7%	85	115					
Cobalt	0.423	mg/L	0.005	0.4		105.7%	85	115					

Client: ALLEGANY COUNTY MARYLAND

WorkOrder: G2503D42

Project: RUBBLE 200 S

# Analytical QC Summary Report

Copper	1	mg/L	0.01	1		100.4%	85	115				
Iron	10.1	mg/L	0.05	10		100.9%	85	115				
Magnesium	2.01	mg/L	0.1	2		100.5%	85	115				
Manganese	1.02	mg/L	0.01	1		101.9%	85	115				
Nickel	1.04	mg/L	0.01	1		103.7%	85	115				
Potassium	10.2	mg/L	0.5	10		102.1%	85	115				
Silver	0.0098	mg/L	0.005	0.01		98.0%	85	115				
Sodium	10.3	mg/L	0.2	10		102.6%	85	115				
Vanadium	0.4	mg/L	0.005	0.4		100.0%	85	115				
Zinc	1.06	mg/L	0.01	1		105.9%	85	115				
Hardness (SM 2340B)	33	mg/L CaCO3	1									

<b>SampleID:</b> LCS1-268525	<b>SampType:</b> LCS1	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/27/2025	<b>RunNo:</b> 318584
	<b>BatchID:</b> 268525		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8416103

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Barium	0.997	mg/L	0.01	1		99.7%	85	115					
Beryllium	0.196	mg/L	0.001	0.2		97.9%	85	115					
Cadmium	0.413	mg/L	0.002	0.4		103.2%	85	115					
Calcium	10	mg/L	0.1	10		100.1%	85	115					
Chromium	0.986	mg/L	0.01	1		98.6%	85	115					
Cobalt	0.41	mg/L	0.005	0.4		102.6%	85	115					
Copper	0.976	mg/L	0.01	1		97.6%	85	115					
Iron	10.1	mg/L	0.05	10		100.8%	85	115					
Magnesium	2.04	mg/L	0.1	2		101.9%	85	115					
Manganese	1	mg/L	0.01	1		100.5%	85	115					
Nickel	1.02	mg/L	0.01	1		102.1%	85	115					
Potassium	10	mg/L	0.5	10		100.4%	85	115					
Selenium	1.12	mg/L	0.02	1		112.2%	85	115					
Silver	0.0102	mg/L	0.005	0.01		102.0%	85	115					
Sodium	10.7	mg/L	0.2	10		107.1%	85	115					
Vanadium	0.393	mg/L	0.005	0.4		98.2%	85	115					
Zinc	1.04	mg/L	0.01	1		103.9%	85	115					
Hardness (SM 2340B)	33.4	mg/L CaCO3	1										

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

<b>SampleID:</b> LCS1-268473	<b>SampType:</b> LCS1	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318701
	<b>BatchID:</b> 268473		<b>Analysis Date:</b> 4/1/2025	<b>SeqNo:</b> 8420366

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Selenium	1.13	mg/L	0.02	1		112.9%	85	115					

<b>SampleID:</b> G2503D31-023BMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318528
	<b>BatchID:</b> 268473		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413868

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	0.0167	99.6%	75	125					
Beryllium	0.182	mg/L	0.001	0.2		90.9%	75	125					
Cadmium	0.424	mg/L	0.002	0.4		106.0%	75	125					
Calcium	31.4	mg/L	0.1	10	22.5	89.8%	75	125					
Chromium	0.984	mg/L	0.01	1		98.4%	75	125					
Cobalt	0.414	mg/L	0.005	0.4		103.6%	75	125					
Copper	0.996	mg/L	0.01	1		99.6%	75	125					
Iron	10.5	mg/L	0.05	10	0.721	97.4%	75	125					
Magnesium	18.5	mg/L	0.1	2	17.2	65.3%	75	125				1	
Manganese	1.09	mg/L	0.01	1	0.106	98.3%	75	125					
Nickel	1.02	mg/L	0.01	1		101.9%	75	125					
Potassium	11.6	mg/L	0.5	10	1.48	101.2%	75	125					
Selenium	1.12	mg/L	0.02	1		112.1%	75	125					
Silver	0.01	mg/L	0.005	0.01		100.0%	75	125					
Sodium	11.3	mg/L	0.2	10	1.22	100.4%	75	125					
Vanadium	0.396	mg/L	0.005	0.4		99.0%	75	125					
Zinc	1.04	mg/L	0.01	1		104.2%	75	125					
Hardness (SM 2340B)	155	mg/L CaCO3	1		127								

<b>SampleID:</b> G2503D05-001EMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318528
	<b>BatchID:</b> 268473		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8414666

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Barium	0.977	mg/L	0.01	1		97.7%	75	125					

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## Analytical QC Summary Report

Beryllium	0.185	mg/L	0.001	0.2		92.5%	75	125					
Cadmium	0.406	mg/L	0.002	0.4		101.5%	75	125					
Calcium	9.93	mg/L	0.1	10	0.447	94.9%	75	125					
Chromium	0.959	mg/L	0.01	1		95.9%	75	125					
Cobalt	0.403	mg/L	0.005	0.4		100.8%	75	125					
Copper	1.19	mg/L	0.01	1	0.198	98.8%	75	125					
Iron	9.6	mg/L	0.05	10		96.0%	75	125					
Magnesium	1.98	mg/L	0.1	2		99.0%	75	125					
Manganese	0.967	mg/L	0.01	1		96.7%	75	125					
Nickel	0.981	mg/L	0.01	1		98.1%	75	125					
Potassium	9.84	mg/L	0.5	10	0.237	96.0%	75	125					
Selenium	1.08	mg/L	0.02	1		108.4%	75	125					
Silver	0.0095	mg/L	0.005	0.01		95.0%	75	125					
Sodium	199	mg/L	0.2	10	196	33.4%	75	125				1	
Vanadium	0.388	mg/L	0.005	0.4		96.9%	75	125					
Zinc	1.05	mg/L	0.01	1	0.0157	103.0%	75	125					
Hardness (SM 2340B)	33	mg/L CaCO3	1			1.12							

<b>SampleID:</b> G2503D42-003EMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/27/2025	<b>RunNo:</b> 318584
	<b>BatchID:</b> 268525		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8416095

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Barium	1.06	mg/L	0.01	1	0.108	95.1%	75	125					
Beryllium	0.193	mg/L	0.001	0.2		96.3%	75	125					
Cadmium	0.388	mg/L	0.002	0.4		97.1%	75	125					
Calcium	292	mg/L	0.1	10	289	27.7%	75	125				1	
Chromium	0.956	mg/L	0.01	1		95.6%	75	125					
Cobalt	0.375	mg/L	0.005	0.4		93.7%	75	125					
Copper	0.988	mg/L	0.01	1		98.8%	75	125					
Iron	17.9	mg/L	0.05	10	8.51	93.9%	75	125					
Magnesium	31.5	mg/L	0.1	2	30.2	64.1%	75	125				1	
Manganese	1.35	mg/L	0.01	1	0.414	93.9%	75	125					
Nickel	0.938	mg/L	0.01	1		93.8%	75	125					
Potassium	19.9	mg/L	0.5	10	10.2	96.4%	75	125					

Client: ALLEGANY COUNTY MARYLAND  
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## Analytical QC Summary Report

Selenium	1.09	mg/L	0.02	1		108.6%	75	125					
Silver	0.0104	mg/L	0.005	0.01		104.0%	75	125					
Sodium	29.1	mg/L	0.2	10	19.4	97.7%	75	125					
Vanadium	0.39	mg/L	0.005	0.4		97.5%	75	125					
Zinc	0.964	mg/L	0.01	1		96.4%	75	125					
Hardness (SM 2340B)	858	mg/L CaCO3	1		846								

<b>SampleID:</b> PB-268473	<b>SampType:</b> PB	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318528
	<b>BatchID:</b> 268473		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413842

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										
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										

<b>SampleID:</b> PB-268525	<b>SampType:</b> PB	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/27/2025	<b>RunNo:</b> 318584
	<b>BatchID:</b> 268525		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8416102

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										

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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										

<b>SampleID:</b> PB-268473	<b>SampType:</b> PB	<b>TestNo:</b> EPA 200.7 Rev 4.4	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318701
	<b>BatchID:</b> 268473		<b>Analysis Date:</b> 4/1/2025	<b>SeqNo:</b> 8420364

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Selenium	< 0.02	mg/L	0.02										

<b>SampleID:</b> G2503D31-023BDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 200.8 Rev 5.4	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318524
	<b>BatchID:</b> 268475		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413371

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						0.317		20		
Thallium	< 0.2	µg/L	0.2								20		

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## Analytical QC Summary Report

<b>SampleID:</b> G2503D42-003EDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 200.8 Rev 5.4	<b>Prep Date:</b> 3/27/2025	<b>RunNo:</b> 318580
	<b>BatchID:</b> 268527		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8415970

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	1.96	µg/L	1						1.84	6.3%	20		
Lead	< 1	µg/L	1								20		
Thallium	< 0.2	µg/L	0.2								20		

<b>SampleID:</b> LCS2-268527	<b>SampType:</b> LCS2	<b>TestNo:</b> EPA 200.8 Rev 5.4	<b>Prep Date:</b> 3/27/2025	<b>RunNo:</b> 318580
	<b>BatchID:</b> 268527		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8415964

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Antimony	6.29	µg/L	1	6		104.8%	85	115					
Arsenic	9.44	µg/L	1	10		94.4%	85	115					
Lead	4.99	µg/L	1	5		99.9%	85	115					
Thallium	1.93	µg/L	0.2	2		96.5%	85	115					

<b>SampleID:</b> G2503D42-002EMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 200.8 Rev 5.4	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318524
	<b>BatchID:</b> 268475		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413439

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Antimony	5.57	µg/L	1	6		92.9%	75	125					
Arsenic	9.63	µg/L	1	10		96.3%	75	125					
Lead	4.86	µg/L	1	5	0.31	91.1%	75	125					
Thallium	1.86	µg/L	0.2	2		93.2%	75	125					

<b>SampleID:</b> G2503D31-027AMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 200.8 Rev 5.4	<b>Prep Date:</b> 3/27/2025	<b>RunNo:</b> 318580
	<b>BatchID:</b> 268527		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8415993

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Antimony	6.94	µg/L	1	6		115.6%	75	125					
Arsenic	10.3	µg/L	1	10		102.7%	75	125					
Lead	5.69	µg/L	1	5	0.622	101.3%	75	125					

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 Project: RUBBLE 200 S

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Thallium	2.11	µg/L	0.2	2		105.5%	75	125					
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<b>SampleID:</b> G2503D31-028AMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 200.8 Rev 5.4	<b>Prep Date:</b> 3/27/2025	<b>RunNo:</b> 318580
	<b>BatchID:</b> 268527		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8416019

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Antimony	8.17	µg/L	1	6	1.98	103.1%	75	125					
Arsenic	10.5	µg/L	1	10	0.652	98.6%	75	125					
Lead	5.42	µg/L	1	5	0.521	97.9%	75	125					
Thallium	2.05	µg/L	0.2	2	0.115	96.9%	75	125					

<b>SampleID:</b> PB-268475	<b>SampType:</b> PB	<b>TestNo:</b> EPA 200.8 Rev 5.4	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318524
	<b>BatchID:</b> 268475		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413359

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										

<b>SampleID:</b> PB-268527	<b>SampType:</b> PB	<b>TestNo:</b> EPA 200.8 Rev 5.4	<b>Prep Date:</b> 3/27/2025	<b>RunNo:</b> 318580
	<b>BatchID:</b> 268527		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8415963

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										

<b>SampleID:</b> G2503D42-001EDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410268

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		

Client: ALLEGANY COUNTY MARYLAND  
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 Project: RUBBLE 200 S

## Analytical QC Summary Report

<b>SampleID:</b> G2503D43-005DDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410282

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate Nitrogen	0.94	mg/L as N	0.05						0.934	0.6%	20		

<b>SampleID:</b> G2503D80-001EDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410294

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		

<b>SampleID:</b> G2503D64-001DDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410299

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate Nitrogen	1.68	mg/L as N	0.05						1.69	0.4%	20		

<b>SampleID:</b> LFB-268411	<b>SampType:</b> LFB	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410263

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate Nitrogen	10.2	mg/L as N	0.05	10		102.5%	90	110					

<b>SampleID:</b> LFB2-268411	<b>SampType:</b> LFB2	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410264

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate Nitrogen	0.502	mg/L as N	0.05	0.5		100.4%	90	110					

<b>SampleID:</b> G2503D42-001ELFM	<b>SampType:</b> LFM	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410269

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate Nitrogen	2.55	mg/L as N	0.05	2.5		102.1%	80	120					

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

<b>SampleID:</b> G2503D43-005DLFM	<b>SampType:</b> LFM	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410283

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Nitrate Nitrogen	3.1	mg/L as N	0.05	2.5	0.934	86.8%	80	120					

<b>SampleID:</b> G2503D80-001ELFM	<b>SampType:</b> LFM	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410295

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Nitrate Nitrogen	2.43	mg/L as N	0.05	2.5		97.3%	80	120					

<b>SampleID:</b> G2503D64-001DLFM	<b>SampType:</b> LFM	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410300

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Nitrate Nitrogen	3.76	mg/L as N	0.05	2.5	1.69	82.9%	80	120					

<b>SampleID:</b> LRB-268411	<b>SampType:</b> LRB	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410265

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										

<b>SampleID:</b> CB-268411	<b>SampType:</b> MBLK	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410262

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										

<b>SampleID:</b> QCS-268411	<b>SampType:</b> QCS	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410266

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Nitrate Nitrogen	3.87	mg/L as N	0.05	4		96.7%	90	110					

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

<b>SampleID:</b> G2503D42-001EDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410208

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	19.2	mg/L	1						19.2	0.0%	20		
Sulfate	26.2	mg/L	2						26.2	0.1%	20		

<b>SampleID:</b> G2503D43-005DDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410222

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	4.2	mg/L	1						4.21	0.3%	20		
Sulfate	50	mg/L	2						50.1	0.2%	20		

<b>SampleID:</b> G2503D80-001EDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410235

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	1.57	mg/L	1						1.57	0.1%	20		
Sulfate	74	mg/L	2						74.1	0.2%	20		

<b>SampleID:</b> G2503D64-001DDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410240

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	4.5	mg/L	1						4.5	0.1%	20		
Sulfate	16.1	mg/L	2						16.1	0.2%	20		

<b>SampleID:</b> HRQC-268411	<b>SampType:</b> HRQC	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410205

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	258	mg/L	1	250		103.2%	90	110					
Sulfate	274	mg/L	2	250		109.6%	90	110					

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## Analytical QC Summary Report

<b>SampleID:</b> HRQC 1000-268411	<b>SampType:</b> HRQC 1000	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410206

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chloride	1040	mg/L	1	1000		104.4%	90	110					
Sulfate	1020	mg/L	2	1000		101.7%	90	110					

<b>SampleID:</b> LFB-268411	<b>SampType:</b> LFB	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410201

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chloride	48.1	mg/L	1	50		96.2%	90	110					
Sulfate	47.8	mg/L	2	50		95.6%	90	110					

<b>SampleID:</b> LFB2-268411	<b>SampType:</b> LFB2	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410202

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chloride	4.6	mg/L	1	5		92.1%	90	110					
Sulfate	4.7	mg/L	2	5		94.0%	90	110					

<b>SampleID:</b> G2503D42-001ELFM	<b>SampType:</b> LFM	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410209

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chloride	32.6	mg/L	1	15	19.2	89.3%	80	120					
Sulfate	43.8	mg/L	2	20	26.2	87.9%	80	120					

<b>SampleID:</b> G2503D43-005DLFM	<b>SampType:</b> LFM	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410223

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chloride	18.2	mg/L	1	15	4.21	93.2%	80	120					
Sulfate	68.3	mg/L	2	20	50.1	90.9%	80	120					

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## Analytical QC Summary Report

<b>SampleID:</b> G2503D80-001ELFM	<b>SampType:</b> LFM	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410236

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chloride	15.7	mg/L	1	15	1.57	94.0%	80	120					
Sulfate	92.2	mg/L	2	20	74.1	90.2%	80	120					

<b>SampleID:</b> G2503D64-001DLFM	<b>SampType:</b> LFM	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410241

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chloride	18.1	mg/L	1	15	4.5	90.8%	80	120					
Sulfate	33.6	mg/L	2	20	16.1	87.5%	80	120					

<b>SampleID:</b> LRB-268411	<b>SampType:</b> LRB	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410203

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										

<b>SampleID:</b> CB-268411	<b>SampType:</b> MBLK	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410200

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										

<b>SampleID:</b> QCS-268411	<b>SampType:</b> QCS	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410204

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	31.3	mg/L	2	32		98.0%	90	110					

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## Analytical QC Summary Report

<b>SampleID:</b> G2503D80-001EDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410313

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chloride	1.57	mg/L	1						1.57	0.1%	20		
Sulfate	74	mg/L	2						74.1	0.2%	20		

<b>SampleID:</b> G2503D80-001ELFM	<b>SampType:</b> LFM	<b>TestNo:</b> EPA 300.0 Rev 2.1	<b>Prep Date:</b> 3/25/2025	<b>RunNo:</b> 318442
	<b>BatchID:</b> 268411		<b>Analysis Date:</b> 3/25/2025	<b>SeqNo:</b> 8410314

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chloride	15.7	mg/L	1	15	1.57	94.0%	80	120					
Sulfate	92.2	mg/L	2	20	74.1	90.2%	80	120					

<b>SampleID:</b> G2503D01-001BDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 350.1 Rev 2.0	<b>Prep Date:</b>	<b>RunNo:</b> 318409
	<b>BatchID:</b> R318409		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8409980

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		

<b>SampleID:</b> G2503D42-001CDUP	<b>SampType:</b> DUP	<b>TestNo:</b> EPA 350.1 Rev 2.0	<b>Prep Date:</b>	<b>RunNo:</b> 318409
	<b>BatchID:</b> R318409		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8410025

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Ammonia Nitrogen	0.146	mg/L as N	0.1						0.151	3.0%	20		

<b>SampleID:</b> LCS	<b>SampType:</b> LCS	<b>TestNo:</b> EPA 350.1 Rev 2.0	<b>Prep Date:</b>	<b>RunNo:</b> 318409
	<b>BatchID:</b> R318409		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8409971

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Ammonia Nitrogen	0.769	mg/L as N	0.1	0.82		93.7%	90	110					

<b>SampleID:</b> CCB	<b>SampType:</b> MBLK	<b>TestNo:</b> EPA 350.1 Rev 2.0	<b>Prep Date:</b>	<b>RunNo:</b> 318409
	<b>BatchID:</b> R318409		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8409964

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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										

<b>SampleID:</b> G2503D01-001BMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 350.1 Rev 2.0	<b>Prep Date:</b>	<b>RunNo:</b> 318409
	<b>BatchID:</b> R318409		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8409983

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Ammonia Nitrogen	0.97	mg/L as N	0.1	1		97.0%	90	110					

<b>SampleID:</b> G2503D42-001CMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 350.1 Rev 2.0	<b>Prep Date:</b>	<b>RunNo:</b> 318409
	<b>BatchID:</b> R318409		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8410028

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Ammonia Nitrogen	1.13	mg/L as N	0.1	1	0.151	98.2%	90	110					

<b>SampleID:</b> LCS-268467	<b>SampType:</b> LCS	<b>TestNo:</b> EPA 8011	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318461
	<b>BatchID:</b> 268467		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8410873

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
1,2-Dibromo-3-chloropropane	0.118	µg/L	0.04	0.125		94.4%	60	140					
1,2-Dibromoethane	0.13	µg/L	0.04	0.125		104.0%	60	140					
Surr: 1,1,2,2-Tetrachloroethane	0.278	µg/L	0	0.286		97.2%	60	140					

<b>SampleID:</b> MBLK-268467	<b>SampType:</b> MBLK	<b>TestNo:</b> EPA 8011	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318461
	<b>BatchID:</b> 268467		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8410850

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	0.543	µg/L	0	0.571		95.1%	60	140					

<b>SampleID:</b> G2503D42-002CMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 8011	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318461
	<b>BatchID:</b> 268467		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8410853

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Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
1,2-Dibromo-3-chloropropane	0.113	µg/L	0.04	0.125		90.4%	60	140					
1,2-Dibromoethane	0.124	µg/L	0.04	0.125		99.2%	60	140					
Surr: 1,1,2,2-Tetrachloroethane	0.264	µg/L	0	0.286		92.3%	60	140					

<b>SampleID:</b> G2503D42-002CMSD	<b>SampType:</b> MSD	<b>TestNo:</b> EPA 8011	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318461
	<b>BatchID:</b> 268467		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8410854

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
1,2-Dibromo-3-chloropropane	0.115	µg/L	0.04						0.113	1.8%	20		
1,2-Dibromoethane	0.126	µg/L	0.04						0.124	1.6%	20		
Surr: 1,1,2,2-Tetrachloroethane	0.265	µg/L	0	0.286		92.7%	60	140	0.264				

<b>SampleID:</b> 20 PPB LCS	<b>SampType:</b> LCS	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318426
	<b>BatchID:</b> R318426		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8409783

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
1,1,1,2-Tetrachloroethane	19.8	µg/L	1	20		99.0%	81	125					
1,1,1-Trichloroethane	20.2	µg/L	1	20		100.8%	71	125					
1,1,2,2-Tetrachloroethane	19	µg/L	1	20		95.1%	77	118					
1,1,2-Trichloroethane	20.2	µg/L	1	20		101.1%	80	125					
1,1-Dichloroethane	21.1	µg/L	1	20		105.4%	71	123					
1,1-Dichloroethene	20.9	µg/L	1	20		104.7%	67	124					
1,2,3-Trichloropropane	19.6	µg/L	1	20		98.2%	72	120					
1,2-Dichlorobenzene	19.6	µg/L	1	20		98.1%	77	120					
1,2-Dichloroethane	20	µg/L	1	20		100.0%	72	123					
1,2-Dichloropropane	20.5	µg/L	1	20		102.5%	78	121					
1,3-Dichloropropane	19.5	µg/L	1	20		97.6%	78	120					
1,4-Dichlorobenzene	19.6	µg/L	1	20		97.8%	76	123					
2-Butanone	18.8	µg/L	5	20		94.0%	63	134					
2-Hexanone	18.7	µg/L	5	20		93.4%	58	132					
Acetone	19.2	µg/L	10	20		96.0%	66	138					
Benzene	19.4	µg/L	1	20		96.9%	72	126					
Bromochloromethane	20.8	µg/L	1	20		104.1%	72	125					

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Bromodichloromethane	19.9	µg/L	1	20		99.4%	71	138					
Bromoform	22.4	µg/L	1	20		111.9%	71	125					
Bromomethane	23.3	µg/L	1	20		116.7%	48	148					
Carbon Disulfide	19.6	µg/L	1	20		98.1%	62	133					
Carbon Tetrachloride	20.4	µg/L	1	20		102.0%	68	133					
Chlorobenzene	19.7	µg/L	1	20		98.4%	77	119					
Chlorodibromomethane	20.3	µg/L	1	20		101.3%	74	131					
Chloroethane	22.6	µg/L	1	20		113.0%	62	140					
Chloroform	20	µg/L	1	20		99.8%	70	125					
cis-1,2-Dichloroethene	20.5	µg/L	1	20		102.5%	75	121					
cis-1,3-Dichloropropene	18.9	µg/L	1	20		94.6%	71	129					
Dibromomethane	21.9	µg/L	1	20		109.4%	77	118					
Dichlorobromomethane	19.9	µg/L	1	20		99.4%	56	145					
Ethylbenzene	19	µg/L	1	20		94.8%	76	118					
Iodomethane	21.8	µg/L	5	20		109.1%	47	146					
Methyl Ethyl Ketone	18.8	µg/L	5	20		94.0%	63	134					
Methyl-tert-butyl ether	20.3	µg/L	1	20		101.6%	68	122					
Methylene Chloride	20.5	µg/L	1	20		102.3%	68	132					
Styrene	19.1	µg/L	1	20		95.8%	78	120					
Tetrachloroethene	20	µg/L	1	20		100.0%	63	131					
Toluene	19.1	µg/L	1	20		95.5%	75	125					
trans-1,2-Dichloroethene	20.4	µg/L	1	20		101.9%	70	124					
trans-1,3-Dichloropropene	20.2	µg/L	1	20		101.2%	70	126					
trans-1,4-Dichloro-2-butene	18.5	µg/L	2	20		92.4%	46	137					
Tribromomethane	22.4	µg/L	1	20		111.9%	71	125					
Trichloroethene	20.3	µg/L	1	20		101.5%	73	123					
Trichlorofluoromethane	21.7	µg/L	1	20		108.3%	63	133					
Trichloromethane	20	µg/L	1	20		99.8%	73	123					
Vinyl Acetate	19.2	µg/L	1	20		95.9%	67	131					
Vinyl Chloride	25.7	µg/L	1	20		128.6%	60	137					
Total Xylene	57.1	µg/L	2	60		95.2%	77	121					
Surr: 1,2-Dichloroethane-d4	30	µg/L	0	30		100.1%	70	130					
Surr: 4-Bromofluorobenzene	29.8	µg/L	0	30		99.5%	70	130					
Surr: Dibromofluoromethane	29.9	µg/L	0	30		99.8%	70	130					

Client: ALLEGANY COUNTY MARYLAND  
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## Analytical QC Summary Report

Surr: Toluene-d8	29.9	µg/L	0	30		99.7%	70	130					
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<b>SampleID:</b> 20 PPB LCS	<b>SampType:</b> LCS	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318478
	<b>BatchID:</b> R318478		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411577

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
4-Methyl-2-Pentanone	19	µg/L	1	20		94.9%	70	130					
Chloromethane	25.6	µg/L	1	20		127.9%	65	129					

<b>SampleID:</b> 20 PPB LCS	<b>SampType:</b> LCS	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318517
	<b>BatchID:</b> R318517		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413083

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
4-Methyl-2-Pentanone	21.4	µg/L	1	20		106.8%	70	130					
Chloromethane	27.5	µg/L	1	20		137.7%	65	129				S	

<b>SampleID:</b> BLANK	<b>SampType:</b> MBLK	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318426
	<b>BatchID:</b> R318426		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8409786

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										
1,3-Dichloropropane	< 1	µg/L	1										
1,4-Dichlorobenzene	< 1	µg/L	1										
2-Butanone	< 5	µg/L	5										
2-Hexanone	< 5	µg/L	5										



Client: ALLEGANY COUNTY MARYLAND  
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 Project: RUBBLE 200 S

## Analytical QC Summary Report

Surr: 1,2-Dichloroethane-d4	31.4	µg/L	0	30		104.8%	70	130					
Surr: 4-Bromofluorobenzene	31.4	µg/L	0	30		104.7%	70	130					
Surr: Dibromofluoromethane	30.6	µg/L	0	30		102.0%	70	130					
Surr: Toluene-d8	30.5	µg/L	0	30		101.7%	70	130					

<b>SampleID:</b> BLANK	<b>SampType:</b> MBLK	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318478
	<b>BatchID:</b> R318478		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411581

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
4-Methyl-2-Pentanone	< 1	µg/L	1										
Chloromethane	< 1	µg/L	1										

<b>SampleID:</b> BLANK	<b>SampType:</b> MBLK	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318517
	<b>BatchID:</b> R318517		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413084

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
4-Methyl-2-Pentanone	< 1	µg/L	1										
Chloromethane	< 1	µg/L	1										

<b>SampleID:</b> G2503D64-001EMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318426
	<b>BatchID:</b> R318426		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8409784

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
1,1,1,2-Tetrachloroethane	20.8	µg/L	1	20		104.2%	76	117					
1,1,1-Trichloroethane	22.4	µg/L	1	20		112.1%	76	130					
1,1,2,2-Tetrachloroethane	19.7	µg/L	1	20		98.6%	71	117					
1,1,2-Trichloroethane	20.1	µg/L	1	20		100.3%	76	126					
1,1-Dichloroethane	22.1	µg/L	1	20		110.4%	66	126					
1,1-Dichloroethene	24	µg/L	1	20		120.2%	73	135					
1,2,3-Trichloropropane	19.8	µg/L	1	20		99.2%	70	115					
1,2-Dichlorobenzene	20.6	µg/L	1	20		102.8%	74	111					
1,2-Dichloroethane	20.2	µg/L	1	20		101.2%	71	123					
1,2-Dichloropropane	20.7	µg/L	1	20		103.6%	78	122					
1,3-Dichloropropane	19.5	µg/L	1	20		97.5%	77	114					

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1,4-Dichlorobenzene	20.7	µg/L	1	20		103.3%	70	121					
2-Butanone	18.1	µg/L	5	20		90.7%	57	125					
2-Hexanone	18.7	µg/L	5	20		93.5%	70	126					
Acetone	18.2	µg/L	10	20		90.9%	51	133					
Acrolein	17.5	µg/L	10	20		87.7%	20	145					
Acrylonitrile	20.8	µg/L	5	20		104.2%	64	122					
Benzene	20.6	µg/L	1	20		102.8%	60	125					
Bromochloromethane	20.9	µg/L	1	20		104.7%	72	123					
Bromodichloromethane	20	µg/L	1	20		99.8%	68	132					
Bromoform	22.9	µg/L	1	20		114.3%	65	117					
Bromomethane	24.7	µg/L	1	20		123.5%	59	137					
Carbon Disulfide	22.7	µg/L	1	20		113.5%	67	146					
Carbon Tetrachloride	23.1	µg/L	1	20		115.5%	67	132					
Chlorobenzene	20.6	µg/L	1	20		103.1%	75	120					
Chlorodibromomethane	20.1	µg/L	1	20		100.7%	70	123					
Chloroethane	25.7	µg/L	1	20		128.4%	57	145					
Chloroform	20.9	µg/L	1	20		104.4%	71	125					
cis-1,2-Dichloroethene	21.3	µg/L	1	20		106.3%	72	125					
cis-1,3-Dichloropropene	19.4	µg/L	1	20		96.9%	71	117					
Dibromomethane	21.4	µg/L	1	20		106.9%	75	115					
Dichlorobromomethane	20	µg/L	1	20		99.8%	76	121					
Ethylbenzene	20.9	µg/L	1	20		104.5%	72	122					
Iodomethane	23.9	µg/L	5	20		119.7%	54	145					
Methyl Ethyl Ketone	18.1	µg/L	5	20		90.7%	57	125					
Methyl-tert-butyl ether	19.9	µg/L	1	20		99.5%	71	123					
Methylene Chloride	21.1	µg/L	1	20		105.7%	65	125					
Styrene	20.1	µg/L	1	20		100.6%	67	127					
Tetrachloroethene	22.2	µg/L	1	20		110.9%	64	129					
Toluene	20.6	µg/L	1	20		103.0%	75	120					
trans-1,2-Dichloroethene	22.6	µg/L	1	20		113.0%	69	118					
trans-1,3-Dichloropropene	20.2	µg/L	1	20		101.0%	66	122					
trans-1,4-Dichloro-2-butene	18.3	µg/L	2	20		91.5%	46	131					
Tribromomethane	22.9	µg/L	1	20		114.3%	66	120					
Trichloroethene	22.2	µg/L	1	20		111.2%	72	122					

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Trichlorofluoromethane	25.7	µg/L	1	20		128.5%	70	134					
Trichloromethane	20.9	µg/L	1	20		104.4%	71	123					
Vinyl Acetate	18.3	µg/L	1	20		91.4%	62	135					
Vinyl Chloride	29.7	µg/L	1	20		148.4%	64	137				S	
Total Xylene	62.1	µg/L	2	60		103.5%	72	120					
Surr: 1,2-Dichloroethane-d4	29.6	µg/L	0	30		98.7%	70	130					
Surr: 4-Bromofluorobenzene	30.1	µg/L	0	30		100.3%	70	130					
Surr: Dibromofluoromethane	29.8	µg/L	0	30		99.4%	70	130					
Surr: Toluene-d8	30	µg/L	0	30		100.0%	70	130					

<b>SampleID:</b> G2503B00-001DMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318478
	<b>BatchID:</b> R318478		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411610

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
4-Methyl-2-Pentanone	18.3	µg/L	1	20		91.3%	71	123					
Chloromethane	28.1	µg/L	1	20		140.4%	62	136				S	

<b>SampleID:</b> G2503D64-001EMSD	<b>SampType:</b> MSD	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318426
	<b>BatchID:</b> R318426		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8409785

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
1,1,1,2-Tetrachloroethane	20.4	µg/L	1						20.8	1.9%	16		
1,1,1-Trichloroethane	22.3	µg/L	1						22.4	0.3%	15		
1,1,2,2-Tetrachloroethane	19.2	µg/L	1						19.7	2.8%	14		
1,1,2-Trichloroethane	20.4	µg/L	1						20.1	1.6%	15		
1,1-Dichloroethane	22.3	µg/L	1						22.1	1.0%	17		
1,1-Dichloroethene	23.5	µg/L	1						24	2.1%	17		
1,2,3-Trichloropropane	19.1	µg/L	1						19.8	3.5%	14		
1,2-Dichlorobenzene	20.2	µg/L	1						20.6	2.0%	13		
1,2-Dichloroethane	20.3	µg/L	1						20.2	0.3%	14		
1,2-Dichloropropane	20.9	µg/L	1						20.7	0.7%	12		
1,3-Dichloropropane	19.7	µg/L	1						19.5	1.3%	17		
1,4-Dichlorobenzene	20.4	µg/L	1						20.7	1.3%	16		
2-Butanone	18.4	µg/L	5						18.1	1.3%	23		

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2-Hexanone	18.4	µg/L	5						18.7	1.7%	18		
Acetone	18.2	µg/L	10						18.2	0.3%	23		
Acrolein	17	µg/L	10						17.5	3.3%	31		
Acrylonitrile	20.6	µg/L	5						20.8	1.0%	16		
Benzene	20.5	µg/L	1						20.6	0.3%	15		
Bromochloromethane	21.3	µg/L	1						20.9	1.5%	15		
Bromodichloromethane	20.2	µg/L	1						20	1.1%	18		
Bromoform	22.3	µg/L	1						22.9	2.6%	22		
Bromomethane	24.6	µg/L	1						24.7	0.4%	27		
Carbon Disulfide	22.6	µg/L	1						22.7	0.4%	17		
Carbon Tetrachloride	23.3	µg/L	1						23.1	0.9%	14		
Chlorobenzene	20.6	µg/L	1						20.6	0.3%	14		
Chlorodibromomethane	20.1	µg/L	1						20.1	0.2%	16		
Chloroethane	24.8	µg/L	1						25.7	3.7%	21		
Chloroform	20.8	µg/L	1						20.9	0.6%	13		
cis-1,2-Dichloroethene	21.2	µg/L	1						21.3	0.4%	12		
cis-1,3-Dichloropropene	19.6	µg/L	1						19.4	1.3%	16		
Dibromomethane	21.6	µg/L	1						21.4	1.1%	14		
Dichlorobromomethane	20.2	µg/L	1						20	1.1%	16		
Ethylbenzene	20.8	µg/L	1						20.9	0.5%	16		
Iodomethane	22.9	µg/L	5						23.9	4.5%	22		
Methyl Ethyl Ketone	18.4	µg/L	5						18.1	1.3%	21		
Methyl-tert-butyl ether	19.9	µg/L	1						19.9	0.0%	16		
Methylene Chloride	21.1	µg/L	1						21.1	0.2%	25		
Styrene	20	µg/L	1						20.1	0.6%	17		
Tetrachloroethene	22.6	µg/L	1						22.2	1.8%	16		
Toluene	20.5	µg/L	1						20.6	0.4%	13		
trans-1,2-Dichloroethene	22.2	µg/L	1						22.6	2.0%	19		
trans-1,3-Dichloropropene	20.4	µg/L	1						20.2	1.0%	15		
trans-1,4-Dichloro-2-butene	18	µg/L	2						18.3	1.6%	17		
Tribromomethane	22.3	µg/L	1						22.9	2.6%	18		
Trichloroethene	22.1	µg/L	1						22.2	0.8%	15		
Trichlorofluoromethane	25.4	µg/L	1						25.7	1.0%	22		
Trichloromethane	20.8	µg/L	1						20.9	0.6%	14		

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Vinyl Acetate	18.1	µg/L	1						18.3	0.8%	17		
Vinyl Chloride	29.7	µg/L	1						29.7	0.2%	20		
Total Xylene	61.7	µg/L	2						62.1		18		
Surr: 1,2-Dichloroethane-d4	29.3	µg/L	0	30		97.7%	70	130	29.6				
Surr: 4-Bromofluorobenzene	29.7	µg/L	0	30		98.9%	70	130	30.1				
Surr: Dibromofluoromethane	30	µg/L	0	30		99.9%	70	130	29.8				
Surr: Toluene-d8	30	µg/L	0	30		99.9%	70	130	30				

<b>SampleID:</b> G2503B00-001DMSD	<b>SampType:</b> MSD	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318478
	<b>BatchID:</b> R318478		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411614

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
4-Methyl-2-Pentanone	18.4	µg/L	1						18.3	0.7%	18		
Chloromethane	27	µg/L	1						28.1	3.7%	16		

<b>SampleID:</b> G2503E91-004EMS	<b>SampType:</b> MS	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318517
	<b>BatchID:</b> R318517		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413094

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
4-Methyl-2-Pentanone	20.8	µg/L	1	20		103.8%	71	123					
Chloromethane	26.8	µg/L	1	20		133.8%	51	129				S	

<b>SampleID:</b> G2503E91-004EMSD	<b>SampType:</b> MSD	<b>TestNo:</b> EPA 8260 D	<b>Prep Date:</b>	<b>RunNo:</b> 318517
	<b>BatchID:</b> R318517		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8413095

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
4-Methyl-2-Pentanone	20.8	µg/L	1						20.8	0.4%	18		
Chloromethane	27.3	µg/L	1						26.8	2.0%	16		

<b>SampleID:</b> LCS 50-268648	<b>SampType:</b> LCS1	<b>TestNo:</b> HACH 8000	<b>Prep Date:</b> 3/28/2025	<b>RunNo:</b> 318605
	<b>BatchID:</b> 268648		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8416979

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chemical Oxygen Demand	46.4	mg/L	10	50		92.7%	90	110					

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<b>SampleID:</b> MBLK-1-268648	<b>SampType:</b> MBLK-1	<b>TestNo:</b> HACH 8000	<b>Prep Date:</b> 3/28/2025	<b>RunNo:</b> 318605
	<b>BatchID:</b> 268648		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8416983

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										

<b>SampleID:</b> G2503D42-006BMS	<b>SampType:</b> MS	<b>TestNo:</b> HACH 8000	<b>Prep Date:</b> 3/28/2025	<b>RunNo:</b> 318605
	<b>BatchID:</b> 268648		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8416974

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chemical Oxygen Demand	51.9	mg/L	10	50		103.8%	75	125					

<b>SampleID:</b> G2503D42-006BMSD	<b>SampType:</b> MSD	<b>TestNo:</b> HACH 8000	<b>Prep Date:</b> 3/28/2025	<b>RunNo:</b> 318605
	<b>BatchID:</b> 268648		<b>Analysis Date:</b> 3/28/2025	<b>SeqNo:</b> 8416977

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Chemical Oxygen Demand	49.5	mg/L	10						51.9	4.8%	20		

<b>SampleID:</b> BLANK-268508	<b>SampType:</b> BLANK	<b>TestNo:</b> SM 2540 C-15	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318486
	<b>BatchID:</b> 268508		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411978

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										

<b>SampleID:</b> G2503D38-002ADUP	<b>SampType:</b> DUP	<b>TestNo:</b> SM 2540 C-15	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318486
	<b>BatchID:</b> 268508		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411981

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Total dissolved solids	106	mg/L	20						106	0.0%	10		

<b>SampleID:</b> G2503D42-004ADUP	<b>SampType:</b> DUP	<b>TestNo:</b> SM 2540 C-15	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318486
	<b>BatchID:</b> 268508		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411993

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Total dissolved solids	1010	mg/L	20						1020	0.4%	10		

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<b>SampleID:</b> LCS-268508	<b>SampType:</b> LCS	<b>TestNo:</b> SM 2540 C-15	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318486
	<b>BatchID:</b> 268508		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8412023

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Total dissolved solids	232	mg/L	20	292		79.5%	79	106					

<b>SampleID:</b> LCS-268490	<b>SampType:</b> LCS	<b>TestNo:</b> SM 3112 B-11	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318484
	<b>BatchID:</b> 268490		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8411908

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Mercury	1.96	µg/L	0.2	2		98.0%	85	115					

<b>SampleID:</b> G2503D42-001FMS	<b>SampType:</b> MS	<b>TestNo:</b> SM 3112 B-11	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318484
	<b>BatchID:</b> 268490		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8411915

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Mercury	1.82	µg/L	0.2	2		91.0%	85	115					

<b>SampleID:</b> G2503D43-004EMS	<b>SampType:</b> MS	<b>TestNo:</b> SM 3112 B-11	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318484
	<b>BatchID:</b> 268490		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8411936

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Mercury	2.12	µg/L	0.2	2		106.0%	85	115					

<b>SampleID:</b> G2503D42-001FMDS	<b>SampType:</b> MSD	<b>TestNo:</b> SM 3112 B-11	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318484
	<b>BatchID:</b> 268490		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8411975

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Mercury	2.01	µg/L	0.2						1.82	9.9%	20		

<b>SampleID:</b> PB-268490	<b>SampType:</b> PB	<b>TestNo:</b> SM 3112 B-11	<b>Prep Date:</b> 3/26/2025	<b>RunNo:</b> 318484
	<b>BatchID:</b> 268490		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8411906

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Mercury	< 0.2	µg/L	0.2										

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<b>SampleID:</b> G2503C48-004ADUP	<b>SampType:</b> DUP	<b>TestNo:</b> SM 4500-H+ B-11	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411175

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDLimit	Qual	Text Rslt
Lab pH	7.69	S.U.	0						7.67	0.3%	20	H	

<b>SampleID:</b> G2503D42-004ADUP	<b>SampType:</b> DUP	<b>TestNo:</b> SM 4500-H+ B-11	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411258

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						8.04	0.7%	20	H	

<b>SampleID:</b> pH LCS 7	<b>SampType:</b> LCS	<b>TestNo:</b> SM 4500-H+ B-11	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8410895

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					

<b>SampleID:</b> pH LCS 7	<b>SampType:</b> LCS	<b>TestNo:</b> SM 4500-H+ B-11	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411038

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					

<b>SampleID:</b> pH LCS 7	<b>SampType:</b> LCS	<b>TestNo:</b> SM 4500-H+ B-11	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/26/2025	<b>SeqNo:</b> 8411241

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					

<b>SampleID:</b> pH LCS 7	<b>SampType:</b> LCS	<b>TestNo:</b> SM 4500-H+ B-11	<b>Prep Date:</b>	<b>RunNo:</b> 318465
	<b>BatchID:</b> R318465		<b>Analysis Date:</b> 3/27/2025	<b>SeqNo:</b> 8411327

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					

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Client: ALLEGANY COUNTY MARYLAND  
WorkOrder: G2503D42  
Project: RUBBLE 200 S

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## Analytical QC Summary Report

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

Prep Batch: 268411 Prep Code: INPR_IC			Prep Batch Report Prep Start Date: 3/25/2025 2:51:00 PM Prep End Date: 3/25/2025 2:51:00 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-268411		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 7:45:00 AM	3/25/2025 7:45:00 AM
G2503811-001A	WS-141 relog PEI-041	PT	3/13/2025 12:55:00 PM	100	100		1.000	3/25/2025 1:00:00 PM	3/25/2025 1:00:00 PM
G2503D07-001B	Weekly DI	Aqueous	3/24/2025 11:30:00 AM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D42-001E	MW-12	Groundwater	3/24/2025 4:00:00 PM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D42-001EDUP		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D42-001ELFM		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D42-002D	MW-6	Groundwater	3/24/2025 4:40:00 PM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D42-003D	MW-7	Groundwater	3/24/2025 5:30:00 PM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D42-004D	MW-13	Groundwater	3/24/2025 7:20:00 PM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D42-005D	TRIP BLANK	Aqueous	3/25/2025 9:07:00 AM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D42-006D	FIELD BLANK	Aqueous	3/24/2025 5:40:00 PM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D43-001D	MW-3	Groundwater	3/14/2025 12:30:00 PM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D43-002D	MW-4	Groundwater	3/14/2025 1:15:00 PM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D43-003D	MW-11	Groundwater	3/14/2025 2:00:00 PM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D43-004D	FIELD DUP	Groundwater	3/14/2025 2:00:00 PM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D43-005D	MW-5	Groundwater	3/14/2025 2:55:00 PM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D43-005DDUP		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D43-005DLFM		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D44-001D	PS04 Weekly	Waste Water	3/24/2025 10:00:00 AM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D45-001E	MW-6	Groundwater	3/24/2025 10:59:00 AM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D45-002E	FIELD BLANK	Aqueous	3/24/2025 11:10:00 AM	100	100		1.000	3/25/2025 10:58:00 AM	3/25/2025 10:58:00 AM
G2503D48-001H	LCS	Leachate	3/24/2025 1:05:00 PM	100	100		1.000	3/25/2025 1:00:00 PM	3/25/2025 1:00:00 PM
G2503D49-001A	Sediment Pond D	Aqueous	3/19/2025 11:00:00 AM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D50-001B	Effluent	Surface Water	3/24/2025 12:00:00 PM	100	100		1.000	3/25/2025 1:00:00 PM	3/25/2025 1:00:00 PM
G2503D50-002B	Influent	Surface Water	3/24/2025 12:10:00 PM	100	100		1.000	3/25/2025 1:00:00 PM	3/25/2025 1:00:00 PM

Client: ALLEGANY COUNTY MARYLAND

WorkOrder: G2503D42

Project: RUBBLE 200 S

# Analytical QC Summary Report

G2503D51-001C	Leachate	Leachate	3/24/2025 1:00:00 PM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D54-001B	NLCHTE	Leachate	3/24/2025 1:30:00 PM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D55-001C	Sed Pond 1	Surface Water	3/24/2025 1:08:00 PM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D56-001B	PLCHTE	Leachate	3/24/2025 1:10:00 PM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D56-002C	SCS4B	Leachate	3/24/2025 2:50:00 PM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D57-001A	S-2	Surface Water	3/24/2025 11:30:00 AM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D57-002A	S-1	Surface Water	3/24/2025 12:50:00 PM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D62-001C	MW105S	Groundwater	3/24/2025 10:45:00 AM	100	100		1.000	3/25/2025 1:00:00 PM	3/25/2025 1:00:00 PM
G2503D64-001D	MW-22S2	Groundwater	3/24/2025 11:15:00 AM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D64-001DDUP		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D64-001DLFM		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D64-002D	MW-23S2	Groundwater	3/24/2025 11:55:00 AM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D64-003D	MW106S	Groundwater	3/24/2025 10:50:00 AM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D64-004D	MW107S	Groundwater	3/24/2025 11:35:00 AM	100	100		1.000	3/25/2025 2:51:00 PM	3/25/2025 2:51:00 PM
G2503D75-001B	PW04	Groundwater	3/21/2025 8:15:00 AM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D75-002B	PW07	Groundwater	3/21/2025 8:55:00 AM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D75-003B	PW08	Groundwater	3/21/2025 8:35:00 AM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D80-001E	MW-4R2	Groundwater	3/24/2025 10:54:00 AM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D80-001EDUP		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D80-001ELFM		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D80-002E	MW-1	Groundwater	3/24/2025 12:04:00 PM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D80-003E	FIELD DUP	Groundwater	3/24/2025 12:04:00 PM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D80-004E	MW-3	Groundwater	3/24/2025 1:14:00 PM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
G2503D80-005E	MW-5	Groundwater	3/24/2025 12:22:00 PM	100	100		1.000	3/25/2025 2:27:00 PM	3/25/2025 2:27:00 PM
HRQC 1000-268411		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 7:45:00 AM	3/25/2025 7:45:00 AM
HRQC-268411		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 7:45:00 AM	3/25/2025 7:45:00 AM
IPC-268411		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 7:45:00 AM	3/25/2025 7:45:00 AM
LFB-268411		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 7:45:00 AM	3/25/2025 7:45:00 AM
LFB2-268411		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 7:45:00 AM	3/25/2025 7:45:00 AM
LRB-268411		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 7:45:00 AM	3/25/2025 7:45:00 AM

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

QCS-268411		Aqueous	3/25/2025 12:00:00 AM	100	100		1.000	3/25/2025 7:45:00 AM	3/25/2025 7:45:00 AM
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<b>Prep Batch: 268426</b>		<b>Prep Batch Report</b>					<b>Technician: Cassandra C. Shope</b>			
<b>Prep Code: INPR_TURB</b>		<b>Prep Start Date: 3/25/2025 1:03:00 PM</b>					<b>Prep Factor Units: mL</b>			
<b>Prep End Date: 3/25/2025 1:21:00 PM</b>										

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
CB-268426		Aqueous	3/25/2025 12:00:00 AM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503791-002C	M-2	Aqueous	3/25/2025 12:00:00 AM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D42-001E	MW-12	Groundwater	3/24/2025 4:00:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D42-002D	MW-6	Groundwater	3/24/2025 4:40:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D42-003D	MW-7	Groundwater	3/24/2025 5:30:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D42-004D	MW-13	Groundwater	3/24/2025 7:20:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D42-005D	TRIP BLANK	Aqueous	3/25/2025 9:07:00 AM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D42-006D	FIELD BLANK	Aqueous	3/24/2025 5:40:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D43-001D	MW-3	Groundwater	3/24/2025 12:30:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D43-002D	MW-4	Groundwater	3/24/2025 1:15:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D43-003D	MW-11	Groundwater	3/24/2025 2:00:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D43-003DDUP		Aqueous	3/25/2025 12:00:00 AM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D43-004D	FIELD DUP	Groundwater	3/24/2025 2:00:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D43-005D	MW-5	Groundwater	3/24/2025 2:55:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D48-001H	LCS	Leachate	3/24/2025 1:05:00 PM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
G2503D48-001HDUP		Aqueous	3/25/2025 12:00:00 AM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
ICV-268426		Aqueous	3/25/2025 12:00:00 AM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
IPC-268426		Aqueous	3/25/2025 12:00:00 AM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM
LRB-268426		Aqueous	3/25/2025 12:00:00 AM	30	30		1.000	3/25/2025 1:03:00 PM	3/25/2025 1:21:00 PM

<b>Prep Batch: 268467</b>		<b>Prep Batch Report</b>					<b>Technician: Aleya G Shreckengost</b>			
<b>Prep Code: PREP_8011</b>		<b>Prep Start Date: 3/26/2025 10:22:17 AM</b>					<b>Prep Factor Units: MI</b>			
<b>Prep End Date: 3/26/2025 12:50:38 PM</b>										

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503D42-001D	MW-12	Groundwater	3/24/2025 4:00:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D42-002C	MW-6	Groundwater	3/24/2025 4:40:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D42-002CMS		Aqueous	3/26/2025 12:00:00 AM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D42-002CMSD		Aqueous	3/26/2025 12:00:00 AM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D42-003C	MW-7	Groundwater	3/24/2025 5:30:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D42-004C	MW-13	Groundwater	3/24/2025 7:20:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D42-005C	TRIP BLANK	Aqueous	3/25/2025 9:07:00 AM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D42-006C	FIELD BLANK	Aqueous	3/24/2025 5:40:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D43-001C	MW-3	Groundwater	3/24/2025 12:30:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D43-002C	MW-4	Groundwater	3/24/2025 1:15:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D43-003C	MW-11	Groundwater	3/24/2025 2:00:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D43-004C	FIELD DUP	Groundwater	3/24/2025 2:00:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D43-005C	MW-5	Groundwater	3/24/2025 2:55:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D45-001D	MW-6	Groundwater	3/24/2025 10:59:00 AM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D45-002D	FIELD BLANK	Aqueous	3/24/2025 11:10:00 AM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D45-003A	TRIP BLANK	Aqueous	3/25/2025 9:49:00 AM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D48-001E	LCS	Leachate	3/24/2025 1:05:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D48-002A	T-Blank	Aqueous	3/24/2025 1:05:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D80-001D	MW-4R2	Groundwater	3/24/2025 10:54:00 AM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D80-002D	MW-1	Groundwater	3/24/2025 12:04:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D80-003D	FIELD DUP	Groundwater	3/24/2025 12:04:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
G2503D80-004D	MW-3	Groundwater	3/24/2025 1:14:00 PM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
LCS-268467		Aqueous	3/26/2025 12:00:00 AM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM
MBLK-268467		Aqueous	3/26/2025 12:00:00 AM	35	35		1.000	3/26/2025 10:22:18 AM	3/26/2025 12:50:38 PM

<b>Prep Batch:</b> 268473 <b>Prep Code:</b> MEPREP200.7	<b>Prep Batch Report</b>	<b>Technician:</b> Kristy L Botteicher <b>Prep Factor Units:</b> mL
	<b>Prep Start Date:</b> 3/26/2025 11:00:00 AM <b>Prep End Date:</b> 3/26/2025 4:30:00 PM	

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503C12-001G	BT 1	Aqueous	3/19/2025 10:00:00 AM	5	50		10.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503C12-002G	HO1	Aqueous	3/19/2025 10:00:00 AM	5	50		10.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503C89-001D	Outfall 001	Waste Water	3/20/2025 7:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D05-001E	Snack Room	Aqueous	3/24/2025 11:35:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D05-001EMS		Aqueous	3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D31-023B	25A	Surface Water	3/24/2025 7:50:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D31-023BDUP		Aqueous	3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D31-023BMS		Aqueous	3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D31-024B	26	Surface Water	3/24/2025 8:05:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D42-001F	MW-12	Groundwater	3/24/2025 4:00:00 PM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D42-002E	MW-6	Groundwater	3/24/2025 4:40:00 PM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D69-001A	Outfall 001	Waste Water	3/24/2025 8:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
LCS1-268473		Aqueous	3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
PB-268473		Aqueous	3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM

<b>Prep Batch: 268475</b>			<b>Prep Batch Report</b>						
<b>Prep Code: MEPREP200.8</b>			<b>Prep Start Date: 3/26/2025 11:00:00 AM</b>				<b>Technician: Kristy L Botteicher</b>		
			<b>Prep End Date: 3/26/2025 4:30:00 PM</b>				<b>Prep Factor Units:</b>		

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503A52-002C	Outfall 002		3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503B02-008C	MW16		3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503B02-008CMS			3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503C12-001G	BT 1	Aqueous	3/19/2025 10:00:00 AM	5	50		10.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503C12-002G	HO1	Aqueous	3/19/2025 10:00:00 AM	5	50		10.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503C89-001D	Outfall 001	Waste Water	3/20/2025 7:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D31-023B	25A	Surface Water	3/24/2025 7:50:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D31-023BDUP			3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D31-023BMS			3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D31-024B	26	Surface Water	3/24/2025 8:05:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM

Client: ALLEGANY COUNTY MARYLAND

WorkOrder: G2503D42

Project: RUBBLE 200 S

# Analytical QC Summary Report

G2503D42-001F	MW-12	Groundwater	3/24/2025 4:00:00 PM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D42-002E	MW-6	Groundwater	3/24/2025 4:40:00 PM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D42-002EMS			3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
G2503D69-001A	Outfall 001	Waste Water	3/24/2025 8:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
LCS1-268475			3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM
PB-268475			3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:00:00 AM	3/26/2025 4:30:00 PM

<b>Prep Batch: 268490</b>		<b>Prep Batch Report</b>					<b>Technician: Kristy L Botteicher</b>			
<b>Prep Code: HG_PREP</b>		<b>Prep Start Date: 3/26/2025 12:45:00 PM</b>					<b>Prep Factor Units: mL</b>			
		<b>Prep End Date: 3/26/2025 2:45:00 PM</b>								

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503D04-001B	SAR-001	Waste Water	3/24/2025 8:05:00 AM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D42-001F	MW-12	Groundwater	3/24/2025 4:00:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D42-001FMS		Aqueous	3/26/2025 12:00:00 AM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D42-001FMDS		Aqueous	3/26/2025 12:00:00 AM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D42-002E	MW-6	Groundwater	3/24/2025 4:40:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D42-003E	MW-7	Groundwater	3/24/2025 5:30:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D42-004E	MW-13	Groundwater	3/24/2025 7:20:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D42-005E	TRIP BLANK	Aqueous	3/25/2025 9:07:00 AM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D42-006E	FIELD BLANK	Aqueous	3/24/2025 5:40:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D43-001E	MW-3	Groundwater	3/24/2025 12:30:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D43-002E	MW-4	Groundwater	3/24/2025 1:15:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D43-003E	MW-11	Groundwater	3/24/2025 2:00:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D43-004E	FIELD DUP	Groundwater	3/24/2025 2:00:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D43-004EMS		Aqueous	3/26/2025 12:00:00 AM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D43-005E	MW-5	Groundwater	3/24/2025 2:55:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D48-001G	LCS	Leachate	3/24/2025 1:05:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D55-001F	Sed Pond 1	Surface Water	3/24/2025 1:08:00 PM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D72-001E	L-3D3	Leachate	3/24/2025 11:15:00 AM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503D72-002E	L-3D	Leachate	3/24/2025 11:42:00 AM	25	25		1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM

Client: ALLEGANY COUNTY MARYLAND

WorkOrder: G2503D42

Project: RUBBLE 200 S

# Analytical QC Summary Report

G2503D72-003E	L-5	Leachate	3/24/2025 12:17:00 PM	25	25	1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503E02-001D	M5-PZ-LPS	Groundwater	3/25/2025 8:00:00 AM	25	25	1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503E02-002D	M4-PZ-LPS	Groundwater	3/25/2025 9:20:00 AM	25	25	1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
G2503E04-003F	LCZ	Leachate	3/25/2025 12:20:00 PM	25	25	1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
LCS-268490		Aqueous	3/26/2025 12:00:00 AM	25	25	1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM
PB-268490		Aqueous	3/26/2025 12:00:00 AM	25	25	1.000	3/26/2025 12:45:00 PM	3/26/2025 2:45:00 PM

<b>Prep Batch: 268508</b>			<b>Prep Batch Report</b>				<b>Technician: Laykin A. Pritts</b>		
<b>Prep Code: WATERPR_TDS</b>			<b>Prep Start Date: 3/26/2025 11:20:00 AM</b>				<b>Prep Factor Units: mL</b>		
			<b>Prep End Date: 3/26/2025 11:25:00 AM</b>						

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
Blank-268508		Aqueous	3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D38-002A	Bando Xing	Surface Water	3/24/2025 10:35:00 AM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D38-002ADUP		Aqueous	3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D39-001A	PR/Lytel Rd	Surface Water	3/24/2025 9:50:00 AM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D39-002A	Summit	Surface Water	3/24/2025 10:25:00 AM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D39-003A	Washington	Surface Water	3/24/2025 11:15:00 AM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D39-004A	Ores Mones	Surface Water	3/24/2025 12:12:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D39-005A	Beck	Surface Water	3/24/2025 1:51:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D39-006A	Blue Hole	Surface Water	3/24/2025 2:32:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D42-001B	MW-12	Groundwater	3/24/2025 4:00:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D42-002A	MW-6	Groundwater	3/24/2025 4:40:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D42-003A	MW-7	Groundwater	3/24/2025 5:30:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D42-004A	MW-13	Groundwater	3/24/2025 7:20:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D42-004ADUP		Aqueous	3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D42-005A	TRIP BLANK	Aqueous	3/25/2025 9:07:00 AM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D42-006A	FIELD BLANK	Aqueous	3/24/2025 5:40:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D43-001A	MW-3	Groundwater	3/24/2025 12:30:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D43-002A	MW-4	Groundwater	3/24/2025 1:15:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D43-003A	MW-11	Groundwater	3/24/2025 2:00:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM

Client: ALLEGANY COUNTY MARYLAND  
 WorkOrder: G2503D42  
 Project: RUBBLE 200 S

## Analytical QC Summary Report

G2503D43-004A	FIELD DUP	Groundwater	3/24/2025 2:00:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D43-005A	MW-5	Groundwater	3/24/2025 2:55:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D54-001C	NLCHE	Leachate	3/24/2025 1:30:00 PM	10	50		5.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
G2503D55-001D	Sed Pond 1	Surface Water	3/24/2025 1:08:00 PM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM
LCS-268508		Aqueous	3/26/2025 12:00:00 AM	50	50		1.000	3/26/2025 11:20:00 AM	3/26/2025 11:25:00 AM

<b>Prep Batch: 268525</b>		<b>Prep Batch Report</b>					<b>Technician: Kristy L Botteicher</b>			
<b>Prep Code: MEPREP200.7</b>		<b>Prep Start Date: 3/27/2025 7:00:00 AM</b>					<b>Prep Factor Units: mL</b>			
		<b>Prep End Date: 3/27/2025 12:30:00 PM</b>								

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503D42-003E	MW-7	Groundwater	3/24/2025 5:30:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D42-003EDUP		Aqueous	3/27/2025 12:00:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D42-003EMS		Aqueous	3/27/2025 12:00:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D42-004E	MW-13	Groundwater	3/24/2025 7:20:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D42-005E	TRIP BLANK	Aqueous	3/25/2025 9:07:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D42-006E	FIELD BLANK	Aqueous	3/24/2025 5:40:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D43-001E	MW-3	Groundwater	3/24/2025 12:30:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D43-002E	MW-4	Groundwater	3/24/2025 1:15:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D43-003E	MW-11	Groundwater	3/24/2025 2:00:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D43-004E	FIELD DUP	Groundwater	3/24/2025 2:00:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D43-005E	MW-5	Groundwater	3/24/2025 2:55:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D50-001D	Effluent	Surface Water	3/24/2025 12:00:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
LCS1-268525		Aqueous	3/27/2025 12:00:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
PB-268525		Aqueous	3/27/2025 12:00:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM

<b>Prep Batch: 268527</b>		<b>Prep Batch Report</b>					<b>Technician: Kristy L Botteicher</b>			
<b>Prep Code: MEPREP200.8</b>		<b>Prep Start Date: 3/27/2025 7:00:00 AM</b>					<b>Prep Factor Units:</b>			
		<b>Prep End Date: 3/27/2025 12:30:00 PM</b>								

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503D31-018A	32A	Surface Water	3/24/2025 1:50:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM

Client: ALLEGANY COUNTY MARYLAND

WorkOrder: G2503D42

Project: RUBBLE 200 S

## Analytical QC Summary Report

G2503D31-019A	33	Surface Water	3/24/2025 1:25:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D31-020A	17	Surface Water	3/24/2025 7:15:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D31-021A	211	Surface Water	3/24/2025 8:25:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D31-022A	213	Surface Water	3/24/2025 7:25:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D31-025A	30	Surface Water	3/24/2025 12:55:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D31-026A	Pitt	Surface Water	3/24/2025 9:05:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D31-027A	Sump	Surface Water	3/24/2025 9:20:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D31-027AMS			3/27/2025 12:00:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D31-028A	After Wash	Surface Water	3/24/2025 9:35:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D31-028AMS			3/27/2025 12:00:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D42-003E	MW-7	Groundwater	3/24/2025 5:30:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D42-003EDUP			3/27/2025 12:00:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D42-004E	MW-13	Groundwater	3/24/2025 7:20:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D42-005E	TRIP BLANK	Aqueous	3/25/2025 9:07:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D42-006E	FIELD BLANK	Aqueous	3/24/2025 5:40:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D43-001E	MW-3	Groundwater	3/24/2025 12:30:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D43-002E	MW-4	Groundwater	3/24/2025 1:15:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D43-003E	MW-11	Groundwater	3/24/2025 2:00:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D43-004E	FIELD DUP	Groundwater	3/24/2025 2:00:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D43-005E	MW-5	Groundwater	3/24/2025 2:55:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
G2503D50-001D	Effluent	Surface Water	3/24/2025 12:00:00 PM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
LCS2-268527			3/27/2025 12:00:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM
PB-268527			3/27/2025 12:00:00 AM	50	50		1.000	3/27/2025 7:00:00 AM	3/27/2025 12:30:00 PM

<b>Prep Batch: 268648</b>		<b>Prep Batch Report</b>							
<b>Prep Code: INPR_COD</b>		<b>Prep Start Date: 3/28/2025 7:12:00 AM</b>					<b>Technician: Cassandra C. Shope</b>		
		<b>Prep End Date: 3/28/2025 9:12:00 AM</b>					<b>Prep Factor Units: mL</b>		
Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
CCV 1-268648		Aqueous	3/28/2025 12:00:00 AM	2	2		1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C27-003B	Outfall 003	Aqueous	3/20/2025 10:58:00 AM	2	2		1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM

Client: ALLEGANY COUNTY MARYLAND

WorkOrder: G2503D42

Project: RUBBLE 200 S

## Analytical QC Summary Report

G2503C27-004A	Outfall 004	Aqueous	3/20/2025 11:15:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C32-001E	MW401R-22	Groundwater	3/20/2025 12:30:00 PM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C32-002E	MW413-21	Groundwater	3/20/2025 1:00:00 PM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C32-003E	MW414-21	Groundwater	3/20/2025 12:45:00 PM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C48-001C	FUP-02R	Groundwater	3/20/2025 8:40:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C48-002C	FUP-01R2	Groundwater	3/20/2025 9:20:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C48-003C	FDP-11R	Groundwater	3/20/2025 9:45:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C48-004C	SP-2	Surface Water	3/20/2025 9:55:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C48-006C	B-78R	Groundwater	3/20/2025 10:20:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C48-007C	GA-2R2	Groundwater	3/20/2025 10:50:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C48-008C	SP-1	Surface Water	3/20/2025 11:05:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C48-010C	PW-1	Surface Water	3/20/2025 11:30:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503C79-001A	ASTM Blank	Solid	3/23/2025 10:00:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503D42-001C	MW-12	Groundwater	3/24/2025 4:00:00 PM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503D42-002B	MW-6	Groundwater	3/24/2025 4:40:00 PM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503D42-003B	MW-7	Groundwater	3/24/2025 5:30:00 PM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503D42-004B	MW-13	Groundwater	3/24/2025 7:20:00 PM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503D42-005B	TRIP BLANK	Aqueous	3/25/2025 9:07:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503D42-006B	FIELD BLANK	Aqueous	3/24/2025 5:40:00 PM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503D42-006BMS		Aqueous	3/28/2025 12:00:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
G2503D42-006BMSD		Aqueous	3/28/2025 12:00:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
LCS 50-268648		Aqueous	3/28/2025 12:00:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM
MBLK-1-268648		Aqueous	3/28/2025 12:00:00 AM	2	2	1.000	3/28/2025 7:12:00 AM	3/28/2025 9:12:00 AM

Client: ALLEGANY COUNTY MARYLAND  
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Project: RUBBLE 200 S

## Analytical QC Summary Report

### Batch Reference Report

Client Samp ID	Test No	Batch ID
FIELD BLANK	ASTM D1067-16	R318465
MW-12	ASTM D1067-16	R318465
MW-13	ASTM D1067-16	R318465
MW-6	ASTM D1067-16	R318465
MW-7	ASTM D1067-16	R318465
TRIP BLANK	ASTM D1067-16	R318465
FIELD BLANK	EPA 120.1	R318465
MW-12	EPA 120.1	R318465
MW-13	EPA 120.1	R318465
MW-6	EPA 120.1	R318465
MW-7	EPA 120.1	R318465
TRIP BLANK	EPA 120.1	R318465
FIELD BLANK	EPA 180.1 Rev 2.0	268426
MW-12	EPA 180.1 Rev 2.0	268426
MW-13	EPA 180.1 Rev 2.0	268426
MW-6	EPA 180.1 Rev 2.0	268426
MW-7	EPA 180.1 Rev 2.0	268426
TRIP BLANK	EPA 180.1 Rev 2.0	268426
FIELD BLANK	EPA 200.7 Rev 4.4	268525
MW-12	EPA 200.7 Rev 4.4	268473
MW-13	EPA 200.7 Rev 4.4	268525
MW-6	EPA 200.7 Rev 4.4	268473
MW-7	EPA 200.7 Rev 4.4	268525
TRIP BLANK	EPA 200.7 Rev 4.4	268525

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## Analytical QC Summary Report

FIELD BLANK	EPA 200.8 Rev 5.4	268527
MW-12	EPA 200.8 Rev 5.4	268475
MW-13	EPA 200.8 Rev 5.4	268527
MW-6	EPA 200.8 Rev 5.4	268475
MW-7	EPA 200.8 Rev 5.4	268527
TRIP BLANK	EPA 200.8 Rev 5.4	268527
FIELD BLANK	EPA 300.0 Rev 2.1	268411
MW-12	EPA 300.0 Rev 2.1	268411
MW-13	EPA 300.0 Rev 2.1	268411
MW-6	EPA 300.0 Rev 2.1	268411
MW-7	EPA 300.0 Rev 2.1	268411
TRIP BLANK	EPA 300.0 Rev 2.1	268411
FIELD BLANK	EPA 350.1 Rev 2.0	R318409
MW-12	EPA 350.1 Rev 2.0	R318409
MW-13	EPA 350.1 Rev 2.0	R318409
MW-6	EPA 350.1 Rev 2.0	R318409
MW-7	EPA 350.1 Rev 2.0	R318409
TRIP BLANK	EPA 350.1 Rev 2.0	R318409
FIELD BLANK	EPA 8011	268467
MW-12	EPA 8011	268467
MW-13	EPA 8011	268467
MW-6	EPA 8011	268467
MW-7	EPA 8011	268467
TRIP BLANK	EPA 8011	268467
FIELD BLANK	EPA 8260 D	R318426
FIELD BLANK	EPA 8260 D	R318478

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## Analytical QC Summary Report

FIELD BLANK	EPA 8260 D	R318517
MW-12	EPA 8260 D	R318426
MW-12	EPA 8260 D	R318478
MW-12	EPA 8260 D	R318517
MW-13	EPA 8260 D	R318426
MW-13	EPA 8260 D	R318478
MW-13	EPA 8260 D	R318517
MW-6	EPA 8260 D	R318426
MW-6	EPA 8260 D	R318478
MW-6	EPA 8260 D	R318517
MW-7	EPA 8260 D	R318426
MW-7	EPA 8260 D	R318478
MW-7	EPA 8260 D	R318517
TRIP BLANK	EPA 8260 D	R318426
TRIP BLANK	EPA 8260 D	R318517
FIELD BLANK	HACH 8000	268648
MW-12	HACH 8000	268648
MW-13	HACH 8000	268648
MW-6	HACH 8000	268648
MW-7	HACH 8000	268648
TRIP BLANK	HACH 8000	268648
FIELD BLANK	SM 2540 C-15	268508
MW-12	SM 2540 C-15	268508
MW-13	SM 2540 C-15	268508
MW-6	SM 2540 C-15	268508
MW-7	SM 2540 C-15	268508

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## Analytical QC Summary Report

TRIP BLANK	SM 2540 C-15	268508
FIELD BLANK	SM 3112 B-11	268490
MW-12	SM 3112 B-11	268490
MW-13	SM 3112 B-11	268490
MW-6	SM 3112 B-11	268490
MW-7	SM 3112 B-11	268490
TRIP BLANK	SM 3112 B-11	268490
FIELD BLANK	SM 4500-CO2 D	R318465
MW-12	SM 4500-CO2 D	R318465
MW-13	SM 4500-CO2 D	R318465
MW-6	SM 4500-CO2 D	R318465
MW-7	SM 4500-CO2 D	R318465
TRIP BLANK	SM 4500-CO2 D	R318465
FIELD BLANK	SM 4500-H+ B-11	R318465
MW-12	SM 4500-H+ B-11	R318465
MW-13	SM 4500-H+ B-11	R318465
MW-6	SM 4500-H+ B-11	R318465
MW-7	SM 4500-H+ B-11	R318465
TRIP BLANK	SM 4500-H+ B-11	R318465

**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.

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## Analytical QC Summary Report

<b>L3</b>	Analyte was spiked into the LCS, but was not recovered.
<b>M1</b>	Matrix Spike recovery above the acceptance limits.
<b>M2</b>	Matrix Spike recovery below the acceptance limits.
<b>M4</b>	The matrix spike failed high for the surrogate.
<b>M5</b>	The matrix spike failed low for the surrogate.
<b>M6</b>	The reporting limits were raised due to sample matrix interference.
<b>M7</b>	Recovery for matrix spike could not be quantified due to matrix interference.
<b>M8</b>	Analyte was spiked into the MS, but was not recovered.
<b>M9</b>	Analyte concentration was determined by the method of standard addition (MSA).
<b>N1</b>	The lab does not hold accreditation from PA-DEP for this parameter by this method
<b>N2</b>	PADEP does not accredit labs for this analyte by this method.
<b>N3</b>	The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).
<b>N4</b>	PADEP does not accredit labs for this analyte by this method in drinking water.
<b>ND</b>	Not Detected.
<b>O1</b>	The flashpoint tester cannot detect below 50 degrees F.
<b>O2</b>	Result is temperature of the sample when flame observed. No flash observed. Result qualified.
<b>O4</b>	Sample was received with headspace.
<b>O5</b>	Sample was received in incorrect container and is not compliant with 40CFR136 Table II.
<b>O6</b>	Insufficient sample volume was received to comply with the method.
<b>P1</b>	The pH of the sample was >2 and is not compliant with 40CFR136 Table II.
<b>P2</b>	Sample contained residual chlorine and is not compliant with 40CFR136 Table II
<b>P3</b>	The pH of the sample was <10 and is not compliant with 40CFR136 Table II.
<b>P4</b>	Field preservation does not meet EPA or method recommendations for this analysis.
<b>P5</b>	Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.
<b>P6</b>	Sample required additional preservative upon receipt.
<b>P7</b>	The sample was received unpreserved.
<b>P8</b>	The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.
<b>Q1</b>	Qualified Data See Case Narrative.
<b>Q2</b>	Reported lower result from the dual detector. See case narrative.
<b>Q3</b>	Sample detected multiple Aroclors. See case narrative.
<b>Q4</b>	Weathering or degradation observed for PCBs. See case narrative.
<b>Q5</b>	Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.
<b>Q6</b>	Peak Height/Area used in quantification is documented in the case narrative.

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## Analytical QC Summary Report

<b>R</b>	Relative Percent Difference (RPD) was above the control limit.
<b>R1</b>	RPD above control limits between matrix spike and MS duplicates.
<b>R2</b>	RPD above the control limit between duplicates.
<b>R3</b>	RSD above the control limit between replicates.
<b>R4</b>	RPD above control limits between Inorganic Carbon check and spike.
<b>R5</b>	RPD above control limits between control sample and control sample duplicates.
<b>R6</b>	Dual Column/Detector RDP >40%. Higher result reported.
<b>S</b>	Recovery for the spiked control sample outside accepted limits.
<b>S2</b>	Surrogate recovery in the blank was below the control limit.
<b>S3</b>	Surrogate recovery in the blank was above the control limit.
<b>S4</b>	Surrogate recovery in the LCS is above the control limit.
<b>S5</b>	Surrogate recovery in the LCS is below the control limit.
<b>SR</b>	Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.
<b>T</b>	Sample temperature received outside the regulatory limit and is not compliant with 40CFR Part136 Table II (for NPW samples).
<b>T1</b>	Sample temperature received outside the regulatory limit. (Primarily for SCM samples).
<b>TC</b>	The MS tune check (tailing factor) did not meet the acceptance criteria.
<b>U</b>	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."



Form F-5002, 03.24  
 \*\*\* Lab Work Order #

62503047

REQUEST FOR LABORATORY  
 ANALYTICAL SERVICES

Chain of Custody (COC)

Shuttle/Cooler ID# 754

Billing Client	Company	Allegany Co. MD	Name	A. Baloy	E-mail Address	landfill@hydrophysics.com	
	Mailing Address	701 Kelly Rd	Telephone No.	724 325-3492	Landfill Site	RUBBLE	
	City, State, Zip	Cumberland, MD	State Sampled	MD	PWS Number		Date Results Required

Special Instruction/Project ID/Analyte List/Comment:	*PC-1: Nitric acid (HNO <sub>3</sub> ) *PC-2: Hydrochloric acid (HCL) *PC-3: Sulfuric acid (H <sub>2</sub> SO <sub>4</sub> ) *PC-4: Sodium Hydroxide (NaOH) *PC-5: Sodium Thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) *PC-6: Ascorbic acid (C <sub>6</sub> H <sub>8</sub> O <sub>6</sub> ) *PC-7: Zinc acetate (C <sub>4</sub> H <sub>6</sub> O <sub>4</sub> Zn) / Sodium Hydroxide (NaOH) *PC-8: Ammonium chloride (NH <sub>4</sub> CL) *PC-9: Copper Sulfate (CuSO <sub>4</sub> ·5H <sub>2</sub> O)	ANALYSIS REQUESTED																				
		Enter 'X' in box below to indicate request and use appropriate preservation code listed to the left																				
SR 1st Review: Amm	CS 2nd Review: LAD	Number of Containers	Dissolved Metals	Field Filtered: Y/N	Preservative*:	Ammonium Nitrate Preservative*:	TST Met.	Preservative*:	Cu, Fe, Sol. Turb, NO <sub>3</sub> Preservative*:	FOD/DBC Preservative*:	Acid. D. Carb. II, TOC, Alk. Preservative*:	VFA 5-60 Preservative*:	VFA 5-60 Preservative*:	Preservative*:	Cooler (s) Temperature on Receipt							

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*:	Ammonium Nitrate Preservative*:	TST Met.	Preservative*:	Cu, Fe, Sol. Turb, NO <sub>3</sub> Preservative*:	FOD/DBC Preservative*:	Acid. D. Carb. II, TOC, Alk. Preservative*:	VFA 5-60 Preservative*:	VFA 5-60 Preservative*:	Preservative*:	Cooler (s) Temperature on Receipt								
MW-3	001	3-24-25	1230	GW	G	15																					
MW-4	002	3-24-25	1315	GW	G	15																					
MW-11	003	3-24-25	1400	GW	G	15																					
F. Dup.	004	3-24-25	1400	GW	G	13																					
MW-5	005	3-24-25	1455	GW	G	15																					

Relinquished by: <i>[Signature]</i>	Date/Time: 3-24-25 1600	Received by: <i>[Signature]</i>	Date/Time: 3-25-25 840						
Relinquished by: <i>[Signature]</i>	Date/Time: 3-25-25 840	Received at lab by: <i>[Signature]</i>	Date/Time: 3-25-25 937						
Printed Sampler Name: A. Baloy	Logged in by: <i>[Signature]</i>								
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 #:	

G2503D42

## FIELD SAMPLING LOG

Facility Name: AMCELLE RUBBLE FILL Sampling Point: MW-12Permit #: 199-WRF-0206

Purge Date	Start Purge	End Purge	Elapsed Time	H <sub>2</sub> O Vol. CSG	Vol. Purged
3/24/2025	15:10	16:00	0:50	24.4	16 L

Purge Method: Dedicated Low-Flow (Bladder) Pump Sample Date/Time: 3/24/2025 16:00

Sampler Type: C A Submersible Pump D Bailer  
 B RediFlo2 E Scoop/Shovel  
 C Bladder Pump F Other

Sampler Material: A A Teflon D Plastic  
 B Metal E Other  
 C PVC

Tubing Material: C A Teflon D Silicon  
 B Tygon E Other  
 C Polyethylene

Samples Composited:  Yes  No Comments: \_\_\_\_\_Samples Filtered:  Yes  NoNo. of Filters Used: 0 Type of Filter: N/A

## FIELD MEASUREMENTS

Depth to Groundwater (ft)	Well Depth (ft)	Meas. Point Elevation (ft)	Water Level Elevation (ft)
20.49	62.05	654.87	634.38

Temp. (°C)	Cond. (µS/cm)	T.D.S. (ppm)	pH (su)	Turbidity (FNU)	D.O. (mg/L)
12.6	510	255	6.41	0.00	9.7
12.5	506	253	6.48	0.00	9.6
12.5	507	253	6.53	0.00	9.5
12.6	505	252	6.53	0.00	9.5
Avg: 12.6	Avg: 507	Avg: 253	Avg: 6.49	Avg: 0	Avg: 9.6

## FIELD COMMENTS

Sample Appearance: Clear, colorless, moderate musty odorWeather Conditions: 55 °F, sunny, calmOther: 15 BottlesSamplers: A Balog, M Solomon

I certify that sampling procedures were in accordance with applicable EPA and state protocols:

Signature: Alex BalogDate: 3/26/2025

G2503D42  
**FIELD SAMPLING LOG**



Facility Name: AMCELLE RUBBLE FILL Sampling Point: MW-6  
 Permit #: 199-WRF-0206

Purge Date 3/24/2025	Start Purge 16:13	End Purge 16:40	Elapsed Time 0:27	H <sub>2</sub> O Vol. CSG 9.5	Vol. Purged 9 L
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Purge Method: Dedicated Low-Flow (Bladder) Pump Sample Date/Time: 3/24/2025 16:40

Sampler Type: C A Submersible Pump D Bailer  
 B RediFlo2 E Scoop/Shovel  
 C Bladder Pump F Other

Sampler Material: A A Teflon D Plastic  
 B Metal E Other  
 C PVC

Tubing Material: C A Teflon D Silicon  
 B Tygon E Other  
 C Polyethylene

Samples Composited:  Yes  No Comments: \_\_\_\_\_

Samples Filtered:  Yes  No

No. of Filters Used: 0 Type of Filter: N/A

**FIELD MEASUREMENTS**

Depth to Groundwater (ft)	Well Depth (ft)	Meas. Point Elevation (ft)	Water Level Elevation (ft)
15.00	24.60	653.21	638.21

Temp. (°C)	Cond. (µS/cm)	T.D.S. (ppm)	pH (su)	Turbidity (FNU)	D.O. (mg/L)
11.8	633	316	6.26	0.00	8.8
11.7	632	316	6.21	4.49	8.8
11.6	629	315	6.16	7.89	8.8
11.6	629	314	6.09	2.71	8.8
Avg: 11.7	Avg: 631	Avg: 315	Avg: 6.18	Avg: 3.77	Avg: 8.8

**FIELD COMMENTS**

Sample Appearance: Clear, colorless, odorless, fine suspended solids  
 Weather Conditions: 55 °F, sunny, calm  
 Other: 15 Bottles  
 Samplers: A Balog, M Solomon

I certify that sampling procedures were in accordance with applicable EPA and state protocols:

Signature: Alex Balog Date: 3/26/2025

G2503D42

## FIELD SAMPLING LOG

Facility Name: AMCELLE RUBBLE FILL Sampling Point: MW-7Permit #: 199-WRF-0206

Purge Date	Start Purge	End Purge	Elapsed Time	H <sub>2</sub> O Vol. CSG	Vol. Purged
3/24/2025	16:57	17:30	0:33	3.32	6 L

Purge Method: Dedicated Low-Flow (Bladder) Pump Sample Date/Time: 3/24/2025 17:30

Sampler Type: C A Submersible Pump D Bailer  
 B RediFlo2 E Scoop/Shovel  
 C Bladder Pump F Other

Sampler Material: A A Teflon D Plastic  
 B Metal E Other  
 C PVC

Tubing Material: C A Teflon D Silicon  
 B Tygon E Other  
 C Polyethylene

Samples Composited:  Yes  No Comments: \_\_\_\_\_Samples Filtered:  Yes  NoNo. of Filters Used: 0 Type of Filter: N/A

## FIELD MEASUREMENTS

Depth to Groundwater (ft)	Well Depth (ft)	Meas. Point Elevation (ft)	Water Level Elevation (ft)
15.50	20.60	653.20	637.70

Temp. (°C)	Cond. (µS/cm)	T.D.S. (ppm)	pH (su)	Turbidity (FNU)	D.O. (mg/L)
11.4	1026	517	5.79	6.68	6.1
11.4	1035	516	6.04	2.23	6.0
11.6	1031	513	6.18	1.25	6.0
11.5	1028	510	6.31	0.00	6.0
Avg: 11.5	Avg: 1030	Avg: 514	Avg: 6.08	Avg: 2.54	Avg: 6

## FIELD COMMENTS

Sample Appearance: clear, colorless, strong musty odorWeather Conditions: 55 °F, sunny, calmOther: 15 Bottles / Field Blank Taken Here at 17:40, 13 bottlesSamplers: A Balog, M Solomon

I certify that sampling procedures were in accordance with applicable EPA and state protocols:

Signature: Alex Balog Date: 3/26/2025

G2503D42

## FIELD SAMPLING LOG

Facility Name: AMCELLE RUBBLE FILL Sampling Point: MW-13Permit #: 199-WRF-0206

Purge Date	Start Purge	End Purge	Elapsed Time	H <sub>2</sub> O Vol. CSG	Vol. Purged
3/24/2025	18:34	19:20	0:46	30.14 gal	12 L

Purge Method: Dedicated Low-Flow (Bladder) Pump Sample Date/Time: 3/24/2025 19:20

Sampler Type: C A Submersible Pump D Bailer  
 B RediFlo2 E Scoop/Shovel  
 C Bladder Pump F Other

Sampler Material: A A Teflon D Plastic  
 B Metal E Other  
 C PVC

Tubing Material: C A Teflon D Silicon  
 B Tygon E Other  
 C Polyethylene

Samples Composited:  Yes  No Comments: \_\_\_\_\_Samples Filtered:  Yes  NoNo. of Filters Used: 0 Type of Filter: N/A

## FIELD MEASUREMENTS

Depth to Groundwater (ft)	Well Depth (ft)	Meas. Point Elevation (ft)	Water Level Elevation (ft)
3.43	49.80	651.69	648.26

Temp. (°C)	Cond. (µS/cm)	T.D.S. (ppm)	pH (su)	Turbidity (FNU)	D.O. (mg/L)
11.7	952	477	6.77	62.00	5.3
11.6	957	479	6.72	41.00	5.4
11.6	957	480	6.64	34.63	5.5
11.6	959	480	6.64	33.12	5.3
Avg: 11.6	Avg: 956	Avg: 479	Avg: 6.69	Avg: 42.69	Avg: 5.4

## FIELD COMMENTS

Sample Appearance: Slightly turbid, light brown, odorlessWeather Conditions: 55 °F, sunny, calmOther: 15 BottlesSamplers: A Balog, M Solomon

I certify that sampling procedures were in accordance with applicable EPA and state protocols:

Signature: Alex BalogDate: 3/26/2025

G2503D43

## FIELD SAMPLING LOG

Facility Name: AMCELLE RUBBLE FILL Sampling Point: MW-3Permit #: 199-WRF-0206

Purge Date	Start Purge	End Purge	Elapsed Time	H <sub>2</sub> O Vol. CSG	Vol. Purged
3/24/2025	12:02	12:30	0:28	3.0	7 L

Purge Method: Dedicated Low-Flow (Bladder) Pump Sample Date/Time: 3/24/2025 12:30

Sampler Type: C A Submersible Pump D Bailer  
 B RediFlo2 E Scoop/Shovel  
 C Bladder Pump F Other

Sampler Material: A A Teflon D Plastic  
 B Metal E Other  
 C PVC

Tubing Material: C A Teflon D Silicon  
 B Tygon E Other  
 C Polyethylene

Samples Composited:  Yes  No Comments: \_\_\_\_\_Samples Filtered:  Yes  NoNo. of Filters Used: 0 Type of Filter: N/A

## FIELD MEASUREMENTS

Depth to Groundwater (ft)	Well Depth (ft)	Meas. Point Elevation (ft)	Water Level Elevation (ft)
17.11	21.80	655.13	638.02

Temp. (°C)	Cond. (µS/cm)	T.D.S. (ppm)	pH (su)	Turbidity (FNU)	D.O. (mg/L)
12.3	617	308	5.80	68.00	5.8
12.3	614	307	5.77	57.00	5.9
12.4	615	308	5.73	36.27	5.7
12.4	618	310	5.75	35.33	5.9
Avg: 12.4	Avg: 616	Avg: 308	Avg: 5.76	Avg: 49.15	Avg: 5.8

## FIELD COMMENTS

Sample Appearance: Slightly turbid, light brown, slight musty odorWeather Conditions: 55 °F, sunny, calmOther: 15 BottlesSamplers: A Balog, M Solomon

I certify that sampling procedures were in accordance with applicable EPA and state protocols:

Signature: Alex BalogDate: 3/26/2025

G2503D43

## FIELD SAMPLING LOG

Facility Name: AMCELLE RUBBLE FILL Sampling Point: MW-4Permit #: 199-WRF-0206

Purge Date	Start Purge	End Purge	Elapsed Time	H <sub>2</sub> O Vol. CSG	Vol. Purged
3/24/2025	12:45	13:15	0:30	5.6	9 L

Purge Method: Dedicated Low-Flow (Bladder) Pump Sample Date/Time: 3/24/2025 13:15

Sampler Type: C A Submersible Pump D Bailer  
 B RediFlo2 E Scoop/Shovel  
 C Bladder Pump F Other

Sampler Material: A A Teflon D Plastic  
 B Metal E Other  
 C PVC

Tubing Material: C A Teflon D Silicon  
 B Tygon E Other  
 C Polyethylene

Samples Composited:  Yes  No Comments: \_\_\_\_\_Samples Filtered:  Yes  NoNo. of Filters Used: 0 Type of Filter: N/A

## FIELD MEASUREMENTS

Depth to Groundwater (ft)	Well Depth (ft)	Meas. Point Elevation (ft)	Water Level Elevation (ft)
19.42	28.00	653.76	634.34

Temp. (°C)	Cond. (µS/cm)	T.D.S. (ppm)	pH (su)	Turbidity (FNU)	D.O. (mg/L)
12.7	652	327	5.84	38.07	8.2
12.7	653	327	5.88	38.10	8.3
12.6	662	332	5.90	41.00	8.4
12.7	657	329	5.90	35.24	8.5
Avg: 12.7	Avg: 656	Avg: 329	Avg: 5.88	Avg: 38.1	Avg: 8.4

## FIELD COMMENTS

Sample Appearance: Clear, colorless, odorlessWeather Conditions: 55 °F, sunny, calmOther: 15 BottlesSamplers: A Balog, M Solomon

I certify that sampling procedures were in accordance with applicable EPA and state protocols:

Signature: Alex BalogDate: 3/26/2025

G2503D43

## FIELD SAMPLING LOG

Facility Name: AMCELLE RUBBLE FILL Sampling Point: MW-11Permit #: 199-WRF-0206

Purge Date	Start Purge	End Purge	Elapsed Time	H <sub>2</sub> O Vol. CSG	Vol. Purged
3/24/2025	13:27	14:00	0:33	6.81	7 L

Purge Method: Dedicated Low-Flow (Bladder) Pump Sample Date/Time: 3/24/2025 14:00

Sampler Type: C A Submersible Pump D Bailer  
 B RediFlo2 E Scoop/Shovel  
 C Bladder Pump F Other

Sampler Material: A A Teflon D Plastic  
 B Metal E Other  
 C PVC

Tubing Material: C A Teflon D Silicon  
 B Tygon E Other  
 C Polyethylene

Samples Composited:  Yes  No Comments: \_\_\_\_\_Samples Filtered:  Yes  NoNo. of Filters Used: 0 Type of Filter: N/A

## FIELD MEASUREMENTS

Depth to Groundwater (ft)	Well Depth (ft)	Meas. Point Elevation (ft)	Water Level Elevation (ft)
22.53	33.00	654.75	632.22

Temp. (°C)	Cond. (µS/cm)	T.D.S. (ppm)	pH (su)	Turbidity (FNU)	D.O. (mg/L)
13.2	428	214	5.95	0.00	9.3
13.2	417	208	5.89	0.00	9.1
13.4	415	207	5.79	0.00	9.4
13.3	412	206	5.79	0.00	9.3
Avg: 13.3	Avg: 418	Avg: 209	Avg: 5.86	Avg: 0	Avg: 9.3

## FIELD COMMENTS

Sample Appearance: Clear, colorless, odorlessWeather Conditions: 55 °F, sunny, calmOther: 15 Bottles / FIELD DUPLICATE TAKEN HERE at 14:00, 13 BottlesSamplers: A Balog, M Solomon

I certify that sampling procedures were in accordance with applicable EPA and state protocols:

Signature: Alex Balog Date: 3/26/2025

G2503D43

## FIELD SAMPLING LOG

Facility Name: AMCELLE RUBBLE FILL Sampling Point: MW-5Permit #: 199-WRF-0206

Purge Date	Start Purge	End Purge	Elapsed Time	H <sub>2</sub> O Vol. CSG	Vol. Purged
3/24/2025	14:16	14:55	0:39	2.2	8 L

Purge Method: Dedicated Low-Flow (Bladder) Pump Sample Date/Time: 3/24/2025 14:55

Sampler Type: C A Submersible Pump D Bailer  
 B RediFlo2 E Scoop/Shovel  
 C Bladder Pump F Other

Sampler Material: A A Teflon D Plastic  
 B Metal E Other  
 C PVC

Tubing Material: C A Teflon D Silicon  
 B Tygon E Other  
 C Polyethylene

Samples Composited:  Yes  No Comments: \_\_\_\_\_Samples Filtered:  Yes  NoNo. of Filters Used: 0 Type of Filter: N/A

## FIELD MEASUREMENTS

Depth to Groundwater (ft)	Well Depth (ft)	Meas. Point Elevation (ft)	Water Level Elevation (ft)
19.13	22.50	654.40	635.27

Temp. (°C)	Cond. (µS/cm)	T.D.S. (ppm)	pH (su)	Turbidity (FNU)	D.O. (mg/L)
12.4	352	191	5.77	0.00	7.8
12.7	343	176	5.59	0.00	7.8
12.1	334	172	5.44	0.00	7.9
11.9	350	175	5.35	0.00	7.9
Avg: 12.3	Avg: 345	Avg: 179	Avg: 5.54	Avg: 0	Avg: 7.9

## FIELD COMMENTS

Sample Appearance: Clear, colorless, odorlessWeather Conditions: 55 °F, sunny, calmOther: 15 BottlesSamplers: A Balog, M Solomon

I certify that sampling procedures were in accordance with applicable EPA and state protocols:

Signature: Alex Balog Date: 3/26/2025

**AMCELLE RUBBLE FILL**  
Permit No. 1999-WRF-0206

APPENDIX C

MUNICIPAL LANDFILL CLOSURE CAP  
INSPECTION REPORT

FIRST SEMI-ANNUAL 2025

## Municipal Landfill Closure Cap Inspection Report

**Reporting Period:** First Semi-Annual 2025

**Date of Inspection:** 3/25/25

<b>Section 1 - Facility</b>			
Name of Facility: Amcelle Rubble Fill			
Owner of Facility: Allegany County, MD			
Location Address: Allegany County, MD			
Latitude :	39 35.776	Longitude:	78 49.120
Closure Cap Area completion date: 9/23/2010		Approximate cap area: 25 acres	
Inspectors: Alex Balog		Inspection date: 3/25/25	

<b>Section 2 - Vegetation</b>	
Type(s) of growth (check all that apply): <input checked="" type="checkbox"/> grasses <input type="checkbox"/> legumes <input type="checkbox"/> herbaceous plants <input checked="" type="checkbox"/> other (specify: <i>small shrubs</i> )	Remarks: <i>Uniform grass cover</i>
Condition of growth: <input checked="" type="checkbox"/> Excellent (thick growth) <input type="checkbox"/> Good <input type="checkbox"/> Poor (thin growth, bare soil, etc.)	Remarks: <i>Uniform thick &amp; healthy coverage</i>
Woody plants present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks: <i>None on the cap, only some small growth around perimeter of cap</i>
Invasive plants present? <input type="checkbox"/> Yes <input type="checkbox"/> Phragmites <input type="checkbox"/> Other <input checked="" type="checkbox"/> No	Remarks: <i>None observed on or near landfill cap</i>
Dead spots present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:

## Municipal Landfill Closure Cap Inspection Report

**Reporting Period:** First Semi-Annual 2025

**Date of Inspection:** 3/25/25

<b>Section 3 – Final Cover Condition</b>	
Is there subsidence (depressions in the cap)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:  
Is there any evidence of water ponding on the cap? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks: <i>Cover grading in good condition</i>
Are there colored leachate seeps through the cap? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:  
Are there colored leachate seeps at toe slope? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:  
Are there signs of burrowing animals? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks: <i>None observed</i>
Is there any waste pushing through the cap? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:  
Does the cap cover all of the solid waste? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Remarks:  
Is there evidence of erosion? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:  
Is there vehicle tracking damage to the cap or vegetation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:  

## Municipal Landfill Closure Cap Inspection Report

**Reporting Period:** First Semi-Annual 2025

**Date of Inspection:** 3/25/25

<b>Section 4 - Drainage and Surface Water</b>	
Conditions/Stability of streams/swales/ditches etc. <input checked="" type="checkbox"/> Excellent (unobstructed) <input type="checkbox"/> Good /Fair <input type="checkbox"/> Poor (overgrown or sediment filled)	Remarks:
Is there evidence of colored leachate in surface waters? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:
Is there surface water monitoring? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:
Are results submitted to MDE? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks: <i>N/A</i>

<b>Section 5 - Groundwater</b>	
Is there groundwater monitoring? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Remarks: <i>Semi-Annually</i>
Are results submitted to MDE? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Remarks: <i>Semi-Annually</i>
Condition of groundwater monitoring wells (if present): <input type="checkbox"/> Excellent <input checked="" type="checkbox"/> Good <input type="checkbox"/> Poor (missing covers, missing locks, deteriorated seals, frost heaved, etc.)	Remarks:

## Municipal Landfill Closure Cap Inspection Report

**Reporting Period:** First Semi-Annual 2025

**Date of Inspection:** 3/25/25

<b>Section 6 - Landfill Gas (LFG) Management System</b>	
Is there an LFG collection system? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks <i>Passive ventilation on the cap.</i>
Are the LFG wells damaged? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:
Is LFG monitoring done? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Remarks: <i>Quarterly</i>
Are results submitted to MDE? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Remarks: <i>Semi-Annually</i>
Does the LFG produce any odors? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:

<b>Section 7 - Other Facility Conditions</b>	
Condition of Access Roads? <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	Remarks:
Is there litter present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Remarks:

# Municipal Landfill Closure Cap Inspection Report

**Reporting Period:** First Semi-Annual 2025

**Date of Inspection:** 3/25/25

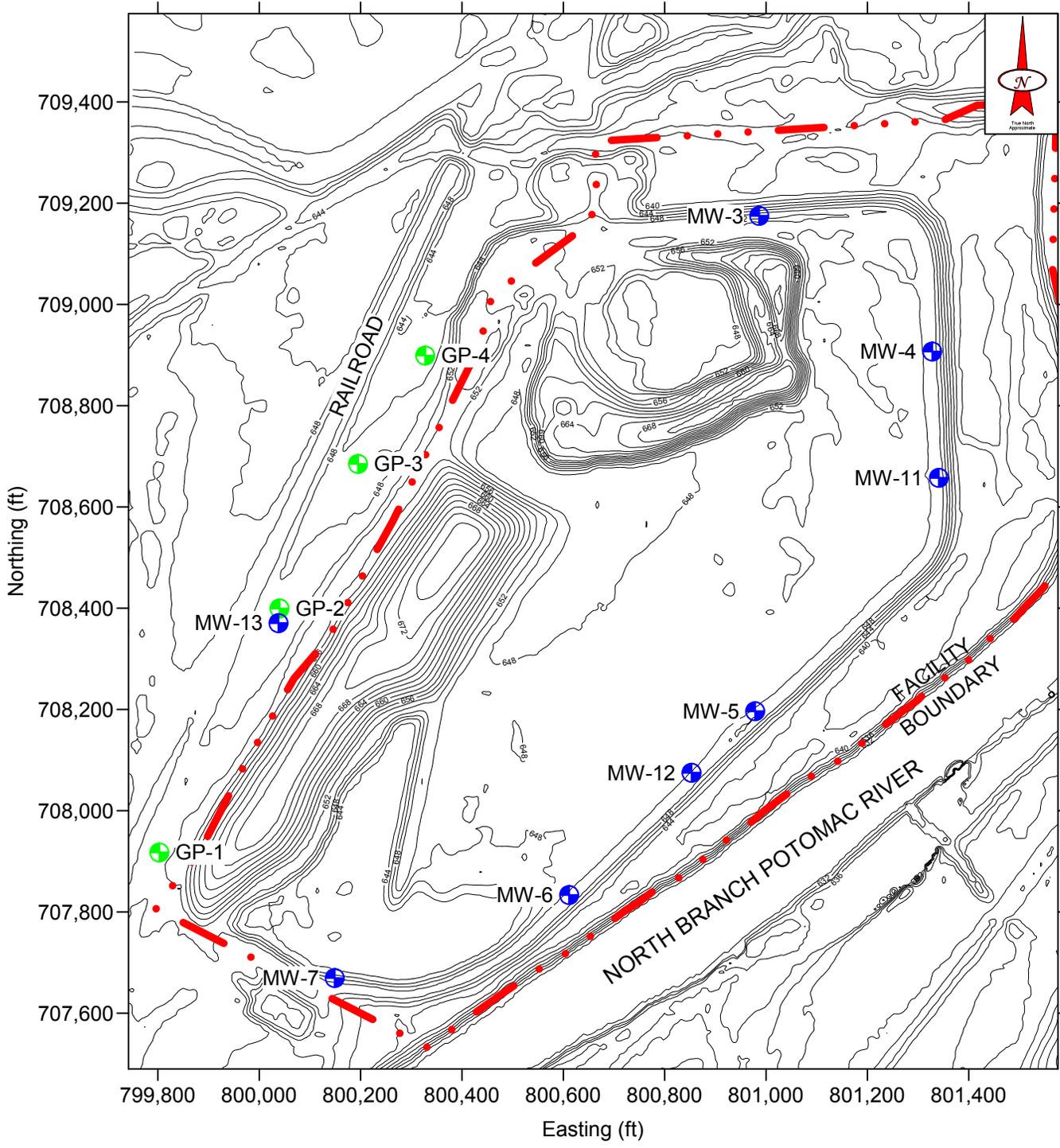
**Section 8 – Corrective Actions** (Describe any corrective actions planned or taken as a result of conditions noted during the inspection)

*N/A*

**AMCELLE RUBBLE FILL**  
Permit No. 1999-WRF-0206

APPENDIX D

GAS SAMPLING LOGS  
FIRST & SECOND QUARTERLY  
2025



**Notes**

Topographic Contour Interval = 2 ft  
 NAD 1983 US State Plane (Maryland) coordinate system in US Survey feet.

**Legend**

- Groundwater Monitoring Well
- Gas Sampling Probe

The Hutchinson Group, Ltd. 4280 Old William Penn Hwy Murrysville, Pennsylvania 15668 (724) 325-3996 Fax: (724) 733-7901 www.thggeophysics.com

DRN	MNH	3/22/24
DES	MNH	3/22/24
CHK	AXB	3/22/24
REV		
PROJ. MGR.	AXB	3/22/24

**PROJECT:**  
 Amcelle Rubble Landfill  
 Allegany County, Maryland

**SCALE:**  
 1 in = 300 ft

**SOURCE:**  
 FEMA Region 3 2012 LiDAR

**DRAWING NO.:**  
 Gas Sampling Location Map  
 1st & 2nd Quarter 2024



**PROJECT NO.:**  
 187-7029

**SHEET TITLE:**  
 DWG7029FD

# AMCELLE RUBBLE FILL

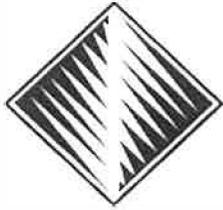
## GAS SAMPLING LOG

Sampling Technician: Alex Balog Date: 3/25/2025  
Gas Meter Make & Serial # Landtec Landfill Meter Temperature (Deg. F.): 39  
Date Last Calibrated: 3/24/2025 Barometric Pressure (In. H<sub>2</sub>O): 29.96  
Weather Condition wind 10 mph, sunny

SAMPLING POINT	TIME	CO (%)	CH <sub>4</sub> (%)	CO <sub>2</sub> (%)	O <sub>2</sub> (%)	H <sub>2</sub> S (%)	LEL (%)	NOTES
GMP-1	18:10	0	0.0	8.1	12.1	0	0.0	
GMP-2	18:12	0	0.0	12.3	13.3	0	0.0	
GMP-3	18:15	0	0.0	14.2	7.4	0	0.0	
GMP-4	18:18	0	0.0	10.2	13.2	0	0.0	

LEL % = Methane reading in % / 0.05

The flammable range for methane is 5% to 15%



# FIELD ENVIRONMENTAL INSTRUMENTS, INC.

www.fieldenvironmental.com

301 Brushton Ave  
Suite A  
Pittsburgh, PA 15221  
Toll Free (800) 393-4009  
Local (412) 436-2600  
Fax (412) 436-2616

## Landtec Landfill Meter Calibration Certificate

<b>Fresh Air Oxygen</b>	<b>Reading %</b>	<b>Acceptable Range</b>
	<input type="text" value="20.8"/>	<input type="text" value="(20.65% - 21.15%)"/>

<b>Cal Standard</b>	<b>Lot #</b>	<b>Expiration</b>
	<input type="text" value="24-2108"/>	<input type="text" value="11/26/2028"/>

<b>ID 277 or 9342 Methane</b>	<b>Reading %</b>	<b>Acceptable Range</b>
<input type="text" value="15%"/>	<input type="text" value="15.0"/>	<input type="text" value="(14.7% - 15.3%)"/>

<b>Carbon Dioxide</b>	<b>Reading %</b>	<b>Acceptable Range</b>
<input type="text" value="15%"/>	<input type="text" value="15.0"/>	<input type="text" value="(14.5% - 15.5%)"/>

<b>Cal Standard</b>	<b>Lot #</b>	<b>Expiration</b>
	<input type="text" value="23-1331"/>	<input type="text" value="1/5/2026"/>

<b>ID 11461 Carbon Monoxide</b>	<b>Reading %</b>	<b>Acceptable Range</b>
<input type="text" value="50 ppm"/>	<input type="text" value="50.0"/>	<input type="text" value="(51% - 49%)"/>

<b>Hydrogen Sulfide</b>	<b>Reading %</b>	<b>Acceptable Range</b>
<input type="text" value="25ppm"/>	<input type="text" value="25.0"/>	<input type="text" value="(24 - 26)"/>

<b>Model</b>	<input type="text" value="GEM-5000"/>
<b>S/N</b>	<input type="text" value="G510167"/>
<b>Barcode</b>	<input type="text" value="U121778X"/>
<b>Order #</b>	<input type="text" value="591229"/>

**Calibrated By**

**Revision 2, 5/1/24**      **Date of Calibration**

All calibrations performed by Field Environmental Instruments conform to manufacturer's specifications.  
All calibration gas used is traceable to NIST. Additional documentation is available upon request.

# AMCELLE RUBBLE FILL

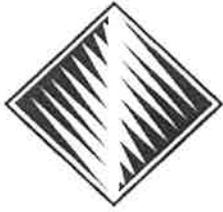
## GAS SAMPLING LOG

Sampling Technician: Alex Balog Date: 6/17/2025  
Gas Meter Make & Serial # Landtec Landfill Meter Temperature (Deg. F.): 69  
Date Last Calibrated: 6/17/2025 Barometric Pressure (In. H<sub>2</sub>O): 29.97  
Weather Condition wind 10 mph, rainy conditions

SAMPLING POINT	TIME	CO (%)	CH <sub>4</sub> (%)	CO <sub>2</sub> (%)	O <sub>2</sub> (%)	H <sub>2</sub> S (%)	LEL (%)	NOTES
GMP-1	10:30	0	0.0	7.5	12.3	0	0.0	
GMP-2	10:32	0	0.0	12.1	13.2	0	0.0	
GMP-3	10:35	0	0.0	14	7.6	0	0.0	
GMP-4	10:38	0	0.0	10.1	12.9	0	0.0	

LEL % = Methane reading in % / 0.05

The flammable range for methane is 5% to 15%



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Toll Free (800) 393-4009  
Local (412) 436-2600  
Fax (412) 436-2616

## Landtec Landfill Meter Calibration Certificate

Fresh Air Oxygen	<b>Reading %</b>	<b>Acceptable Range</b>
	20.7	(20.65% - 21.15%)

	<b>Lot #</b>	<b>Expiration</b>
Cal Standard	24-2108	11/26/2028

ID 277 or 9342 Methane	<b>Reading %</b>	<b>Acceptable Range</b>
15% ▼	15.0	(14.7% - 15.3%) ▼

Carbon Dioxide	<b>Reading %</b>	<b>Acceptable Range</b>
15% ▼	15.0	(14.5% - 15.5%) ▼

	<b>Lot #</b>	<b>Expiration</b>
Cal Standard ID 11461	23-1331	1/5/2026

Carbon Monoxide	<b>Reading %</b>	<b>Acceptable Range</b>
50 ppm ▼	50.0	(51% - 49%) ▼

Hydrogen Sulfide	<b>Reading %</b>	<b>Acceptable Range</b>
25ppm ▼	25.0	(24 - 26) ▼

Model	GEM-5000 ▼
S/N	G510167
Barcode	U121778X
Order #	591208

<b>Calibrated By</b>	Max Mattia ▼
----------------------	--------------

Revision 2, 5/1/24	<b>Date of Calibration</b>	06/17/25
--------------------	----------------------------	----------

All calibrations performed by Field Environmental Instruments conform to manufacturer's specifications. All calibration gas used is traceable to NIST. Additional documentation is available upon request.

**AMCELLE RUBBLE FILL**  
Permit No. 1999-WRF-0206

APPENDIX E

MDE Monitoring Parameters Table I & II

**TABLE I  
MONITORING PARAMETERS**

<b>VOLATILE ORGANIC COMPOUNDS</b>	<b>PQL (µg/L) or (ppb)</b>	<b>MCL (µg/L) or (ppb)</b>
Acetone	5	
Acrylonitrile	5	
Benzene	1	5
Bromochloromethane	1	
Bromomethane; Methyl Bromide	1	
2-Butanone; Methyl ethyl ketone (MEK)	5	
Carbon disulfide	1	
Carbon tetrachloride	1	5
Chlorobenzene	1	100
Chloroethane; Ethyl Chloride	1	
Chloromethane; Methyl Chloride	1	
1,2-Dibromo-3-chloropropane; (DBCP)	0.04	0.2
1,2-Dibromoethane; Ethylene dibromide (EDB)	0.04	0.05
Dibromomethane; Methylene bromide	1	
1,2-Dichlorobenzene; o-Dichlorobenzene	1	600
1,4-Dichlorobenzene; p-Dichlorobenzene	1	75
trans-1,4-dichloro-2-butene	5	
1,1-Dichloroethane; Ethylidene chloride	1	
1,2-Dichloroethane; Ethylene dichloride	1	5
1,1-Dichloroethene; 1,1-Dichloroethylene	1	7
cis-1,2-Dichloroethene; cis-1,2-Dichloroethylene	1	70
trans-1,2-Dichloroethene; trans-1,2-Dichloroethylene	1	100
Methylene chloride; Dichloromethane	1	5
Methyl tert-butyl ether (MTBE)	2	
1,2-Dichloropropane; Propylene dichloride	1	5
trans-1,3-Dichloropropene	1	
cis-1,3-Dichloropropene	1	
Ethylbenzene	1	700
2-Hexanone; Methyl butyl ketone	5	
Iodomethane; Methyl iodide	1	
4-Methyl-2-pentanone; Methyl isobutyl ketone	5	
Styrene	1	100
1,1,1,2-Tetrachloroethane	1	
1,1,2,2-Tetrachloroethane	1	
Tetrachloroethene; Tetrachloroethylene (PCE)	1	5
Toluene	1	1000
1,1,1-Trichloroethane; Methylchloroform	1	200
1,1,2-Trichloroethane	1	5
Trichloroethene; Trichloroethylene (TCE)	1	5
Trichlorofluoromethane; CFC-11	1	
1,2,3-Trichloropropane	1	
Vinyl acetate	1	
Vinyl chloride	1	2
o-Xylene	1	10,000
m+p-Xylenes	1	(total)
Bromodichloromethane; Dichlorobromomethane	1	
Dibromochloromethane; Chlorodibromomethane	1	80
Bromoform; Tribromomethane	1	(total)
Chloroform; Trichloromethane	1	

**TABLE II  
MONITORING PARAMETERS**

<b>ELEMENTS AND INDICATOR PARAMETERS</b>	<b>PQL (ppm) or (mg/l)</b>	<b>MCL (ppm) or (mg/l)</b>	<b>MCL (ppb) or (µg/L)</b>
Total Antimony	0.002	0.006	6
Total Arsenic	0.002	0.01	10
Total Barium	0.01	2	2000
Total Beryllium	0.002	0.004	4
Total Cadmium	0.004	0.005	5
Total Chromium	0.01	0.1	100
Total Calcium*	0.08		
Total Cobalt*	0.01		
Total Copper*	0.01	1.3 (AL)	1000
Total Iron**	0.005	0.3	300
Total Lead	0.002	0.015 (AL)	15
Total Nickel*	0.011	0.1	100
Total Magnesium*	0.004		
Total Manganese**	0.01	0.05	50
Total Mercury	0.0002	0.002	2
Total Potassium*	0.39		
Total Selenium	0.035	0.05	50
Total Silver**	0.01	0.1	100
Total Sodium*	0.2		
Total Thallium	0.002	0.002	2
Total Vanadium*	0.01		
Total Zinc**	0.01	5	5000
Alkalinity*	1		
Ammonia*	1		
Chemical oxygen demand*	10		
Chloride**	0.39	250	250000
Hardness*	0.5		
Nitrate	0.06	10	10000
pH**	0.1 (SU)	6.5-8.5	6.5-8.5
Specific conductance*	1		
Sulfate**	0.38	250	250000
Total dissolved solids**	10	500	500000
Turbidity	0.11 (NTU)	5 (NTU)	5 (NTU)

Primary MCL
* = No MCL
** = Secondary MCL
+= No MCL but recommended level by EPA

AL = Action Level  
PQL = Practical Quantitation Limit  
MCL= Maximum Contaminant Level  
NTU= Nephelometric Turbidity Unit