

West Des Moines, IA

PROJECT: Woodbury Co, FY26 Env Comp, IA 27225337.26 DATE: 1/29/2026

SUBJECT: 2025-01-29\_Woodbury County Sanitary Landfill - 97-SDP-02-75C - 2025 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report TRANSMITTAL ID: 00004

PURPOSE: For your approval VIA: Info Exchange

FROM

| NAME                               | COMPANY       | EMAIL                  | PHONE           |
|------------------------------------|---------------|------------------------|-----------------|
| Nathan Ohrt<br>West Des Moines, IA | SCS Engineers | NOhrt@scsengineers.com | +1-515-415-9220 |

TO

| NAME                                                                           | COMPANY        | EMAIL                   | PHONE        |
|--------------------------------------------------------------------------------|----------------|-------------------------|--------------|
| Mike Smith<br>502 East 9th Street<br>Des Moines IA 50319-0034<br>United States | Iowa, State of | mike.smith@dnr.iowa.gov | 515-725-8200 |

REMARKS: Good afternoon Mike-

SCS Engineers, on behalf of the Woodbury County Area Solid Waste Agency, is submitting for download the 2025 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report for the Woodbury County Sanitary Landfill. If you have any questions or comments regarding these reports, please contact me at the number below. Thank you.

Nathan Ohrt  
Senior Project Professional  
SCS Engineers  
West Des Moines, Iowa  
319-331-9613 (M)  
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## Transmittal

DATE: 1/29/2026  
TRANSMITTAL ID: 00004

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| QTY | DATED     | TITLE                                                                                                                                                                                      | NOTES |
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| 1   | 1/29/2026 | 2025-01-29_Woodbury County Sanitary Landfill - 97-SDP-02-75C - 2025 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report.pdf |       |

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### COPIES:

|               |                                           |
|---------------|-------------------------------------------|
| Nathan Ohrt   | (SCS Engineers)                           |
| Aaron Lincoln | (Woodbury County Area Solid Waste Agency) |
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January 29, 2026  
File No. 27225337.26

Mr. Mike Smith, P.E.  
Iowa Department of Natural Resources  
Land Quality Bureau  
6200 Park Avenue  
Des Moines, Iowa 50321

Subject: 2025 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report  
Woodbury County Sanitary Landfill  
Permit No. 97-SDP-02-75C

Dear Mike:

SCS Engineers, on behalf of the Woodbury County Area Solid Waste Agency, has completed the required groundwater monitoring and statistical evaluation for the Woodbury County Sanitary Landfill (Landfill) for the year 2025. Services were performed in general accordance with applicable sections of Iowa Administrative Code (IAC) 567-113.10 and the current requirements for implementation of the Hydrologic Monitoring System Plan for the Landfill. Please find enclosed a copy of the 2025 Annual Water Quality Report.

Additionally, an evaluation of the leachate control system and gas monitoring results for the Landfill is included in accordance with the 2002 IAC 567-113.26(2)"l" and 113.26(15)"b," respectively. The 2025 Leachate Control System Performance Evaluation Report and the 2025 Landfill Gas Annual Report for the Landfill are included as appendices to the Annual Water Quality Report.

Please contact Nathan Ohrt at (319) 331-9613 if you have any questions or need additional information regarding the attached reports.

Sincerely,



Nathan Ohrt  
Senior Project Professional  
SCS Engineers



Timothy C. Buelow, P.E.  
VP – Senior Project Advisor  
SCS Engineers

NPO/SAM

Copies: Ms. Jeanette Beekman, Secretary for Woodbury County Area Solid Waste Agency





# 2025 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report

Woodbury County Sanitary Landfill  
Solid Waste Permit No. 97-SDP-02-75C

Prepared for:

Woodbury County Solid Waste Agency

**SCS ENGINEERS**

272235337.26 | January 2026

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## CERTIFICATION

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_

Typed: Nathan Ohrt

Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_

Typed: Timothy C. Buelow, P.E.

Certification page (PE or groundwater scientist signature) **113.10(1)"d"**

For the purposes of this rule, a “qualified groundwater scientist” means a scientist or an engineer who has received a baccalaureate or postgraduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields demonstrated by state registration, professional certifications, or completion of accredited university programs that enable that individual to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.

## EXECUTIVE SUMMARY

### ES.1 PERIOD OF REPORT COVERAGE

The period of report coverage is from January through December 2025 and includes the sampling events shown in **Table 2**.

### ES.2 REPORT PRIORITY

The following summarizes report priorities associated with groundwater compliance at the Woodbury County Sanitary Landfill (Landfill):

- Department review urgency: None.
- Department review impact on rules schedule: None.
- Actions or activities on hold pending Department review or comment: None.
- Actions and/or permit amendments needed: None.

### ES.3 SITE STATUS AND APPLICABLE RULES

- Landfill Status: Closed.
- Types of waste accepted: Previously MSW and C&D.
- Applicable IAC rules: 2009 567-113.10 (6, 7, 8, and 9).

### ES.4 COMMENTS

The following summarizes points of special emphasis:

Statistically significant levels (SSLs) above the groundwater protection standards (GWPSs) for monitoring wells MW-3, MW-8, and PZ-2B have been previously reported. A portion of the upper confidence band was below the GWPS for tetrachloroethene in monitoring well PZ-2B in both of the 2025 statistical evaluations, completing one year of the statistical requirements of IAC 567-113.10(9)"e"(2) for remedy completion.

During this reporting period, a new SSL for trichloroethene was measured in monitoring well MW-2. As monitoring well MW-2 is located near monitoring well PZ-2B and shares the same SSL parameter (trichloroethene), the previously approved remedy (source control via passive subsurface venting and monitored natural attenuation) can likely be applied to monitoring well MW-2. Please see the discussion in Section 5.1.

Bracketing wells were sampled for SSL parameters during this reporting period. The cobalt concentration in the bracketing well MW-14 was below the background level during the 1<sup>st</sup> 2025 sampling event. Tetrachloroethene and trichloroethene concentrations were measured as non-detect in bracketing wells MW-11, MW-12, and MW-14 during both 2025 semi-annual sampling events. Trichloroethene concentrations were measured above the GWPS and tetrachloroethene was measured at a J flag concentration in bracketing well MW-9 during the 2025 sampling events. A sample was not collected from vertical bracketing well PZ-2A (adjacent to PZ-2B) during the June 2025 sampling event as it was dry, but a sample was collected during the August 2025 sampling event. Tetrachloroethene and trichloroethene were not detected in bracketing well PZ-2A.

## ACRONYMS/ABBREVIATIONS

ACM = Assessment of Corrective Measures  
CAMP = Corrective Action Monitoring Program  
CCV = Continuing Calibration Verification  
CL = Control Limit - Mean plus Two Standard Deviations  
COC = Chain of Custody  
DNR = Iowa Department of Natural Resources  
DO = Dissolved Oxygen  
DQR = Double Quantification Rule  
GWPS = Groundwater Protection Standard  
LEL = Lower Explosive Limit  
LCL = Lower Confidence Limit  
LCS = Laboratory Control Sample  
LN = Lognormal  
MCL = EPA Maximum Contaminant Level  
MS/MSD = Matrix Spike/Matrix Spike Duplicate  
MSW = Municipal Solid Waste  
N = Normal  
NC = No Change  
NM = Not Measured  
NP = Non-Parametric  
ORP = Oxidation-Reduction Potential  
P = Parametric  
PL = Prediction Limit  
RL = Reporting Limit  
RPD = Relative Percent Difference  
SWS = DNR Statewide Standard for a protected groundwater source  
SSI = Statistically Significant Increase above background  
SSL = Statistically Significant Level above groundwater protection standard  
SSS = Site-Specific Standard (Site-Specific GWPS)  
TSS = Total Suspended Solids  
UCL = Upper Confidence Limit  
VOC = Volatile Organic Compound

## 1.0 SITE BACKGROUND

### 1.1 SITE LOCATION

The Landfill property is depicted in **Figure 1**, Approved Monitoring Network. The Landfill is located approximately 7.25 miles south of Moville, Iowa in the NW ½ of the NW ¼ of Section 6, T87N, R44W, in Woodbury County, Iowa.

### 1.2 FACILITY

The Landfill was built in 1975 as a cut-and-cover operation. The Landfill ceased accepting waste prior to October 1, 2007. The Landfill closure permit was issued on May 7, 2008 (Doc #20953).

### 1.3 GEOLOGY AND HYDROGEOLOGY OF THE SITE

The Hydrogeologic Assessment Report dated May 19, 1992, prepared by Terracon Environmental, Inc., provided the following geological description:

*The landfill is situated in the loess hills region of western Iowa which is characterized by a mantle of wind derived silts and clays (loess) overlying glacial drift deposits. The landscape is well-drained. Accumulative thicknesses of loess and glacial drift in the landfill area are reported to be on the order of less than 50 to greater than 300 feet.*

*Based on IGS test borings near the landfill, the Nishnabotna Member of the Cretaceous-aged Dakota Formation is the uppermost bedrock unit underlying glacial drift in the landfill vicinity. The Nishnabotna is characterized as a massive sandstone containing minor thicknesses of shale interbeds. The Nishnabotna is a regional aquifer which supplies a substantial amount of water to northwest Iowa. The Nishnabotna is on the order of about 200 feet thick and unconformably overlies Mississippian limestone.*

*Loess was typically encountered as the uppermost lithologic unit. Loess was generally described in the field as brown and gray lean clay. Trace amounts of sand grains were observed in some of the loess samples. It is suspected that some loess horizons have been reworked or redeposited (colluvium).*

*Glacial drift, composed of glacial till and glacio-fluvial deposits, was observed to underlie the loess deposits. Glacial till was generally described as brown to dark gray, lean clay containing various amounts of sand and gravel. Thin sand and gravel seams on the order of one to five centimeters thick were also observed within glacial till. Thicker sand units or lenses on the order of two to five feet thick were also observed within glacial till and are indicated on the boring logs and geologic profiles as individual lithologic units separate from glacial till.*

*Bedrock underlying unconsolidated Quaternary deposits was observed to be sandstone. The sandstone was observed in [the southeast area of the landfill] where the ground surface elevation was lowest at the site. The sandstone consisted of semi-consolidated, friable sandstone directly below glacial till.*

The Hydrogeologic Assessment Report dated May 19, 1992, prepared by Terracon Environmental Inc. provided the following hydrogeological description:

[It is assumed] that the uppermost aquifer is greater than 50 feet below the water table. The uppermost aquifer is considered to be sandstone of the Dakota Formation which underlies unconsolidated glacial till and loess deposits. The two-inch wells were installed to monitor the water table.

Groundwater was interpreted as flowing from regions of higher potentiometric head to regions of lower potentiometric head. The groundwater gradient flow along the depicted profile lines appears to have directional components of primarily downward and southward.

## 2.0 FIGURES DISCUSSION

The following figures are attached.

### 2.1 FIGURE 1 – APPROVED MONITORING NETWORK

The Landfill property and hydrologic monitoring system plan (HMSP) monitoring network are depicted on **Figure 1**. **Figure 1** indicates the respective monitoring programs of the HMSP monitoring points as of the beginning of this reporting period.

### 2.2 FIGURE 2 – GROUNDWATER CONTOURS

A groundwater contour map based on water levels measured during the November 2025 groundwater sampling event is included as **Figure 2**. Groundwater generally flows toward the creek located south of the landfilled area. The flow direction is generally consistent with previous groundwater contour maps.

## 3.0 STANDARDS HISTORY GRAPHS

Standards history graphs are included in **Appendix G**. Standards history graphs for the following parameters are included:

- Antimony
- Arsenic
- Barium
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Nickel
- Selenium
- Vanadium
- Zinc

With the exception of cobalt, the prediction limits were below the GWPSs. For cobalt, the prediction limit of 0.002223 mg/L exceeded the statewide standard of 0.0021 mg/L, so 0.002223 mg/L was used as the GWPS. More information about standards and GWPSs is included in **Table 5**.

## 4.0 QA/QC SUMMARY

The quality assurance/quality control (QA/QC) program for the Landfill followed similar protocols as included in the HMSP. Data validation procedures were performed on analytical results for laboratory quality control samples and a quality assurance assessment of the data was conducted as the data were generated. The QA review procedure provided documentation of the accuracy and precision of the analytical data and confirmed that the analyses were sufficiently sensitive to detect constituents at levels below regulatory standards when technically feasible with the laboratory method utilized. SCS then conducted QA/QC data validation of the produced data, which included review of sample handling, analytical sensitivity, and blanks, accuracy, and precision. A summary of the laboratory QA/QC and data validation can be found in **Appendices B-1**, Laboratory Data, and **B-2**, Data Validation, respectively. The QA/QC review indicated that the data was acceptable.

## 5.0 DATA EVALUATION

Assessment and corrective action monitoring statistical evaluations in accordance with the requirements of IAC 567-113.10(6) were conducted for the groundwater analytical data collected during the 2025 reporting period. The statistical evaluations for samples collected during this reporting period are located in **Appendix D** of this report.

Groundwater monitoring for the Landfill consists of six monitoring points, with background well MW-6 located northwest of the Landfill. Compliance monitoring points are located along the south and southeast waste boundaries.

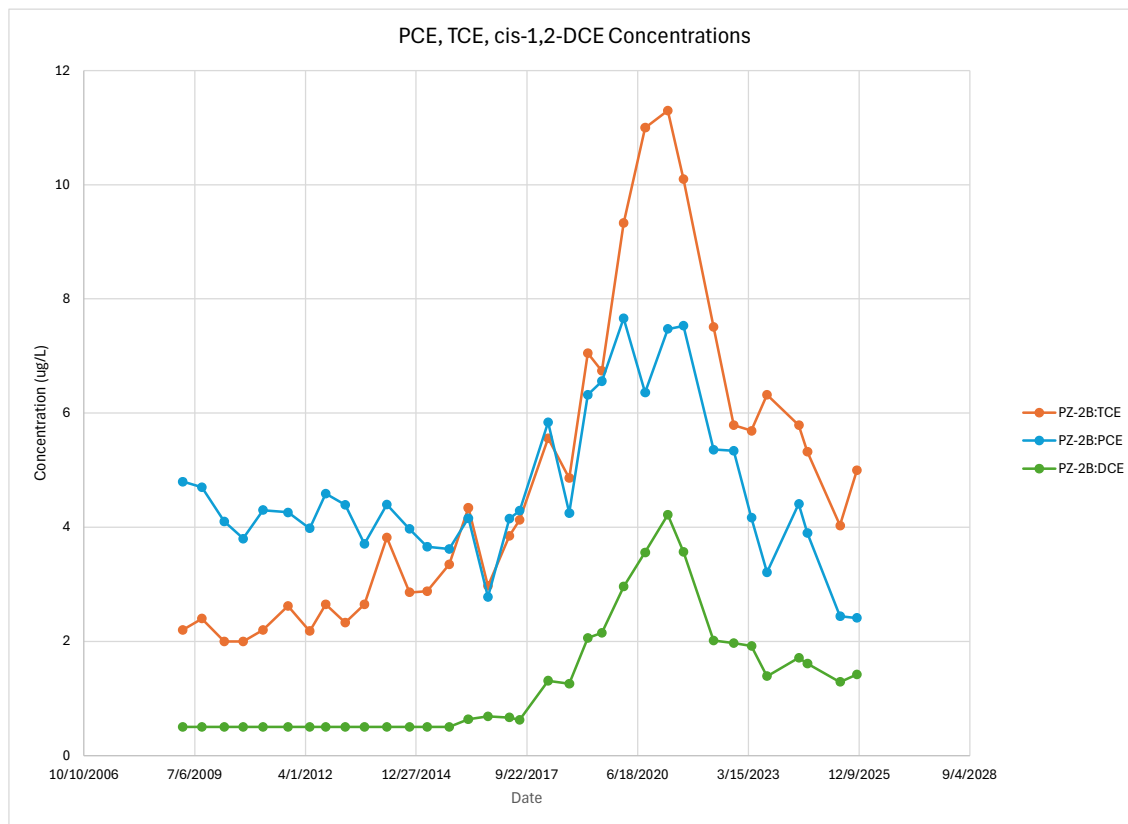
Monitoring wells MW-2, MW-3, MW-8, and PZ-2B, located south and southeast of the Landfill, had detections of multiple VOCs, plus herbicide 2,4-D in monitoring wells MW-3 and MW-8. Tetrachloroethene in monitoring well MW-2, trichloroethene in monitoring wells MW-2, MW-3, MW-8, and PZ-2B, and vinyl chloride in monitoring well MW-8 had concentrations exceeding the GWPS during this reporting period. The trichloroethene concentrations in monitoring wells MW-2, MW-3, MW-8, and PZ-2B have consistently exceeded the GWPS for several years. It should be noted that a majority of the VOC detections, with the exception of the GWPS exceedance parameters noted, were less than 50% of their respective GWPS values. Monitoring well MW-5, located southwest of the Landfill, had no VOC detections.

Monitoring wells MW-2, MW-6, and MW-8 each had multiple site-wide maximum concentrations for metals measured during this reporting period. However, there were no metal concentrations that exceeded a GWPS.

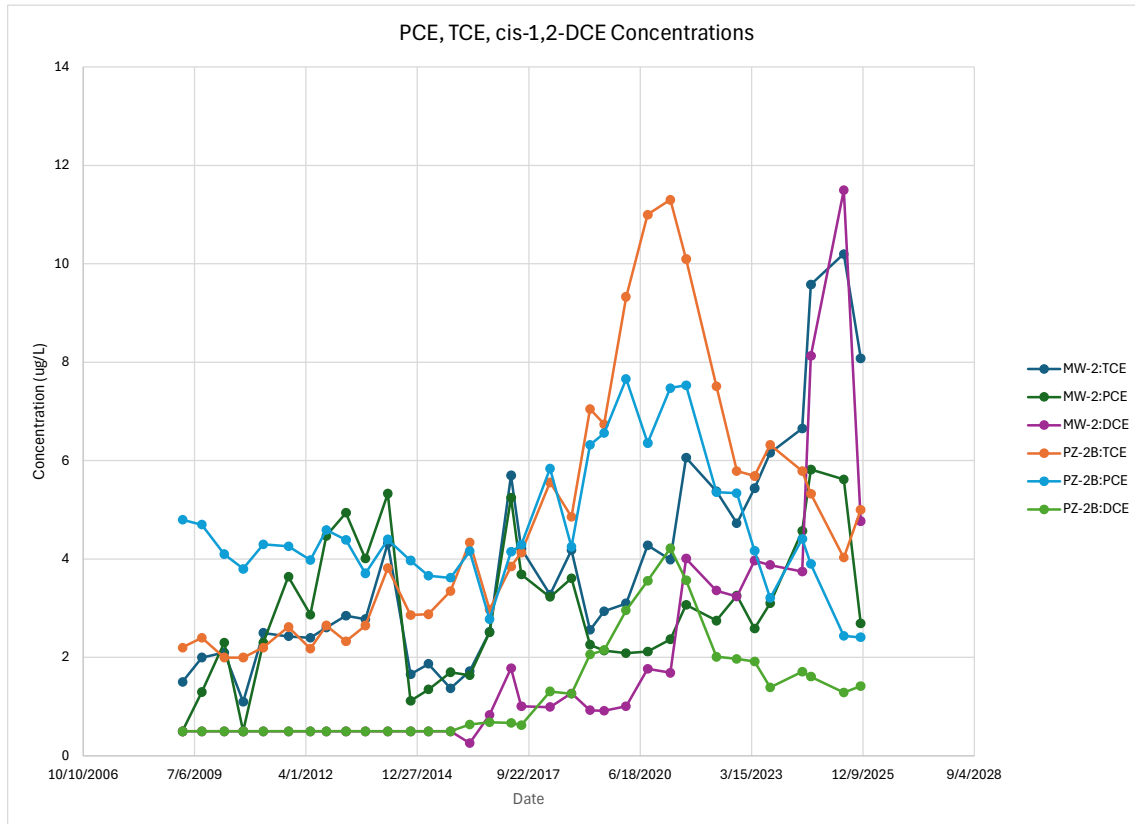
SSLs above a GWPS for monitoring wells MW-3, MW-8, and PZ-2B have been previously reported. A portion of the upper confidence band was below the GWPS for tetrachloroethene in monitoring well PZ-2B in both of the 2025 statistical evaluations, completing one year of the statistical requirements of IAC 567-113.10(9)"e"(2) for remedy completion.

During this reporting period, a new SSL for trichloroethene was measured in monitoring well MW-2. The following graph shows an increase in trichloroethene (TCE) concentrations at monitoring well PZ-2B, peaking in 2021, followed by a decline since then, with the most recent concentration (5 mg/L) less than half the highest in 2021 (11.3 mg/L). Decreasing concentrations are also observed for tetrachloroethene (PCE) and cis-1,2-dichloroethene (DCE). These declining concentrations indicate that the source control is effectively reducing the impact near monitoring well PZ-2B.





The graph below shows the TCE, PCE, and cis-1,2-DCE concentrations for monitoring MW-2, as well as those same constituents in monitoring well PZ-2B. The increasing concentrations of TCE in monitoring well PZ-2B, followed by a decline as noted above, are also observed in monitoring well MW-2, with a peak in June 2025, followed by a decrease in the most recent sampling event. Also, like monitoring well PZ-2B, the PCE and cis-1,2-DCE concentrations are declining in monitoring well MW-2.



The similarity in patterns of the concentrations measured in monitoring wells PZ-2B and MW-2 indicates that these monitoring wells are likely monitoring the same area of impact rather than impact from two separate sources. In addition, the ten-foot screened interval of monitoring well MW-2 (95-105 elevation in the local datum) is slightly above the two-foot screened interval of PZ-2B (90.4-92.4 elevation). Monitoring well MW-2 is located downgradient of PZ-2B, likely introducing a temporal component to the data interpretation. Given the close spacing between the two wells and the up/downgradient positioning, they effectively function as a single monitoring point, with a nearly 15-foot screened interval to detect impact.

There have been no detections of TCE or PCE in monitoring well MW-14 dating back to 2019, indicating the area of impact is localized near monitoring wells PZ-2B and MW-2.

As monitoring well MW-2 is located near monitoring well PZ-2B and appears to be monitoring the same impact, the previously approved remedy can likely be applied to monitoring well MW-2.

#### **Trending in Assessment/Corrective Action Monitoring Wells**

Statistically significant trends were identified for monitoring well/constituent pairs by Mann-Kendall trend analysis during this reporting period. The trend analyses are included in the 1<sup>st</sup> and 2<sup>nd</sup> 2025 Semi-Annual statistical output included as attachments in **Appendix D**. The statistically significant trends were as follows:

| Monitoring Point                       | Constituent            | Trend      |
|----------------------------------------|------------------------|------------|
| <b>1<sup>st</sup> 2025 Semi-Annual</b> |                        |            |
| MW-8                                   | cis-1,2-Dichloroethene | Increasing |
| PZ-2B                                  | cis-1,2-Dichloroethene | Decreasing |
|                                        | Tetrachloroethene      | Decreasing |
| <b>2<sup>nd</sup> 2025 Semi-Annual</b> |                        |            |
| MW-8                                   | cis-1,2-Dichloroethene | Increasing |
| PZ-2B                                  | Tetrachloroethene      | Decreasing |
| MW-2                                   | Trichloroethene        | Increasing |

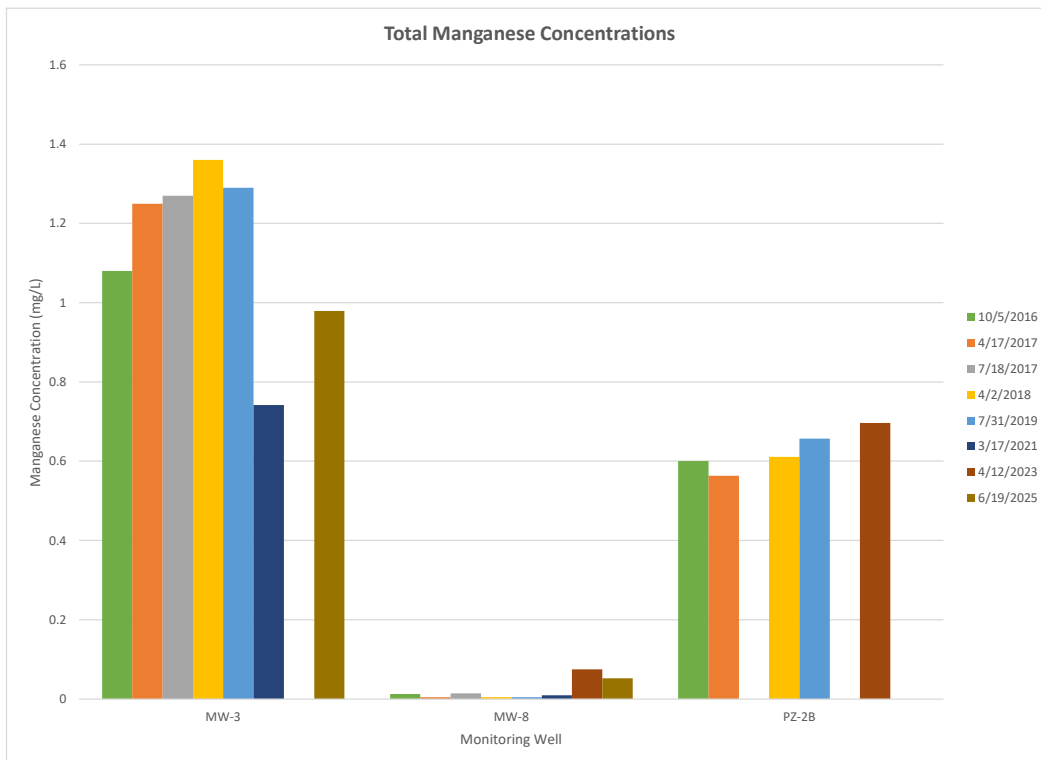
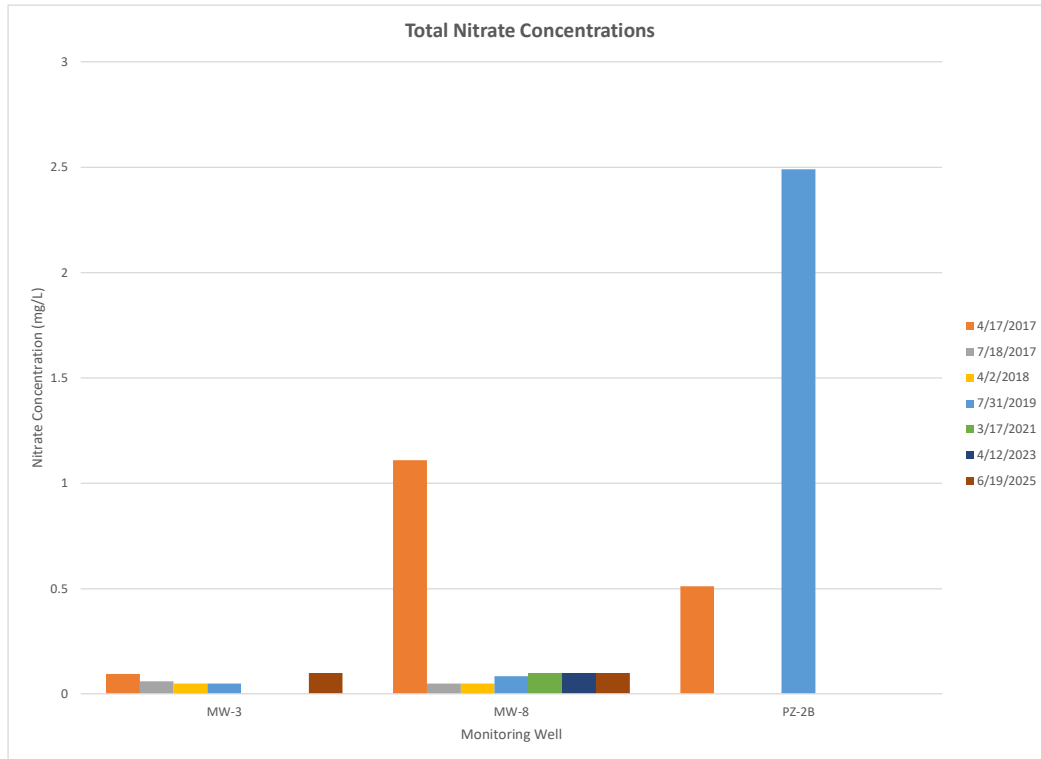
It should be noted that cis-1,2-dichloroethene is a daughter product of trichloroethene, and trichloroethene is a daughter product of tetrachloroethene.

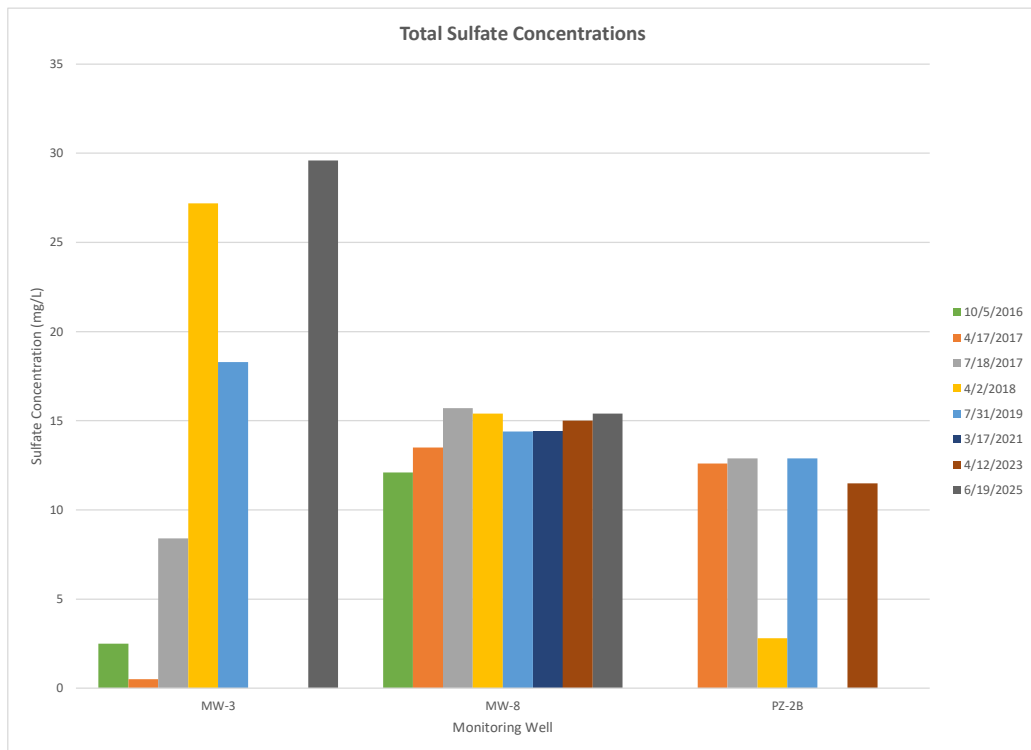
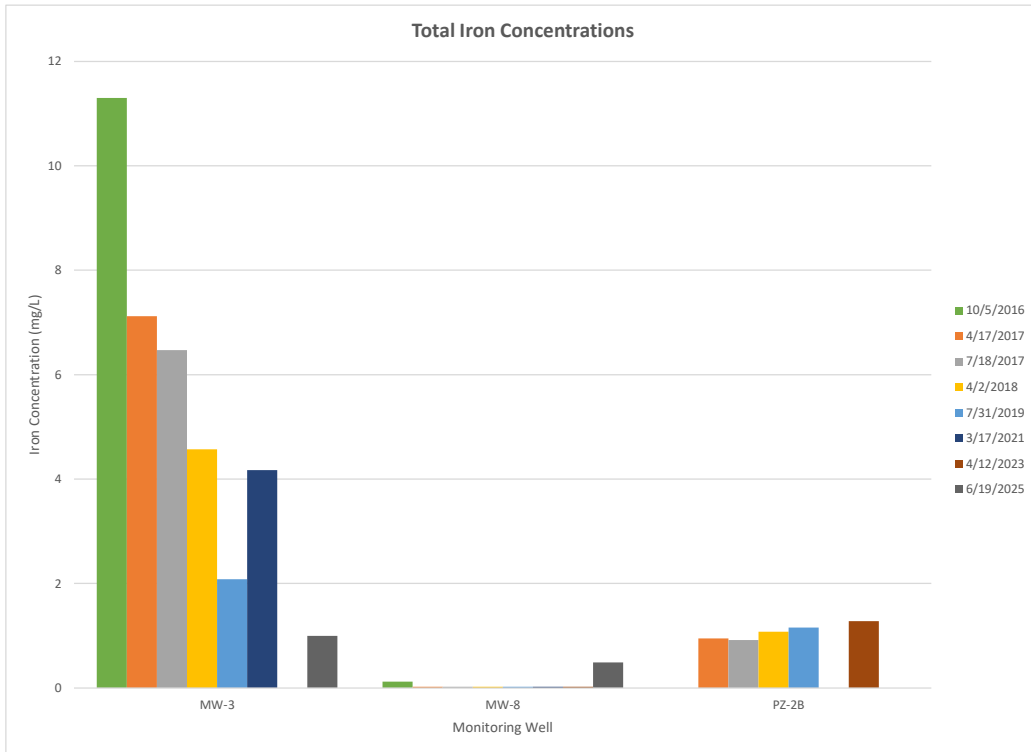
## 5.1 CORRECTIVE ACTION GROUNDWATER MONITORING PROGRAM REMEDY DISCUSSION

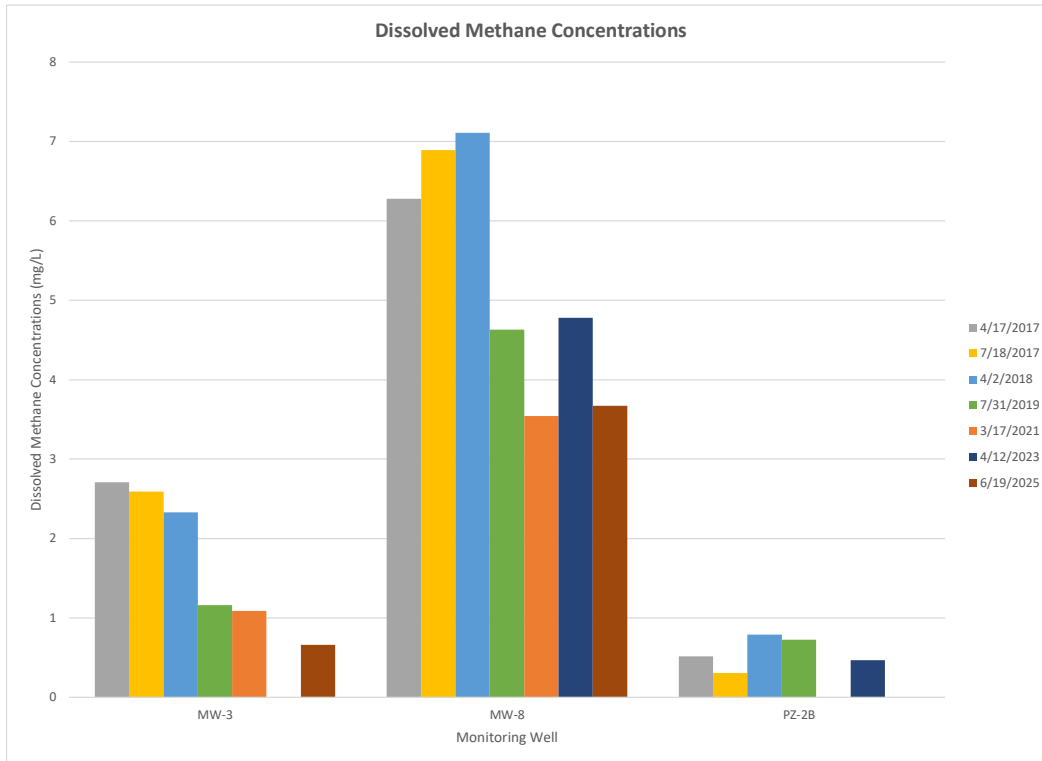
An Assessment of Corrective Measures (ACM) Report was submitted on June 30, 2020 (Doc #98017) and approved in permit correspondence dated July 22, 2020 (Doc #98119). The Selection of Remedy and Corrective Action Groundwater Monitoring Program (CAMP) was submitted on November 9, 2020 and approved in permit correspondence dated November 20, 2020 (Doc #98974). The selected remedy was passive subsurface landfill gas venting and monitored natural attenuation. Passive gas venting is on-going at the Landfill; 27 passive landfill gas vents are currently in place.

The Monitoring Well PZ-2B Trending Summary submitted on June 14, 2023 (Doc #106988) indicated that another assessment of corrective measures was not necessary due to decreasing trends of tetrachloroethene and trichloroethene and the lower measured concentrations in recent reporting periods.

Natural attenuation processes are addressing at least a portion of the groundwater impact at the Landfill. Biennial natural attenuation sampling was approved in the CAMP. Monitoring wells MW-3 and MW-8 each produced samples for natural attenuation parameters in 2025. The Summary of Groundwater Chemistry – Natural Attenuation, located in **Appendix C-2**, shows the current and historical natural attenuation constituent concentrations for bracketing monitoring wells MW-9, MW-11, MW-12, MW-13, and MW-14 and corrective action monitoring wells MW-3, MW-8, and PZ-2B. The following graphs illustrate total nitrate, total manganese, total iron, sulfate, and dissolved methane concentrations in monitoring wells MW-3, MW-8, and PZ-2B.







### MW-3

The graphs indicate natural attenuation is likely occurring in this area. Data from the 2025 natural attenuation sampling event indicate nitrate levels remain low, while manganese and iron concentrations remain elevated, as would be expected from reducing conditions likely resulting from biological activity. Decreasing dissolved methane concentrations may indicate that the subsurface venting system is reducing methane migration into the groundwater.

### MW-8

Data from the 2025 natural attenuation sampling event indicate consistent concentrations for nitrate, manganese, iron, and sulfate. Electron acceptor usage indicative of more reducing conditions in the vicinity of MW-8 appears limited. Based on the higher dissolved methane concentrations at MW-8 compared to MW-3, it appears that natural attenuation is not as well established in the vicinity of MW-8. In addition, a review of the oxygen reduction potential (ORP), located in Appendix A - Field Data Sheets, indicates a more negative ORP value in MW-3 when compared to MW-8. Decreasing dissolved methane concentrations may indicate that the subsurface venting system is reducing methane migration into the groundwater.

### PZ-2B

Natural attenuation parameters were not collected from monitoring well PZ-2B in 2025. Data from the 2023 natural attenuation sampling event indicate consistent concentrations for nitrate, manganese, iron, and sulfate. Similar to MW-8, electron acceptor usage indicative of more reducing conditions in the vicinity of PZ-2B appears limited. It appears that natural attenuation is not well established in the vicinity of PZ-2B based on electron acceptor concentrations. However, a review of the oxygen reduction potential (ORP), located in Appendix A - Field Data Sheets, indicates a more negative ORP value in PZ-

2B when compared to MW-8. VOC concentrations are generally declining in the monitoring well PZ-2B samples.

### **Trending**

Trending of the SSL constituents are shown in **Table 11**. Cobalt and trichloroethene in monitoring well MW-3 and tetrachloroethene and trichloroethene in monitoring well PZ-2B were decreasing. Trichloroethene levels in monitoring wells MW-2 and MW-8 were increasing. Trends were established at 80% confidence. The generally decreasing to stable trends in the SSL parameters may be an indication that the installed passive gas venting system is contributing to a decrease in SSL concentrations in the vicinity of corrective action monitoring wells PZ-2B, MW-3 and MW-8.

## **6.0 SUMMARY AND RECOMMENDATIONS**

### **6.1 SITE IMPACT ON GROUNDWATER**

- Slightly elevated concentrations of cobalt have been measured to the south of the Landfill in the vicinity of corrective action monitoring well MW-3. Cobalt concentrations in bracketing wells have measured concentrations below the background prediction limit, therefore, cobalt is considered bracketed at the site.
- Trichloroethene impact is present to the south of the Landfill in corrective action monitoring wells MW-2, MW-3, MW-8, and PZ-2B. Landfill gas vents were installed to aid in venting the subsurface in the area of these monitoring wells as the groundwater impact appears to be caused by landfill gas. Trichloroethene is considered bracketed at this time for monitoring wells MW-2, MW-3, MW-8, and PZ-2B, considering monitoring wells MW-11 and MW-14 as downgradient monitoring wells for monitoring wells MW-2 and PZ-2B.
- Tetrachloroethene impact is present southeast of the Landfill in monitoring wells MW-2 and PZ-2B. As noted above, landfill gas vents were installed to aid in venting the subsurface in the area upgradient of monitoring well PZ-2B. Tetrachloroethene was measured at an SSL initially during the 2021 reporting period; and is considered bracketed. It should be noted that bracketing wells to the south, east, and west measured non-detect concentrations during the most recent semi-annual sampling event.
- As monitoring well MW-2 is located near monitoring well PZ-2B and appears to be monitoring the same impact, the previously approved remedy can likely be applied to monitoring well MW-2.

### **6.2 PROPOSED MONITORING**

Anticipated groundwater sampling for the 2026 reporting period is shown in **Table 2**. Natural attenuation parameters are sampled biennially; they will be sampled next in 2027.

### **6.3 PROPOSED MONITORING WELL CHANGES**

No changes to the monitoring wells are recommended at this time.

## Tables



**Table 1**  
**Monitoring Program Summary**  
**2025 Annual Water Quality Report**  
**Woodbury County Sanitary Landfill**  
**Permit No. 97-SDP-02-75C**

| Monitoring Well         | Formation <sup>(1)</sup> | Current Monitoring Program         | Change for Next Sampling Event | Constituents with SSIs during the 2025 Reporting Period                                                                                                                        | Constituents with SSLs             | Total Number of Samples in Each Monitoring Program |           |            |
|-------------------------|--------------------------|------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------------|-----------|------------|
|                         |                          |                                    |                                |                                                                                                                                                                                |                                    | Inorganic/Organic                                  | Detection | Assessment |
| HMSP Monitoring Points  |                          |                                    |                                |                                                                                                                                                                                |                                    |                                                    |           |            |
| MW-6                    | Glacial Till             | Background                         | No Change                      | Not Applicable                                                                                                                                                                 | Not Applicable                     | 17/31                                              |           |            |
| MW-2                    | Loess                    | Assessment                         | Corrective Action              | Cadmium, Nickel, 1,1-Dichloroethane, cis-1,2-Dichloroethene, Tetrachloroethene, Trichloroethene                                                                                | Trichloroethene                    |                                                    | 19/35     |            |
| MW-3                    | Loess                    | Corrective Action                  | No Change                      | 1,1-Dichloroethane, cis-1,2-Dichloroethene, Trichloroethene, 2,4-D                                                                                                             | Cobalt, Trichloroethene            |                                                    |           | 12/28      |
| MW-5                    | Glacial Till             | Assessment                         | No Change                      | None                                                                                                                                                                           | None                               |                                                    | 19/34     |            |
| MW-8                    | Glacial Till             | Corrective Action                  | No Change                      | Barium, Chromium, 1,1-Dichloroethane, 1,2-Dichloropropane, Benzene, cis-1,2-Dichloroethene, Dichlorodifluoromethane, Tetrachloroethene, Trichloroethene, Vinyl Chloride, 2,4-D | Trichloroethene                    |                                                    |           | 15/31      |
| PZ-2B                   | Glacio-Fluvial Sand      | Corrective Action                  | No Change                      | Arsenic, 1,1-Dichloroethane, cis-1,2-Dichloroethene, Dichlorodifluoromethane, Tetrachloroethene, Trichloroethene                                                               | Trichloroethene, Tetrachloroethene |                                                    |           | 19/34      |
| Other Monitoring Points |                          |                                    |                                |                                                                                                                                                                                |                                    |                                                    |           |            |
| MW-9                    | Loess                    | Bracketing well for SSL parameters |                                |                                                                                                                                                                                |                                    |                                                    |           |            |
| MW-11                   | Loess                    | Bracketing well for SSL parameters |                                |                                                                                                                                                                                |                                    |                                                    |           |            |
| MW-12                   | Loess                    | Bracketing well for SSL parameters |                                |                                                                                                                                                                                |                                    |                                                    |           |            |
| MW-13                   | Clay                     | Bracketing well for SSL parameters |                                |                                                                                                                                                                                |                                    |                                                    |           |            |
| MW-14                   | Glacial Till             | Bracketing well for SSL parameters |                                |                                                                                                                                                                                |                                    |                                                    |           |            |
| PZ-2A                   | Glacial Till             | Bracketing well for SSL parameters |                                |                                                                                                                                                                                |                                    |                                                    |           |            |

Notes:

<sup>(1)</sup> Obtained from screened interval on boring logs.

SSL - Statistically Significant Level above groundwater protection standard.

SSI - Statistically Significant Increase above background.

**Table 2**  
**Monitoring Program Implementation Schedule**  
**2025 Annual Water Quality Report**  
**Woodbury County Sanitary Landfill**  
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| Monitoring Well | Recent Sampling Dates and Constituents                         |                    |                                          | Upcoming Sampling Dates and Constituents        |                                          | Full Appendix II Sample Dates                                                |                |
|-----------------|----------------------------------------------------------------|--------------------|------------------------------------------|-------------------------------------------------|------------------------------------------|------------------------------------------------------------------------------|----------------|
|                 | June 2025                                                      | August 2025        | November 2025                            | 1 <sup>st</sup> 2026 Semi-Annual                | 2 <sup>nd</sup> 2026 Semi-Annual         | Previously Collected                                                         | Next Event     |
| MW-6            | Appendix I, TSS, Sulfide                                       |                    | Appendix I, TSS, Sulfide                 | Appendix I, TSS, Sulfide                        | Appendix I, TSS, Sulfide                 | Not applicable                                                               | Not applicable |
| MW-2            | Appendix II, TSS (no 8270E SVOCs & PCBs)                       | 8270E SVOCs & PCBs | Appendix I, TSS, Dichlorodifluoromethane | Appendix I, TSS, Dichlorodifluoromethane        | Appendix I, TSS, Dichlorodifluoromethane | 3/21/2009, 4/7/2014, 10/28/2014, 4/6/2015, 10/21/2015, 8/25/2020, 6/19/2025  | 2030           |
| PZ-2B           | Appendix II, TSS                                               |                    | Appendix I, TSS, Dichlorodifluoromethane | Appendix I, TSS, Dichlorodifluoromethane        | Appendix I, TSS, Dichlorodifluoromethane | 3/21/2009, 4/7/2014, 10/28/2014, 4/6/2015, 10/21/2015, 8/25/2020, 6/19/2025  | 2030           |
| MW-3            | Not Sampled - Dry                                              |                    | Appendix II, TSS, Natural Attenuation    | Appendix I, TSS                                 |                                          | 3/21/2009, 4/7/2014, 10/28/2014, 4/6/2015, 10/21/2015, 2/12/2020, 11/19/2025 | 2030           |
| MW-5            | Appendix I, TSS                                                |                    | Appendix I, TSS                          | Appendix II, TSS                                | Appendix I, TSS                          | 3/21/2009, 8/5/2016, 3/17/2021                                               | 2026           |
| MW-8            | Appendix II, TSS, (no 8270E SVOCs & PCBs), Natural Attenuation | 8270E SVOCs & PCBs | Not Sampled - Dry                        | Appendix I, TSS                                 |                                          | 3/21/2009, 4/7/2014, 10/28/2014, 4/6/2015, 10/21/2015, 2/12/2020, 6/19/2025  | 2030           |
| MW-9            | Tetrachloroethene, Trichloroethene                             |                    | Tetrachloroethene, Trichloroethene       | Tetrachloroethene, Trichloroethene              | Tetrachloroethene, Trichloroethene       | Not applicable                                                               | Not applicable |
| MW-11           | Tetrachloroethene, Trichloroethene                             |                    | Tetrachloroethene, Trichloroethene       | Tetrachloroethene, Trichloroethene              | Tetrachloroethene, Trichloroethene       | Not applicable                                                               | Not applicable |
| MW-12           | Tetrachloroethene, Trichloroethene                             |                    | Tetrachloroethene, Trichloroethene       | Tetrachloroethene, Trichloroethene              | Tetrachloroethene, Trichloroethene       | Not applicable                                                               | Not applicable |
| MW-13           | Cobalt, TSS, Trichloroethene                                   |                    |                                          | Cobalt, TSS, Trichloroethene                    | Cobalt, TSS, Trichloroethene             | Not applicable                                                               | Not applicable |
| MW-14           | Cobalt, TSS, Tetrachloroethene, Trichloroethene                |                    |                                          | Cobalt, TSS, Tetrachloroethene, Trichloroethene |                                          | Not applicable                                                               | Not applicable |
| PZ-2A           | Not Sampled - Dry                                              | Appendix I, TSS    | Tetrachloroethene, Trichloroethene       | Tetrachloroethene, Trichloroethene              | Tetrachloroethene, Trichloroethene       | Not applicable                                                               | Not applicable |

Notes:

TSS - Total Suspended Solids

SVOC - Semi-Volatile Organic Compounds

Natural Attenuation Parameters Include: Dissolved Methane, Iron, Nitrate, Manganese, and Sulfate.

**Table 3**  
**Monitoring Well Maintenance and Performance Re-Evaluation Schedule**  
**2025 Annual Water Quality Report**  
**Woodbury County Sanitary Landfill**  
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| Compliance with:                                                         | 2023      | 2024      | 2025                    | 2026      | 2027      |
|--------------------------------------------------------------------------|-----------|-----------|-------------------------|-----------|-----------|
| 567 IAC 113.10(2)"f"(1) high and low water levels                        |           | Completed | Included <sup>(1)</sup> | Scheduled | Scheduled |
| 567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths | Completed | Completed | Included <sup>(2)</sup> | Scheduled | Scheduled |
| 567 IAC 113.10(2)"f"(3) well depths                                      | Completed | Completed | Included <sup>(1)</sup> | Scheduled | Scheduled |
| 567 IAC 113.10(2)"f"(4) well recharge rates and chemistry                |           | Completed |                         | Scheduled |           |

Notes:

<sup>(1)</sup> See Table 4.

<sup>(2)</sup> See Section 2.2 of this report.

**Table 4**  
**Monitoring Well Performance and Maintenance Summary**  
**2025 Annual Water Quality Report**  
**Woodbury County Sanitary Landfill**  
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| Well  | Top of Casing | Top of Screen | Total Depth |                                | Date of Measurements |               | Maximum Depth Discrepancy (ft) |
|-------|---------------|---------------|-------------|--------------------------------|----------------------|---------------|--------------------------------|
|       |               |               |             |                                | June 2025            | November 2025 |                                |
| MW-6  | 228.26        | 174.3         | 69.0        | Groundwater Level (ft)         | 58.29                | 58.19         | -2.7                           |
|       |               |               |             | Groundwater Elevation (Ft MSL) | 169.97               | 170.07        |                                |
|       |               |               |             | Measured Well Depth (ft)       | 71.6                 | 71.7          |                                |
|       |               |               |             | Submerged screen               | N                    | N             |                                |
| MW-2  | 138.66        | 104.7         | 44.0        | Groundwater Level (ft)         | 20.20                | 20.18         | 2.1                            |
|       |               |               |             | Groundwater Elevation (Ft MSL) | 118.46               | 118.48        |                                |
|       |               |               |             | Measured Well Depth (ft)       | 44.2                 | 41.9          |                                |
|       |               |               |             | Submerged screen               | Y                    | Y             |                                |
| PZ-2B | 139.24        | 91.3          | 50.5        | Groundwater Level (ft)         | 23.10                | 22.07         | -1.7                           |
|       |               |               |             | Groundwater Elevation (Ft MSL) | 116.14               | 117.17        |                                |
|       |               |               |             | Measured Well Depth (ft)       | 52.2                 | 52.2          |                                |
|       |               |               |             | Submerged screen               | Y                    | Y             |                                |
| MW-3  | 172.82        | 122.8         | 60.0        | Groundwater Level (ft)         | Dry                  | 56.60         | 1.0                            |
|       |               |               |             | Groundwater Elevation (Ft MSL) | NA                   | 116.22        |                                |
|       |               |               |             | Measured Well Depth (ft)       | 59.0                 | 59.3          |                                |
|       |               |               |             | Submerged screen               | N                    | N             |                                |
| MW-5  | 186.00        | 118.4         | 82.6        | Groundwater Level (ft)         | 59.04                | 59.38         | 0.3                            |
|       |               |               |             | Groundwater Elevation (Ft MSL) | 126.96               | 126.62        |                                |
|       |               |               |             | Measured Well Depth (ft)       | 82.5                 | 82.3          |                                |
|       |               |               |             | Submerged screen               | Y                    | Y             |                                |
| MW-8  | 169.79        | 116.2         | 63.6        | Groundwater Level (ft)         | 55.10                | Dry           | 0.3                            |
|       |               |               |             | Groundwater Elevation (Ft MSL) | 114.69               | NA            |                                |
|       |               |               |             | Measured Well Depth (ft)       | 63.3                 | NM            |                                |
|       |               |               |             | Submerged screen               | N                    | NA            |                                |

Notes:

NM - Not Measured

NA- Not Available

Comments:

- 1) Monitoring wells with submersible pumps are only measured once every 5 years. Monitoring wells MW-3, MW-5, MW-6, and MW-8 were measured during this reporting period and will be measured next during the 2030 reporting period.
- 2) The monitoring wells were within 1.7 feet of the installed depth with the exceptions of monitoring wells MW-2 and MW-6. However, as monitoring wells MW-2 and MW-6 consistently produce samples, it does not appear siltation is affecting the ability of the wells to produce samples.

**Table 5**  
**Background and GWPS Summary**  
**2025 Annual Water Quality Report**  
**Woodbury County Sanitary Landfill**  
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**Interwell Background/GWPS (MW-6)**

| Constituent    | Units | Samples | Detections | Min              | Max             | Mean       | Background Level | Statistical Test | GWPS     | Source |
|----------------|-------|---------|------------|------------------|-----------------|------------|------------------|------------------|----------|--------|
| Antimony (Sb)  | mg/L  | 17      | 5          | 0.00042*         | 0.00179*        | 0.00095824 | 0.00179          | PL (NP)          | 0.006    | MCL    |
| Arsenic (As)   | mg/L  | 17      | 4          | 0.00056*         | 0.00115*        | 0.00097571 | 0.00115          | PL (NP)          | 0.01     | MCL    |
| Barium (Ba)    | mg/L  | 17      | 17         | 0.387            | 0.599           | 0.49632353 | 0.6563           | PL (P)           | 2.0      | MCL    |
| Beryllium (Be) | mg/L  | 17      | 0          | 0.0005 (1/2 RL)  | 0.0005 (1/2 RL) | 0.00050000 | < 0.001          | DQR              | 0.004    | MCL    |
| Cadmium (Cd)   | mg/L  | 17      | 6          | 0.00005 (1/2 RL) | 0.000542        | 0.00018147 | 0.000542         | PL (NP)          | 0.005    | MCL    |
| Chromium (Cr)  | mg/L  | 17      | 2          | 0.00208*         | 0.0025 (1/2 RL) | 0.00247353 | 0.0025           | PL (NP)          | 0.1      | MCL    |
| Cobalt (Co)    | mg/L  | 17      | 13         | 0.00005*         | 0.00203         | 0.00050894 | 0.002223         | PL (P)           | 0.002223 | SSS    |
| Copper (Cu)    | mg/L  | 17      | 8          | 0.0012*          | 0.0146          | 0.00342176 | 0.0146           | PL (NP)          | 1.3      | MCL    |
| Lead (Pb)      | mg/L  | 17      | 7          | 0.00025 (1/2 RL) | 0.00316         | 0.00067771 | 0.00316          | PL (NP)          | 0.015    | MCL    |
| Nickel (Ni)    | mg/L  | 17      | 5          | 0.000695*        | 0.00455*        | 0.00256500 | 0.00455          | PL (NP)          | 0.1      | SWS    |
| Selenium (Se)  | mg/L  | 17      | 16         | 0.00194*         | 0.00752         | 0.00527676 | 0.008585         | PL (P)           | 0.05     | MCL    |
| Silver (Ag)    | mg/L  | 17      | 0          | 0.00025 (1/2 RL) | 0.0005 (1/2 RL) | 0.00048529 | < 0.001          | DQR              | 0.1      | SWS    |
| Thallium (Tl)  | mg/L  | 17      | 1          | 0.000329*        | 0.001 (1/2 RL)  | 0.00051935 | 0.001            | PL (NP)          | 0.002    | MCL    |
| Vanadium (V)   | mg/L  | 17      | 11         | 0.000856*        | 0.00473*        | 0.00211109 | 0.004629         | PL (P)           | 0.035    | SWS    |
| Zinc (Zn)      | mg/L  | 17      | 2          | 0.005 (1/2 RL)   | 0.0159*         | 0.01035294 | 0.0159           | PL (NP)          | 2.0      | SWS    |

\* Indicates a J flag; concentration is below the reporting limit but above the method detection limit. The concentration is estimated.

**Notes:**

- 1) Background levels based on calculated prediction limits or reporting limit, as applicable.

**Acronyms/Abbreviations:**

|                                               |                                     |
|-----------------------------------------------|-------------------------------------|
| RL = Reporting Limit                          | PL = Prediction Limit               |
| GWPS = Groundwater Protection Standard (mg/L) | MCL = EPA Maximum Contaminant Level |
| DQR = Double Quantification Rule              | NP = Non-Parametric                 |
| SSS = Site-Specific GWPS                      | P = Parametric                      |
| SWS = Statewide Standard                      |                                     |

**Comments:**

- 1) **Water quality results and effectiveness of the statistical data evaluation criteria:** Statistical evaluations consist of prediction limits, double quantification rule, and confidence intervals/confidence bands, as appropriate, and do not use data from the background wells for development of the confidence intervals or confidence bands.
- 2) **Changes to the previous statistical method during reporting period:** There were no changes to the statistical method during this reporting period.
- 3) **Re-sampling strategy:** The Woodbury County Sanitary Landfill detection monitoring statistical method includes a 1-of-2 retesting scheme; however, retesting is not performed for the assessment monitoring or corrective action monitoring programs. The monitoring wells in the Woodbury County Sanitary Landfill monitoring network are in the assessment or corrective action monitoring program; therefore, indicated SSIs are considered as SSIs despite not performing retesting to complete the statistical test.
- 4) **Justification for data exclusion:** Due to the effect of elevated TSS on inorganic concentrations, data obtained prior to the implementation of low-flow sampling during the 2016 reporting period was removed from statistical consideration beginning with the 2019 reporting period.

**Table 6**  
**Summary of Well/Detected Constituent Pairs With No Previous SSIs**  
**2025 Annual Water Quality Report**  
**Woodbury County Sanitary Landfill**  
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| Well | Constituent         | Units | Most Recent Result | Background Standard |
|------|---------------------|-------|--------------------|---------------------|
| MW-2 | Cadmium             | mg/L  | 0.000315           | 0.000542            |
| MW-3 | 2,4-D*              | µg/L  | 1.02               | <1                  |
| MW-8 | Chromium            | mg/L  | 0.00698            | 0.0025              |
|      | 1,2-Dichloropropane | µg/L  | 1.29               | <1                  |

Notes:

Table 6 shows constituent/well pairs with SSIs indicated in 2025 but not in 2024.

\* - MW-3 did not produce a sample since November 2022 until this reporting period. The SSIs were considered ongoing if they were indicated in 2022 and 2025.

Comments:

- 1) **Problems with the current detection network:** None.
- 2) **Schedule to implement remedies:** Not applicable.
- 3) **Alternative constituent or sample frequency changes:** None.
- 4) **Significant changes to calculated prediction limits:** Not applicable.
- 5) **Resampling strategy:** If any monitoring well returns to the detection monitoring program, retesting will be performed on a 1-of-2 retesting scheme. The Woodbury County Sanitary Landfill detection monitoring statistical method includes a 1-of-2 retesting scheme; however, retesting is not performed for the assessment monitoring or corrective action monitoring programs. The monitoring wells in the Woodbury County Sanitary Landfill monitoring network are in the assessment or corrective action monitoring programs; therefore, indicated SSIs are considered as SSIs despite not performing retesting to complete the statistical test.

**Table 7**  
**Summary Table of Ongoing and Newly Identified SSIs**  
**2025 Annual Water Quality Report**  
**Woodbury County Sanitary Landfill**  
**Permit No. 97-SDP-02-75C**

| Well  | Constituent             | Units | Most Recent Result | Background Standard | Lower Confidence Limit | GWPS  | Sample Dates       |             |                                   |
|-------|-------------------------|-------|--------------------|---------------------|------------------------|-------|--------------------|-------------|-----------------------------------|
|       |                         |       |                    |                     |                        |       | Initial Exceedance | Resample(s) | 5 <sup>th</sup> background sample |
| MW-2  | Cadmium                 | mg/L  | 0.000315           | 0.000542            | 0.0001743              | 0.005 | 6/19/2025          | NM          | 10/10/2018                        |
|       | Nickel                  | mg/L  | 0.00558            | 0.00455             | 0.001611               | 0.1   | 6/19/2025          | NM          | 10/10/2018                        |
|       | 1,1-Dichloroethane      | µg/L  | 4.71               | < 1                 | 4.363                  | 140   | 3/21/2009          | NM          | 3/16/2011                         |
|       | cis-1,2-Dichloroethene  | µg/L  | 4.77               | < 1                 | 3.24                   | 70    | 7/18/2017          | NM          | 3/16/2011                         |
|       | Tetrachloroethene       | µg/L  | 2.69               | < 1                 | 2.38                   | 5     | 9/9/2009           | NM          | 3/16/2011                         |
| MW-3  | Trichloroethene         | µg/L  | 8.08               | < 1                 | TS                     | 5     | 3/21/2009          | NM          | 3/16/2011                         |
|       | 1,1-Dichloroethane*     | µg/L  | 5.27               | <1                  | 4.514                  | 140   | 3/21/2009          | NM          | 3/16/2011                         |
|       | cis-1,2-Dichloroethene* | µg/L  | 8.16               | < 1                 | 6.909                  | 70    | 9/16/2010          | NM          | 3/16/2011                         |
|       | Trichloroethene*        | µg/L  | 9.09               | <1                  | 12.61                  | 5     | 4/9/2008           | NM          | 3/16/2011                         |
| MW-5  | 2,4-D*                  | µg/L  | 1.02               | <1                  | 0.545                  | 70    | 11/18/2025         | NM          | 10/21/2015                        |
| MW-5  | None                    |       |                    |                     |                        |       |                    |             |                                   |
| MW-8  | Barium                  | mg/L  | 0.98               | 0.6563              | 0.8838                 | 2     | 6/19/2025          | NM          | 10/10/2018                        |
|       | Chromium                | mg/L  | 0.00698            | 0.0025              | 0.00139                | 0.1   | 6/19/2025          | NM          | 10/10/2018                        |
|       | 1,1-Dichloroethane      | µg/L  | 39.5               | < 1                 | 26.21                  | 140   | 3/21/2009          | NM          | 3/16/2011                         |
|       | 1,2-Dichloropropane     | µg/L  | 1.29               | <1                  | 0.6352                 | 5     | 6/19/2025          | NM          | 3/16/2011                         |
|       | Benzene                 | µg/L  | 1.51               | < 0.5               | 1.151                  | 5     | 10/27/2011         | NM          | 3/16/2011                         |
|       | cis-1,2-Dichloroethene  | µg/L  | 6.84               | < 1                 | TS                     | 70    | 10/5/2016          | NM          | 3/16/2011                         |
|       | Tetrachloroethene       | µg/L  | 1.28               | < 1                 | 0.6333                 | 5     | 4/12/2023          | NM          | 3/16/2011                         |
|       | Trichloroethene         | µg/L  | 19.5               | < 1                 | 16.19                  | 5     | 4/9/2008           | NM          | 3/30/2010                         |
|       | Vinyl Chloride          | µg/L  | 2.09               | < 1                 | 1.701                  | 2     | 3/21/2009          | NM          | 3/16/2011                         |
|       | 2,4-D                   | µg/L  | 1.25               | <1                  | 0.7456                 | 70    | 4/7/2014           | NM          | 10/21/2015                        |
| PZ-2B | Dichlorodifluoromethane | µg/L  | 14.1               | < 3                 | 18.61                  | 1000  | 3/21/2009          | NM          | 3/16/2011                         |
|       | Arsenic                 | mg/L  | 0.00552            | 0.00115             | 0.00526                | 0.01  | 6/19/2025          | NM          | 10/10/2018                        |
|       | 1,1-Dichloroethane      | µg/L  | 2.8                | < 1                 | 2.636                  | 140   | 3/21/2009          | NM          | 3/16/2011                         |
|       | cis-1,2-Dichloroethene  | µg/L  | 1.42               | < 1                 | 1.365                  | 70    | 4/2/2018           | NM          | 3/16/2011                         |
|       | Tetrachloroethene       | µg/L  | 2.41               | < 1                 | TS                     | 5     | 3/21/2009          | NM          | 3/16/2011                         |
|       | Trichloroethene         | µg/L  | 5                  | < 1                 | 4.615                  | 5     | 3/21/2009          | NM          | 3/16/2011                         |
|       | Dichlorodifluoromethane | µg/L  | 3.93               | < 3                 | 3.362                  | 1000  | 3/21/2009          | NM          | 3/16/2011                         |

Notes:

1) Shaded rows denote constituent/well pairs with SSIs indicated in 2025 but not 2024. Unshaded rows denote constituent/well pairs with SSIs indicated during both the 2024 and 2025 reporting periods.

NM - Not Measured; Resampling of constituents with indicated statistically significant increases (SSIs) above background was not part of the statistical methodology performed by the previous consultant. For this reason, all wells were moved to the assessment monitoring program following the collection of the 5th background sample with the exception of monitoring well MW-5. MW-5 was moved into the assessment monitoring program following the 2nd 2017 semi-annual statistical evaluation.

TS - Theil Sen; Due to a statistically significant trend, confidence intervals were not calculated. Theil-Sen analysis was performed in lieu of confidence interval analysis.

\* - The monitoring well did not produce a sample since November 2022 until this reporting period. The SSIs were considered ongoing if they were indicated in 2022 and 2025.

Comments:

- 1) **Problems with the current assessment network:** None.
- 2) **Proposed remedies:** Source control consisting of passive subsurface venting is ongoing.
- 3) **Alternative constituent or sample frequency changes:** None.
- 4) **Plume delineation strategies:** Considered complete.
- 5) **Property owner notifications:** Previously completed.

**Table 8**  
**Summary Table of Ongoing and Newly Identified SSLs**  
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| Well  | Constituent       | Units | Most Recent Result | Upper Confidence Limit | GWPS     | Initial Exceedance | Upper Confidence Limit Below GWPS |         |                      |    |                      |    |
|-------|-------------------|-------|--------------------|------------------------|----------|--------------------|-----------------------------------|---------|----------------------|----|----------------------|----|
|       |                   |       |                    |                        |          |                    | 1 <sup>st</sup> Year              |         | 2 <sup>nd</sup> Year |    | 3 <sup>rd</sup> Year |    |
| MW-2  | Trichloroethene   | µg/L  | 8.08               | TS                     | 5        | 2025               | NA                                | NA      | NA                   | NA | NA                   | NA |
| MW-3  | Cobalt            | mg/L  | 0.00482            | 0.007289               | 0.002223 | 2019*              | NA                                | NA      | NA                   | NA | NA                   | NA |
|       | Trichloroethene   | µg/L  | 9.09               | 20.63                  | 5        | 2008               | NA                                | NA      | NA                   | NA | NA                   | NA |
| MW-8  | Trichloroethene   | µg/L  | 19.5               | 18.83                  | 5        | 2008               | NA                                | NA      | NA                   | NA | NA                   | NA |
| PZ-2B | Tetrachloroethene | µg/L  | 2.41               | TS                     | 5        | 2021               | 6/2025                            | 11/2025 | NA                   | NA | NA                   | NA |
|       | Trichloroethene   | µg/L  | 5                  | 6.749                  | 5        | 2021               | NA                                | NA      | NA                   | NA | NA                   | NA |

Notes:

The SSLs in monitoring wells MW-3, MW-8, and PZ-2B were previously reported. The SSL in monitoring well MW-2 is new during this reporting period.

NA - Indicates that the constituent-monitoring point dataset has not satisfied the statistical requirements of IAC 567-113.10(9)"e"(2), which is identified by the entire confidence interval or any part of the upper confidence band, as appropriate, being below the GWPS.

TS - Theil Sen. Due to a statistically significant trend, confidence intervals were not calculated. Theil-Sen analysis was performed in lieu of confidence interval analysis.

\* - Inorganic data obtained prior to the implementation of low-flow sampling during the 2016 reporting period was removed from statistical consideration beginning with the 1<sup>st</sup> 2019 semi-annual statistical evaluation. Therefore, the initial exceedance of cobalt is considered to be the 1<sup>st</sup> 2019 semi-annual sampling event although the SSL measurement precedes 2019.



**Table 9**  
**Summary of Groundwater Chemistry**  
**2025 Annual Water Quality Report**  
**Woodbury County Sanitary Landfill**  
**Permit No. 97-SDP-02-75C**

The Reporting Period Summary of Groundwater Chemistry is located in Appendix C-1.

The Summary of Groundwater Chemistry - Natural Attenuation is located in Appendix C-2.

Analytical data prior to 2025 is available in the 2024 Annual Water Quality Report dated February 25, 2025 (Doc #112393).

**Table 10**  
**Historical SSI and SSL**  
**2025 Annual Water Quality Report**  
**Woodbury County Sanitary Landfill**  
**Permit No. 97-SDP-02-75C**

**Key**

|  |     |
|--|-----|
|  | SSI |
|  | SSL |

| Well  | Constituent             | Spring 2018 | Fall 2018 | Spring 2019 | Fall 2019 | Spring 2020 | Fall 2020 | Spring 2021 | Fall 2021 | Spring 2022 | Fall 2022 | Spring 2023 | Fall 2023 | Spring 2024 | Fall 2024 | Spring 2025 | Fall 2025 |
|-------|-------------------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| MW-2  | Barium                  |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Cadmium                 |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Nickel                  |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | 1,1-Dichloroethane      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Acetone                 |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | cis-1,2-Dichloroethene  |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Tetrachloroethene       |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Trichloroethene         |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| MW-3  | Dichlorodifluoromethane |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Cobalt                  |             |           |             |           |             |           |             |           | NS          |           | NS          | NS        | NS          | NS        | NS          |           |
|       | 1,1-Dichloroethane      |             |           |             |           |             |           |             |           | NS          |           | NS          | NS        | NS          | NS        | NS          |           |
|       | Benzene                 |             |           |             |           |             |           |             |           | NS          |           | NS          | NS        | NS          | NS        | NS          |           |
|       | Chloroethane            |             |           |             |           |             |           |             |           | NS          |           | NS          | NS        | NS          | NS        | NS          |           |
|       | cis-1,2-Dichloroethene  |             |           |             |           |             |           |             |           | NS          |           | NS          | NS        | NS          | NS        | NS          |           |
|       | Tetrachloroethene       |             |           |             |           |             |           |             |           | NS          |           | NS          | NS        | NS          | NS        | NS          |           |
|       | Trichloroethene         |             |           |             |           |             |           |             |           | NS          |           | NS          | NS        | NS          | NS        | NS          |           |
| MW-5  | 2,4-D [2C]              |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Carbon Disulfide        |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| MW-8  | Chloroethane            |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Barium                  |             |           |             |           |             |           |             |           | NS          |           |             | NS        |             | NS        |             | NS        |
|       | Chromium                |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Cobalt                  |             |           |             |           |             |           |             |           |             |           |             |           |             | NS        |             | NS        |
|       | Nickel                  |             |           |             |           |             |           |             |           |             |           |             |           |             | NS        |             | NS        |
|       | 1,1-Dichloroethane      |             |           |             |           |             |           |             |           | NS          |           |             | NS        |             | NS        |             | NS        |
|       | 1,2-Dichloropropane     |             |           |             |           |             |           |             |           | NS          |           |             | NS        |             | NS        |             | NS        |
|       | Benzene                 |             |           |             |           |             |           |             |           | NS          |           |             | NS        |             | NS        |             | NS        |
|       | Chloroethane            |             |           |             |           |             |           |             |           | NS          |           |             | NS        |             | NS        |             | NS        |
|       | cis-1,2-Dichloroethene  |             |           |             |           |             |           |             |           | NS          |           |             | NS        |             | NS        |             | NS        |
|       | Tetrachloroethene       |             |           |             |           |             |           |             |           | NS          |           |             | NS        |             | NS        |             | NS        |
|       | Trichloroethene         |             |           |             |           |             |           |             |           | NS          |           |             | NS        |             | NS        |             | NS        |
|       | Vinyl Chloride          |             |           |             |           |             |           |             |           | NS          |           |             | NS        |             | NS        |             | NS        |
|       | 2,4-D                   |             |           |             |           |             |           |             |           | NS          | NS        |             | NS        |             | NS        |             | NS        |
|       | Dichlorodifluoromethane |             |           |             |           |             |           |             |           | NS          | NS        |             | NS        |             | NS        |             | NS        |
|       | Sulfide                 |             |           |             |           |             |           |             |           | NS          |           |             | NS        |             | NS        |             | NS        |
| PZ-2B | Arsenic                 |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Nickel                  |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | 1,1-Dichloroethane      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | cis-1,2-Dichloroethene  |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Tetrachloroethene       |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Trichloroethene         |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Vinyl Chloride          |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
|       | Dichlorodifluoromethane |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |

**Comments:**

- 1) Inorganic data obtained prior to the implementation of low-flow sampling was removed from statistical consideration beginning with the 1<sup>st</sup> 2019 semi-annual statistical evaluation. Therefore, the initial exceedance of cobalt is considered the 1<sup>st</sup> 2019 semi-annual sampling event although the SSL measurement precedes 2019.
  - 2) SSIs shown were not verified with retesting as the monitoring wells are in either assessment or corrective action monitoring.
- NS - Sample was not collected due to insufficient water in well or equipment failure.

**Table 11**  
**Corrective Action Trend Analysis**  
**2025 Annual Water Quality Report**  
**Woodbury County Sanitary Landfill**  
**Permit No. 97-SDP-02-75C**

| Well  | Current SSL       | Trend      | Calculated S | Critical S | N | Projected Year to Completion* |
|-------|-------------------|------------|--------------|------------|---|-------------------------------|
| MW-2  | Trichloroethene   | Increasing | 22           | 21         | 8 | NA                            |
| MW-3  | Cobalt            | Decreasing | -14          | -21        | 8 | 2030                          |
|       | Trichloroethene   | Decreasing | -6           | -21        | 8 | 2041                          |
| MW-8  | Trichloroethene   | Increasing | 15           | 21         | 8 | NA                            |
| PZ-2B | Tetrachloroethene | Decreasing | -22          | -21        | 8 | 2029                          |
|       | Trichloroethene   | Decreasing | -19          | -21        | 8 | 2031                          |

Notes:

N - Number of Samples.

S - Mann-Kendall Statistic.

NA - Projected date to completion unable to be calculated due to increasing trend.

\* - To satisfy IAC 113.10(9)"e"; Projected Date to Completion was based on utilizing the Sen's slope calculation to determine when the concentration would be below the GWPS for eight sampling events and remain there for three consecutive years.

Comments:

- 1) An Assessment of Corrective Measures Report was submitted on June 30, 2020 (Doc #98017) and approved in permit correspondence dated July 22, 2020 (Doc #98119). The Selection of Remedy and Corrective Action Monitoring Program was submitted on November 9, 2020 and approved in permit correspondence dated November 20, 2020 (Doc #98974).

## Figures



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User: bmadsen  
Date Saved: 2/5/2025 11:08 AM



| HMSP Monitoring Points | Monitoring Program |
|------------------------|--------------------|
| MW-6                   | Background         |
| MW-2                   | Assessment         |
| PZ-2B                  | Corrective Action  |
| MW-3                   | Corrective Action  |
| MW-5                   | Assessment         |
| MW-8                   | Corrective Action  |



### Approved Monitoring Network

**Legend**

- HMSP Monitoring Point
- Monitoring Well
- Groundwater Piezometer
- Leachate Well
- Gas Monitoring Point
- Approximate Waste Boundary
- Interpolated Waste Boundary
- Located Waste Boundary
- Approximate Property Boundary
- Stream

Woodbury County Sanitary Landfill  
Pierson, Iowa  
Project No: 27225337.26  
Drawing Date: January 2026

Figure 1

ESRI, COIAR, USGS, Sources: Esri, TomTom, Garmin, FRC, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, USDA NRI, Iowa State University GIS Facility



Path: C:\Users\hmadson\OneDrive - SCS Engineers\Desktop\GIS\Map\Iowa Office\Site Maps\WCSA\W2023 AMQBW\Woodbury 2023 AMQBW.dwg  
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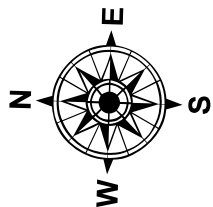


## Groundwater Contours

### Legend

- |                                                                                     |                            |                               |
|-------------------------------------------------------------------------------------|----------------------------|-------------------------------|
| Approximate Groundwater Contour Based On Field Measurements Taken November 18, 2025 | Groundwater Piezometer     | Interpolated Waste Boundary   |
| Monitoring Well                                                                     | Leachate Well              | Located Waste Boundary        |
|                                                                                     | Gas Monitoring Point       | Approximate Property Boundary |
|                                                                                     | Approximate Waste Boundary | Stream                        |

Woodbury County Sanitary Landfill  
Pierson, Iowa  
Project No: 27225337.26  
Drawing Date: January 2026



0 130 260 520 Feet

Figure 2





## Appendix A

### Field Sampling Forms

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>MW-2</b>        | Date: <b>6/19/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Garrett Horak</b> |

| A. MW/PIEZOMETER CONDITIONS |     |
|-----------------------------|-----|
| Well/Piezometer Capped?     | Yes |
| Litter/Standing Water?      | No  |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                                     |
|-----------------------------------------------------------|-------------------------------------|
| Measured Well Total Depth (feet):                         | 44.2                                |
| Initial Static Water Level (feet):                        | 20.20                               |
| Initial Groundwater Elevation (ft-amsl):                  | 119.13                              |
| Equipment Used:                                           | Dedicated Tubing – Peristaltic Pump |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 3:58 PM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 4:01 PM                                                          | 15.1                       | 0.8                           | 982.9                                          | 7.98                    | 192.2       | 9.3                |  |
| 4:04 PM                                                          | 15.2                       | 0.5                           | 981.5                                          | 7.28                    | 188.3       | 8.7                |  |
| 4:07 PM                                                          | 15.3                       | 0.4                           | 979.9                                          | 7.21                    | 187.4       | 8.6                |  |
| 4:10 PM                                                          | 15.6                       | 0.3                           | 981.9                                          | 7.19                    | 186.8       | 8.6                |  |
| 4:13 PM                                                          | 15.6                       | 0.3                           | 984.8                                          | 7.18                    | 187.5       | 8.5                |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 2.8    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 15:00  |
| Average Purge Rate (mL/min):                   | 186.67 |

| D. WELL MAINTENANCE                           |                            |
|-----------------------------------------------|----------------------------|
| Does the well require any future maintenance? | No                         |
| If yes, explain:                              |                            |
| Additional Comments:                          | Color: clear    Odor: none |



# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>MW-3</b>        | Date: <b>6/19/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Garrett Horak</b> |

| A. MW/PIEZOMETER CONDITIONS |     |
|-----------------------------|-----|
| Well/Piezometer Capped?     | Yes |
| Litter/Standing Water?      | No  |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |      |
|-----------------------------------------------------------|------|
| Measured Well Total Depth (feet):                         | 59.0 |
| Initial Static Water Level (feet):                        | Dry  |
| Initial Groundwater Elevation (ft-amsl):                  | NA   |
| Equipment Used:                                           |      |

| C. WELL PURGING                                                  |                                          |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|------------------------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                                          |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10%               | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
|                                                                  | Purging start time.                      |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  |                                          |                               |                                                |                         |             |                    |  |
|                                                                  | Parameters stabilized, sample collected. |                               |                                                |                         |             |                    |  |

|                                                |      |
|------------------------------------------------|------|
| Quantity of Water Removed from Well (liters):  | 0.0  |
| Was well pumped/bailed dry?                    | No   |
| Total Amount of Time Purged (minutes:seconds): |      |
| Average Purge Rate (mL/min):                   | 0.00 |

| D. WELL MAINTENANCE                           |                          |
|-----------------------------------------------|--------------------------|
| Does the well require any future maintenance? | Yes                      |
| If yes, explain:                              | Lock needed.             |
| Additional Comments:                          | Monitoring well was dry. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>MW-5</b>        | Date: <b>6/19/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Garrett Horak</b> |

| A. MW/PIEZOMETER CONDITIONS |     |
|-----------------------------|-----|
| Well/Piezometer Capped?     | Yes |
| Litter/Standing Water?      | No  |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                       |
|-----------------------------------------------------------|-----------------------|
| Measured Well Total Depth (feet):                         | 82.5                  |
| Initial Static Water Level (feet):                        | 59.04                 |
| Initial Groundwater Elevation (ft-amsl):                  | 127.17                |
| Equipment Used:                                           | Dedicated Submersible |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 2:08 PM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 2:11 PM                                                          | 14.6                       | 7.5                           | 946.0                                          | 8.25                    | 84.6        | 37.4               |  |
| 2:14 PM                                                          | 15.5                       | 1.7                           | 922.3                                          | 7.42                    | -8.9        | 30.2               |  |
| 2:17 PM                                                          | 15.3                       | 0.7                           | 921.0                                          | 9.98                    | -35.6       | 60.8               |  |
| 2:20 PM                                                          | 16.3                       | 0.5                           | 928.5                                          | 9.98                    | -49.4       | 53.1               |  |
| 2:23 PM                                                          | 14.3                       | 0.3                           | 913.4                                          | 10.44                   | -57.7       | 35.0               |  |
| 2:26 PM                                                          | 16.8                       | 0.3                           | 906.4                                          | 9.11                    | -65.4       | 29.8               |  |
| 2:29 PM                                                          | 18.2                       | 0.3                           | 926.5                                          | 8.78                    | -70.9       | 46.2               |  |
| 2:32 PM                                                          | 15.9                       | 0.2                           | 918.7                                          | 9.20                    | -72.5       | 19.7               |  |
| 2:35 PM                                                          | 17.1                       | 0.2                           | 908.3                                          | 9.07                    | -73.7       | 9.3                |  |
| 2:38 PM                                                          | 17.4                       | 0.2                           | 913.7                                          | 9.12                    | -73.0       | 11.5               |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |       |
|------------------------------------------------|-------|
| Quantity of Water Removed from Well (liters):  | 2.2   |
| Was well pumped/bailed dry?                    | No    |
| Total Amount of Time Purged (minutes:seconds): | 30:00 |
| Average Purge Rate (mL/min):                   | 73.33 |

| D. WELL MAINTENANCE                           |                                                                                                    |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------|
| Does the well require any future maintenance? | No                                                                                                 |
| If yes, explain:                              |                                                                                                    |
| Additional Comments:                          | Color: clear with black flakes    Odor: sulfur<br>Well went dry while collecting duplicate sample. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>MW-6</b>        | Date: <b>6/19/2025</b>        |
| Gradient: <b>Up</b>                               | Sampler: <b>Garrett Horak</b> |

| A. MW/PIEZOMETER CONDITIONS |     |
|-----------------------------|-----|
| Well/Piezometer Capped?     | Yes |
| Litter/Standing Water?      | No  |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                           |
|-----------------------------------------------------------|---------------------------|
| Measured Well Total Depth (feet):                         | 71.6                      |
| Initial Static Water Level (feet):                        | 58.29                     |
| Initial Groundwater Elevation (ft-amsl):                  | 169.97                    |
| Equipment Used:                                           | Non-Dedicated Submersible |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 1:20 PM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 1:23 PM                                                          | 17.4                       | 2.1                           | 891.2                                          | 7.14                    | 263.5       | 171.4              |  |
| 1:26 PM                                                          | 17.3                       | 1.9                           | 889.0                                          | 7.11                    | 273.1       | 152.3              |  |
| 1:29 PM                                                          | 18.7                       | 1.9                           | 905.3                                          | 7.08                    | 276.4       | 141.2              |  |
| 1:32 PM                                                          | 17.4                       | 1.9                           | 923.0                                          | 7.06                    | 279.4       | 132.5              |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 2.6    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 216.67 |

| D. WELL MAINTENANCE                           |                                                                                                               |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Does the well require any future maintenance? | Yes                                                                                                           |
| If yes, explain:                              | Troubleshoot pump.                                                                                            |
| Additional Comments:                          | Color: orange    Odor: none<br>Dedicated submersible pump malfunctioned, used non-dedicated submersible pump. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>MW-8</b>        | Date: <b>6/19/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Garrett Horak</b> |

| A. MW/PIEZOMETER CONDITIONS |     |
|-----------------------------|-----|
| Well/Piezometer Capped?     | Yes |
| Litter/Standing Water?      | No  |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                           |
|-----------------------------------------------------------|---------------------------|
| Measured Well Total Depth (feet):                         | 63.3                      |
| Initial Static Water Level (feet):                        | 55.10                     |
| Initial Groundwater Elevation (ft-amsl):                  | 115.28                    |
| Equipment Used:                                           | Non-Dedicated Submersible |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 11:10 AM                                                         | Purging start time.        |                               |                                                |                         |             |                    |  |
| 11:13 AM                                                         | 16.1                       | 1.0                           | 1353.6                                         | 6.68                    | 197.2       | 47.9               |  |
| 11:16 AM                                                         | 15.9                       | 0.7                           | 1362.3                                         | 6.72                    | 185.9       | 38.9               |  |
| 11:19 AM                                                         | 15.7                       | 0.7                           | 1363.9                                         | 6.74                    | 184.7       | 28.7               |  |
| 11:22 AM                                                         | 15.8                       | 0.6                           | 1369.5                                         | 6.74                    | 187.1       | 58.6               |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 2.1    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 175.00 |

| D. WELL MAINTENANCE                           |                                                                                                             |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Does the well require any future maintenance? | Yes                                                                                                         |
| If yes, explain:                              | Troubleshoot pump.                                                                                          |
| Additional Comments:                          | Color: cloudy gray    Odor: none<br>Dedicated submersible pump issues, used non-dedicated submersible pump. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>MW-9</b>        | Date: <b>6/20/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Garrett Horak</b> |

| A. MW/PIEZOMETER CONDITIONS |     |
|-----------------------------|-----|
| Well/Piezometer Capped?     | Yes |
| Litter/Standing Water?      | No  |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                       |
|-----------------------------------------------------------|-----------------------|
| Measured Well Total Depth (feet):                         | 44.4                  |
| Initial Static Water Level (feet):                        | 39.32                 |
| Initial Groundwater Elevation (ft-amsl):                  | 115.91                |
| Equipment Used:                                           | Dedicated Submersible |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 10:40 AM                                                         | Purging start time.        |                               |                                                |                         |             |                    |  |
| 10:43 AM                                                         | 13.7                       | 1.1                           | 1025.7                                         | 7.29                    | 138.3       | 530.6              |  |
| 10:46 AM                                                         | 14.3                       | 0.8                           | 988.9                                          | 7.16                    | 142.7       | 257.2              |  |
| 10:49 AM                                                         | 14.7                       | 0.7                           | 995.5                                          | 7.12                    | 152.7       | 142.2              |  |
| 10:52 AM                                                         | 15.2                       | 0.6                           | 1011.7                                         | 7.08                    | 161.7       | 148.1              |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 2.2    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 183.33 |

| D. WELL MAINTENANCE                           |                                     |
|-----------------------------------------------|-------------------------------------|
| Does the well require any future maintenance? | No                                  |
| If yes, explain:                              | Well was labeled with paint marker. |
| Additional Comments:                          | Color: cloudy gray    Odor: none    |



# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>MW-11</b>       | Date: <b>6/20/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Garrett Horak</b> |

| A. MW/PIEZOMETER CONDITIONS        |  |
|------------------------------------|--|
| Well/Piezometer Capped? <b>Yes</b> |  |
| Litter/Standing Water? <b>No</b>   |  |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                                     |
|-----------------------------------------------------------|-------------------------------------|
| Measured Well Total Depth (feet):                         | 16.9                                |
| Initial Static Water Level (feet):                        | 13.21                               |
| Initial Groundwater Elevation (ft-amsl):                  | 113.93                              |
| Equipment Used:                                           | Dedicated Tubing – Peristaltic Pump |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 9:36 AM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 9:39 AM                                                          | 16.2                       | 5.1                           | 744.6                                          | 13.89                   | 175.5       | 99.2               |  |
| 9:42 AM                                                          | 14.6                       | 4.7                           | 728.2                                          | 13.27                   | 188.3       | 54.2               |  |
| 9:45 AM                                                          | 13.9                       | 4.7                           | 714.6                                          | 12.50                   | 195.6       | 37.8               |  |
| 9:48 AM                                                          | 14.2                       | 4.8                           | 709.8                                          | 12.18                   | 200.7       | 29.0               |  |
| 9:51 AM                                                          | 14.1                       | 4.8                           | 708.4                                          | 12.16                   | 205.4       | 26.1               |  |
| 9:54 AM                                                          | 13.3                       | 4.9                           | 713.5                                          | 12.46                   | 209.6       | 21.9               |  |
| 9:57 AM                                                          | 13.6                       | 4.9                           | 707.7                                          | 12.42                   | 213.0       | 19.3               |  |
| 10:00 AM                                                         | 13.6                       | 4.9                           | 709.5                                          | 12.28                   | 216.0       | 12.3               |  |
| 10:03 AM                                                         | 13.8                       | 4.9                           | 705.4                                          | 12.32                   | 218.7       | 10.2               |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |       |
|------------------------------------------------|-------|
| Quantity of Water Removed from Well (liters):  | 0.0   |
| Was well pumped/bailed dry?                    | No    |
| Total Amount of Time Purged (minutes:seconds): | 27:00 |
| Average Purge Rate (mL/min):                   | 0.00  |

| D. WELL MAINTENANCE                           |                                                                                                             |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Does the well require any future maintenance? | No                                                                                                          |
| If yes, explain:                              |                                                                                                             |
| Additional Comments:                          | Color: clear, some cloudiness    Odor: none<br>Very high pH.<br>Quantity of water removed was not recorded. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>MW-12</b>       | Date: <b>6/20/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Garrett Horak</b> |

## A. MW/PIEZOMETER CONDITIONS

|                         |     |  |
|-------------------------|-----|--|
| Well/Piezometer Capped? | Yes |  |
| Litter/Standing Water?  | No  |  |

## B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

|                                          |                           |
|------------------------------------------|---------------------------|
| Measured Well Total Depth (feet):        | 20.2                      |
| Initial Static Water Level (feet):       | 15.40                     |
| Initial Groundwater Elevation (ft-amsl): | 110.97                    |
| Equipment Used:                          | Non-Dedicated Submersible |

## C. WELL PURGING

**FIELD PARAMETERS** [stabilization criteria] RECORD EVERY 3 MINUTES

| Time                                     | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
|------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| 8:45 AM                                  | Purging start time.        |                               |                                                |                         |             |                    |  |
| 8:48 AM                                  | 16.3                       | 4.8                           | 860.4                                          | 7.38                    | 198.6       | 913.4              |  |
| 8:51 AM                                  | 14.9                       | 4.3                           | 859.2                                          | 7.51                    | 209.8       | 921.8              |  |
| 8:54 AM                                  | 13.2                       | 4.1                           | 859.1                                          | 7.51                    | 215.5       | 716.3              |  |
| 8:57 AM                                  | 13.2                       | 4.3                           | 856.4                                          | 7.67                    | 218.2       | 449.6              |  |
| 9:00 AM                                  | 12.2                       | 4.3                           | 856.1                                          | 7.71                    | 220.9       | 297.3              |  |
| 9:03 AM                                  | 12.1                       | 4.1                           | 853.5                                          | 8.18                    | 223.1       | 189.8              |  |
| 9:06 AM                                  | 12.0                       | 3.9                           | 859.8                                          | 8.20                    | 225.2       | 139.9              |  |
| 9:09 AM                                  | 12.1                       | 3.9                           | 854.8                                          | 8.38                    | 226.8       | 74.2               |  |
| 9:12 AM                                  | 12.6                       | 3.7                           | 858.1                                          | 8.34                    | 228.1       | 52.1               |  |
| 9:15 AM                                  | 12.6                       | 3.7                           | 857.1                                          | 8.33                    | 229.5       | 34.2               |  |
|                                          |                            |                               |                                                |                         |             |                    |  |
|                                          |                            |                               |                                                |                         |             |                    |  |
|                                          |                            |                               |                                                |                         |             |                    |  |
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|                                          |                            |                               |                                                |                         |             |                    |  |
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|                                          |                            |                               |                                                |                         |             |                    |  |
|                                          |                            |                               |                                                |                         |             |                    |  |
|                                          |                            |                               |                                                |                         |             |                    |  |
|                                          |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected. |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 3.4    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 30:00  |
| Average Purge Rate (mL/min):                   | 113.33 |

## D. WELL MAINTENANCE

|                                               |                                                                                                                                                      |     |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Does the well require any future maintenance? |                                                                                                                                                      | Yes |
| If yes,<br>explain:                           | Add lock.<br>Troubleshoot pump.                                                                                                                      |     |
| Additional<br>Comments:                       | Color: brown, became clearer by sample collection    Odor: none<br>Issues using peristaltic pump controller. Non-dedicated submersible used instead. |     |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>MW-14</b>       | Date: <b>6/20/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Garrett Horak</b> |

|                                    |  |
|------------------------------------|--|
| <b>A. MW/PIEZOMETER CONDITIONS</b> |  |
| Well/Piezometer Capped? <b>Yes</b> |  |
| Litter/Standing Water? <b>No</b>   |  |

|                                                                  |                           |
|------------------------------------------------------------------|---------------------------|
| <b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b> |                           |
| Measured Well Total Depth (feet):                                | 31.2                      |
| Initial Static Water Level (feet):                               | 20.42                     |
| Initial Groundwater Elevation (ft-amsl):                         | 134.81                    |
| Equipment Used:                                                  | Non-Dedicated Submersible |

| <b>C. WELL PURGING</b>                                                  |                            |                               |                                                |                         |             |                    |  |
|-------------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| <b>FIELD PARAMETERS</b> [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                                    | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 11:21 AM                                                                | Purging start time.        |                               |                                                |                         |             |                    |  |
| 11:24 AM                                                                | 19.0                       | 0.9                           | 1066.2                                         | 6.99                    | 119.7       | 252.1              |  |
| 11:27 AM                                                                | 20.4                       | 0.6                           | 1066.4                                         | 6.97                    | 22.1        | 235.8              |  |
| 11:30 AM                                                                | 21.1                       | 0.5                           | 1076.6                                         | 6.97                    | -26.9       | 211.4              |  |
| 11:33 AM                                                                | 19.5                       | 0.5                           | 1107.1                                         | 6.98                    | -43.1       | 167.4              |  |
|                                                                         |                            |                               |                                                |                         |             |                    |  |
|                                                                         |                            |                               |                                                |                         |             |                    |  |
|                                                                         |                            |                               |                                                |                         |             |                    |  |
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|                                                                         |                            |                               |                                                |                         |             |                    |  |
|                                                                         |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                                |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 1.8    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 150.00 |

|                                               |                             |
|-----------------------------------------------|-----------------------------|
| <b>D. WELL MAINTENANCE</b>                    |                             |
| Does the well require any future maintenance? | No                          |
| If yes, explain:                              |                             |
| Additional Comments:                          | Color: orange    Odor: none |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>PZ-2A</b>       | Date: <b>7/9/2025</b>         |
| Gradient: <b>Down</b>                             | Sampler: <b>Garrett Horak</b> |

| A. MW/PIEZOMETER CONDITIONS |     |
|-----------------------------|-----|
| Well/Piezometer Capped?     | Yes |
| Litter/Standing Water?      | No  |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                                     |
|-----------------------------------------------------------|-------------------------------------|
| Measured Well Total Depth (feet):                         | 71.0                                |
| Initial Static Water Level (feet):                        | 23.92                               |
| Initial Groundwater Elevation (ft-amsl):                  | 131.31                              |
| Equipment Used:                                           | Dedicated Tubing – Peristaltic Pump |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 1:10 PM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 1:13 PM                                                          | 18.8                       | 1.0                           | 765.5                                          | 7.30                    | -59.4       | 3.0                |  |
| 1:16 PM                                                          | 19.1                       | 0.4                           | 754.0                                          | 7.29                    | -84.2       | 2.2                |  |
| 1:19 PM                                                          | 20.5                       | 0.3                           | 753.1                                          | 7.28                    | -99.3       | 1.9                |  |
| 1:22 PM                                                          | 22.2                       | 0.3                           | 760.9                                          | 7.28                    | -111.0      | 1.3                |  |
| 1:25 PM                                                          | 24.6                       | 1.8                           | 768.4                                          | 7.28                    | -103.8      | 2.1                |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 1.9    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 158.33 |

| D. WELL MAINTENANCE                           |                                                                                 |
|-----------------------------------------------|---------------------------------------------------------------------------------|
| Does the well require any future maintenance? | No                                                                              |
| If yes, explain:                              |                                                                                 |
| Additional Comments:                          | Color: Clear<br>Odor: None<br>Water level ran too low for peri pump. No sample. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                               |
| Monitoring Well/Piezometer ID: <b>PZ-2B</b>       | Date: <b>7/9/2025</b>         |
| Gradient: <b>Down</b>                             | Sampler: <b>Garrett Horak</b> |

| A. MW/PIEZOMETER CONDITIONS |     |
|-----------------------------|-----|
| Well/Piezometer Capped?     | Yes |
| Litter/Standing Water?      | No  |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                                     |
|-----------------------------------------------------------|-------------------------------------|
| Measured Well Total Depth (feet):                         | 52.2                                |
| Initial Static Water Level (feet):                        | 22.35                               |
| Initial Groundwater Elevation (ft-amsl):                  | 116.03                              |
| Equipment Used:                                           | Dedicated Tubing – Peristaltic Pump |

| C. WELL PURGING                                                  |                                              |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                                              |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10%                   | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 11:43 AM                                                         | Purging start time.                          |                               |                                                |                         |             |                    |  |
| 11:46 AM                                                         | 19.9                                         | 0.9                           | 951.6                                          | 6.90                    | -40.9       | NA                 |  |
| 11:49 AM                                                         | 19.4                                         | 0.4                           | 952.8                                          | 6.88                    | -59.6       | NA                 |  |
| 11:52 AM                                                         | 19.1                                         | 0.3                           | 954.2                                          | 6.88                    | -69.1       | NA                 |  |
| 11:55 AM                                                         | 19.3                                         | 0.3                           | 963.1                                          | 6.87                    | -74.8       | NA                 |  |
|                                                                  | NA - Not available due to meter malfunction. |                               |                                                |                         |             |                    |  |
|                                                                  |                                              |                               |                                                |                         |             |                    |  |
|                                                                  |                                              |                               |                                                |                         |             |                    |  |
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|                                                                  |                                              |                               |                                                |                         |             |                    |  |
|                                                                  |                                              |                               |                                                |                         |             |                    |  |
|                                                                  | Parameters stabilized, sample collected.     |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 1.8    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 150.00 |

| D. WELL MAINTENANCE                           |                              |
|-----------------------------------------------|------------------------------|
| Does the well require any future maintenance? | Yes                          |
| If yes, explain:                              | Hinge repaired. Lock needed. |
| Additional Comments:                          | Color: Clear<br>Odor: Sulfur |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>MW-2</b>        | Date: <b>8/28/2025</b>         |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

| A. MW/PIEZOMETER CONDITIONS       |                   |
|-----------------------------------|-------------------|
| Well/Piezometer Capped? <b>No</b> | Larger well pipe. |
| Litter/Standing Water? <b>No</b>  |                   |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                                     |
|-----------------------------------------------------------|-------------------------------------|
| Measured Well Total Depth (feet):                         | 44.3                                |
| Initial Static Water Level (feet):                        | 22.83                               |
| Initial Groundwater Elevation (ft-amsl):                  | 116.50                              |
| Equipment Used:                                           | Dedicated Tubing – Peristaltic Pump |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 12:45 PM                                                         | Purging start time.        |                               |                                                |                         |             |                    |  |
| 12:48 PM                                                         | 15.6                       | 0.7                           | 1059.7                                         | 7.13                    | 153.5       | 3.1                |  |
| 12:51 PM                                                         | 15.3                       | 0.3                           | 1037.3                                         | 7.14                    | 147.3       | 2.7                |  |
| 12:54 PM                                                         | 15.4                       | 0.2                           | 1030.8                                         | 7.13                    | 142.9       | 2.7                |  |
| 12:57 PM                                                         | 15.2                       | 0.1                           | 1026.6                                         | 7.13                    | 139.6       | 2.5                |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 1.7    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 141.67 |

| D. WELL MAINTENANCE                           |                                            |
|-----------------------------------------------|--------------------------------------------|
| Does the well require any future maintenance? | No                                         |
| If yes, explain:                              |                                            |
| Additional Comments:                          | Color: clear    Odor: slight plastic smell |



# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>MW-8</b>        | Date: <b>8/28/2025</b>         |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

|                                    |  |
|------------------------------------|--|
| <b>A. MW/PIEZOMETER CONDITIONS</b> |  |
| Well/Piezometer Capped? <b>Yes</b> |  |
| Litter/Standing Water? <b>No</b>   |  |

|                                                                  |                                  |
|------------------------------------------------------------------|----------------------------------|
| <b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b> |                                  |
| Measured Well Total Depth (feet):                                | <b>NM</b>                        |
| Initial Static Water Level (feet):                               | <b>54.93</b>                     |
| Initial Groundwater Elevation (ft-amsl):                         | <b>115.45</b>                    |
| Equipment Used:                                                  | <b>Non-Dedicated Submersible</b> |

|                        |
|------------------------|
| <b>C. WELL PURGING</b> |
|------------------------|

| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 12:02 PM                                                         | Purging start time.        |                               |                                                |                         |             |                    |  |
| 12:05 PM                                                         | 16.4                       | 0.3                           | 1471.9                                         | 6.60                    | 120.3       | 45.1               |  |
| 12:08 PM                                                         | 15.7                       | 0.2                           | 1460.2                                         | 6.62                    | 86.7        | 34.7               |  |
| 12:11 PM                                                         | 15.8                       | 0.2                           | 1457.6                                         | 6.62                    | 71.0        | 27.1               |  |
| 12:14 PM                                                         | 15.4                       | 0.1                           | 1459.8                                         | 6.62                    | 63.7        | 22.2               |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |               |
|------------------------------------------------|---------------|
| Quantity of Water Removed from Well (liters):  | <b>2.7</b>    |
| Was well pumped/bailed dry?                    | <b>No</b>     |
| Total Amount of Time Purged (minutes:seconds): | <b>12:00</b>  |
| Average Purge Rate (mL/min):                   | <b>225.00</b> |

|                                               |                                                                                                                                                                                      |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>D. WELL MAINTENANCE</b>                    |                                                                                                                                                                                      |
| Does the well require any future maintenance? | <b>No</b>                                                                                                                                                                            |
| If yes, explain:                              |                                                                                                                                                                                      |
| Additional Comments:                          | Color: slightly cloudy with fine particulate.    Odor: slight burnt smell.<br>Dedicated submersible controller unable to establish flow, switched to non-dedicated submersible pump. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>PZ-2A</b>       | Date: <b>8/28/2025</b>         |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

|                                    |  |
|------------------------------------|--|
| <b>A. MW/PIEZOMETER CONDITIONS</b> |  |
| Well/Piezometer Capped? <b>Yes</b> |  |
| Litter/Standing Water? <b>No</b>   |  |

|                                                                  |                                     |
|------------------------------------------------------------------|-------------------------------------|
| <b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b> |                                     |
| Measured Well Total Depth (feet):                                | 71.0                                |
| Initial Static Water Level (feet):                               | 22.05                               |
| Initial Groundwater Elevation (ft-amsl):                         | 133.18                              |
| Equipment Used:                                                  | Dedicated Tubing – Peristaltic Pump |

| <b>C. WELL PURGING</b>                                                  |                            |                               |                                                |                         |             |                    |  |
|-------------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| <b>FIELD PARAMETERS</b> [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                                    | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(FNU) |  |
| 1:15 PM                                                                 | Purging start time.        |                               |                                                |                         |             |                    |  |
| 1:18 PM                                                                 | 17.1                       | 1.4                           | 833.5                                          | 7.30                    | -85.4       | 7.4                |  |
| 1:21 PM                                                                 | 17.3                       | 0.8                           | 820.4                                          | 7.29                    | -108.7      | 10.2               |  |
| 1:24 PM                                                                 | 17.2                       | 0.4                           | 811.9                                          | 7.29                    | -121.2      | 10.5               |  |
| 1:27 PM                                                                 | 17.1                       | 0.3                           | 810.5                                          | 7.29                    | -130.8      | 9.8                |  |
|                                                                         |                            |                               |                                                |                         |             |                    |  |
|                                                                         |                            |                               |                                                |                         |             |                    |  |
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|                                                                         |                            |                               |                                                |                         |             |                    |  |
|                                                                         |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                                |                            |                               |                                                |                         |             |                    |  |

|                                                |       |
|------------------------------------------------|-------|
| Quantity of Water Removed from Well (liters):  | 1.1   |
| Was well pumped/bailed dry?                    | Yes   |
| Total Amount of Time Purged (minutes:seconds): | 12:00 |
| Average Purge Rate (mL/min):                   | 91.67 |

|                                               |                                                                                                  |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>D. WELL MAINTENANCE</b>                    |                                                                                                  |
| Does the well require any future maintenance? | No                                                                                               |
| If yes, explain:                              |                                                                                                  |
| Additional Comments:                          | Color: clear    Odor: sulfur<br>Well went dry during sample collection, partial sample obtained. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>MW-2</b>        | Date: <b>11/18/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

| A. MW/PIEZOMETER CONDITIONS       |               |
|-----------------------------------|---------------|
| Well/Piezometer Capped? <b>No</b> | <b>4" PVC</b> |
| Litter/Standing Water? <b>No</b>  |               |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)  |               |
|------------------------------------------------------------|---------------|
| Measured Well Total Depth (feet):                          | <b>41.9</b>   |
| Initial Static Water Level (feet):                         | <b>20.18</b>  |
| Initial Groundwater Elevation (ft-amsl):                   | <b>119.15</b> |
| Equipment Used: <b>Dedicated Tubing – Peristaltic Pump</b> |               |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(NTU) |  |
| 3:52 PM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 3:55 PM                                                          | 9.6                        | 3.4                           | 971.7                                          | 6.93                    | -33.4       | 2.7                |  |
| 3:58 PM                                                          | 9.7                        | 1.5                           | 986.9                                          | 6.90                    | -22.4       | 2.0                |  |
| 4:01 PM                                                          | 9.7                        | 0.9                           | 987.4                                          | 6.91                    | -14.1       | 2.0                |  |
| 4:04 PM                                                          | 9.7                        | 0.7                           | 990.2                                          | 6.91                    | -8.3        | 2.1                |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |               |
|------------------------------------------------|---------------|
| Quantity of Water Removed from Well (liters):  | <b>1.8</b>    |
| Was well pumped/bailed dry?                    | <b>No</b>     |
| Total Amount of Time Purged (minutes:seconds): | <b>12:00</b>  |
| Average Purge Rate (mL/min):                   | <b>150.00</b> |

| D. WELL MAINTENANCE                                     |                                                                                                   |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Does the well require any future maintenance? <b>No</b> |                                                                                                   |
| If yes, explain:                                        |                                                                                                   |
| Additional Comments:                                    | Color: clear    Odor: slight ocean<br>Well top (PVC) approximately 2 ft below top of well casing. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>MW-3</b>        | Date: <b>11/19/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

| A. MW/PIEZOMETER CONDITIONS       |               |
|-----------------------------------|---------------|
| Well/Piezometer Capped? <b>No</b> | <b>4" PVC</b> |
| Litter/Standing Water? <b>No</b>  |               |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                                  |
|-----------------------------------------------------------|----------------------------------|
| Measured Well Total Depth (feet):                         | <b>59.3</b>                      |
| Initial Static Water Level (feet):                        | <b>56.60</b>                     |
| Initial Groundwater Elevation (ft-amsl):                  | <b>98.63</b>                     |
| Equipment Used:                                           | <b>Non-Dedicated Submersible</b> |

## C. WELL PURGING

| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(NTU) |  |
| 1:40 PM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 1:44 PM                                                          | 12.3                       | 1.4                           | 1519.0                                         | 6.43                    | -27.9       | 60.8               |  |
| 1:48 PM                                                          | 12.6                       | 0.8                           | 1529.0                                         | 6.45                    | -32.4       | 33.2               |  |
| 1:53 PM                                                          | 12.7                       | 0.5                           | 1523.0                                         | 6.46                    | -33.6       | 34.2               |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |              |
|------------------------------------------------|--------------|
| Quantity of Water Removed from Well (liters):  | <b>0.1</b>   |
| Was well pumped/bailed dry?                    | <b>No</b>    |
| Total Amount of Time Purged (minutes:seconds): | <b>13:00</b> |
| Average Purge Rate (mL/min):                   | <b>7.69</b>  |

## D. WELL MAINTENANCE

|                                                          |                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Does the well require any future maintenance? <b>Yes</b> |                                                                                                                                                                                                                                                                                         |
| If yes, explain:                                         | Dedicated submersible pump and associated tubing were removed from the well post sample collection.                                                                                                                                                                                     |
| Additional Comments:                                     | Color: clear    Odor: seaweed    Detritus and fine particulate present.<br>Tubing was detached from the well upon arrival. Hooked tubing and reattached to dedicated submersible pump.<br>SWL was below dedicated submersible pump depth. Sampled using non-dedicated submersible pump. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>MW-5</b>        | Date: <b>11/18/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

|                                    |  |
|------------------------------------|--|
| <b>A. MW/PIEZOMETER CONDITIONS</b> |  |
| Well/Piezometer Capped? <b>Yes</b> |  |
| Litter/Standing Water? <b>No</b>   |  |

|                                                                  |                       |
|------------------------------------------------------------------|-----------------------|
| <b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b> |                       |
| Measured Well Total Depth (feet):                                | 82.3                  |
| Initial Static Water Level (feet):                               | 59.38                 |
| Initial Groundwater Elevation (ft-amsl):                         | 126.83                |
| Equipment Used:                                                  | Dedicated Submersible |

| <b>C. WELL PURGING</b>                                                  |                            |                               |                                                |                         |             |                    |  |
|-------------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| <b>FIELD PARAMETERS</b> [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                                    | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(NTU) |  |
| 2:32 PM                                                                 | Purging start time.        |                               |                                                |                         |             |                    |  |
| 2:35 PM                                                                 | 11.0                       | 2.7                           | 1165.6                                         | 7.22                    | -118.1      | 19.8               |  |
| 2:38 PM                                                                 | 11.4                       | 1.3                           | 976.4                                          | 7.17                    | -124.1      | 35.0               |  |
| 2:41 PM                                                                 | 11.9                       | 0.8                           | 960.8                                          | 7.14                    | -122.8      | 51.7               |  |
| 2:44 PM                                                                 | 12.6                       | 0.7                           | 952.7                                          | 7.12                    | -121.3      | 23.7               |  |
|                                                                         |                            |                               |                                                |                         |             |                    |  |
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|                                                                         |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                                |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 3.9    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 325.00 |

|                                               |                                                                                                                           |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>D. WELL MAINTENANCE</b>                    |                                                                                                                           |
| Does the well require any future maintenance? | No                                                                                                                        |
| If yes, explain:                              |                                                                                                                           |
| Additional Comments:                          | Color: clear    Odor: sulfur<br>Dark indiscriminate detritus and fine particulate present.<br>Duplicate sample collected. |

## FORM FOR GROUNDWATER SAMPLING

[illegible]

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>MW-9</b>        | Date: <b>11/19/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

| A. MW/PIEZOMETER CONDITIONS       |                             |
|-----------------------------------|-----------------------------|
| Well/Piezometer Capped? <b>No</b> | Requires well head assembly |
| Litter/Standing Water? <b>No</b>  |                             |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                       |
|-----------------------------------------------------------|-----------------------|
| Measured Well Total Depth (feet):                         | 44.6                  |
| Initial Static Water Level (feet):                        | 38.98                 |
| Initial Groundwater Elevation (ft-amsl):                  | 116.25                |
| Equipment Used:                                           | Dedicated Submersible |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(NTU) |  |
| 9:27 AM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 9:30 AM                                                          | 10.8                       | 2.7                           | 1009.7                                         | 6.92                    | -60.7       | 1043.2             |  |
| 9:33 AM                                                          | 10.2                       | 1.4                           | 1012.6                                         | 6.91                    | -52.6       | 966.4              |  |
| 9:36 AM                                                          | 11.2                       | 2.8                           | 1001.2                                         | 6.94                    | -46.3       | 408.2              |  |
| 9:39 AM                                                          | 11.7                       | 1.2                           | 995.8                                          | 6.92                    | -33.3       | 255.6              |  |
| 9:42 AM                                                          | 11.8                       | 1.1                           | 983.6                                          | 6.95                    | -22.9       | 301.7              |  |
| 9:45 AM                                                          | 11.7                       | 2.0                           | 986.3                                          | 6.96                    | -11.0       | 246.2              |  |
| 9:48 AM                                                          | 11.8                       | 1.1                           | 992.7                                          | 6.94                    | -2.2        | 218.7              |  |
| 9:51 AM                                                          | 11.9                       | 0.8                           | 1000.5                                         | 6.92                    | 2.9         | 226.6              |  |
| 9:54 AM                                                          | 11.9                       | 0.6                           | 1008.4                                         | 6.91                    | 3.0         | 250.0              |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 6.2    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 27:00  |
| Average Purge Rate (mL/min):                   | 229.63 |

| D. WELL MAINTENANCE                           |                                                                                                                                                                         |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Does the well require any future maintenance? | Yes                                                                                                                                                                     |
| If yes, explain:                              | Well head assembly.                                                                                                                                                     |
| Additional Comments:                          | Color: light brown    Odor: slight ocean<br>Due to high turbidity the purge was continued post stabilization parameters being met. Turbidity stabilized around 220 NTU. |



# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>MW-11</b>       | Date: <b>11/19/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

|                                    |  |
|------------------------------------|--|
| <b>A. MW/PIEZOMETER CONDITIONS</b> |  |
| Well/Piezometer Capped? <b>Yes</b> |  |
| Litter/Standing Water? <b>No</b>   |  |

|                                                                  |        |
|------------------------------------------------------------------|--------|
| <b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b> |        |
| Measured Well Total Depth (feet):                                | 16.9   |
| Initial Static Water Level (feet):                               | 13.02  |
| Initial Groundwater Elevation (ft-amsl):                         | 114.12 |
| Equipment Used: <b>Dedicated Tubing – Peristaltic Pump</b>       |        |

| <b>C. WELL PURGING</b>                                           |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(NTU) |  |
| 8:54 AM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 8:57 AM                                                          | 10.5                       | 5.4                           | 781.3                                          | 7.08                    | 115.3       | 2.7                |  |
| 9:00 AM                                                          | 10.9                       | 4.4                           | 771.3                                          | 7.05                    | 117.7       | 2.8                |  |
| 9:03 AM                                                          | 11.1                       | 4.2                           | 757.8                                          | 7.05                    | 119.6       | 2.8                |  |
| 9:06 AM                                                          | 11.2                       | 4.0                           | 754.5                                          | 7.05                    | 121.3       | 2.9                |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 1.5    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 125.00 |

|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>D. WELL MAINTENANCE</b>                    |                            |
| Does the well require any future maintenance? | No                         |
| If yes, explain:                              |                            |
| Additional Comments:                          | Color: clear    Odor: none |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>MW-12</b>       | Date: <b>11/19/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

|                                    |  |
|------------------------------------|--|
| <b>A. MW/PIEZOMETER CONDITIONS</b> |  |
| Well/Piezometer Capped? <b>Yes</b> |  |
| Litter/Standing Water? <b>No</b>   |  |

|                                                                  |                                     |
|------------------------------------------------------------------|-------------------------------------|
| <b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b> |                                     |
| Measured Well Total Depth (feet):                                | 20.2                                |
| Initial Static Water Level (feet):                               | 15.21                               |
| Initial Groundwater Elevation (ft-amsl):                         | 111.93                              |
| Equipment Used:                                                  | Dedicated Tubing – Peristaltic Pump |

| <b>C. WELL PURGING</b>                                           |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(NTU) |  |
| 8:54 AM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 8:57 AM                                                          | 10.5                       | 5.4                           | 781.3                                          | 7.08                    | 115.3       | 2.7                |  |
| 9:00 AM                                                          | 10.9                       | 4.4                           | 771.3                                          | 7.05                    | 117.7       | 2.8                |  |
| 9:03 AM                                                          | 11.1                       | 4.2                           | 757.8                                          | 7.05                    | 119.6       | 2.8                |  |
| 9:06 AM                                                          | 11.2                       | 4.0                           | 754.5                                          | 7.05                    | 121.3       | 2.9                |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 1.4    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 116.67 |

|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>D. WELL MAINTENANCE</b>                    |                            |
| Does the well require any future maintenance? | No                         |
| If yes, explain:                              |                            |
| Additional Comments:                          | Color: clear    Odor: none |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>PZ-2A</b>       | Date: <b>11/19/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

| A. MW/PIEZOMETER CONDITIONS       |        |
|-----------------------------------|--------|
| Well/Piezometer Capped? <b>No</b> | 1" PVC |
| Litter/Standing Water? <b>No</b>  |        |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                                     |
|-----------------------------------------------------------|-------------------------------------|
| Measured Well Total Depth (feet):                         | 71.0                                |
| Initial Static Water Level (feet):                        | 23.35                               |
| Initial Groundwater Elevation (ft-amsl):                  | 131.88                              |
| Equipment Used:                                           | Dedicated Tubing – Peristaltic Pump |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(NTU) |  |
| 10:41 AM                                                         | Purging start time.        |                               |                                                |                         |             |                    |  |
| 10:44 AM                                                         | 9.8                        | 4.8                           | 796.9                                          | 7.32                    | -103.3      | 39.4               |  |
| 10:47 AM                                                         | 9.4                        | 3.6                           | 773.1                                          | 7.30                    | -111.7      | 35.8               |  |
| 10:50 AM                                                         | 9.5                        | 3.3                           | 765.5                                          | 7.30                    | -116.2      | 24.6               |  |
| 10:53 AM                                                         | 9.6                        | 3.1                           | 759.4                                          | 7.29                    | -120.5      | 15.5               |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
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|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |       |
|------------------------------------------------|-------|
| Quantity of Water Removed from Well (liters):  | 0.8   |
| Was well pumped/bailed dry?                    | No    |
| Total Amount of Time Purged (minutes:seconds): | 12:00 |
| Average Purge Rate (mL/min):                   | 66.67 |

| D. WELL MAINTENANCE                           |                                                                                                                                                                            |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Does the well require any future maintenance? | No                                                                                                                                                                         |
| If yes, explain:                              |                                                                                                                                                                            |
| Additional Comments:                          | Color: light brown tint    Odor: slight sulfur<br>Top 9 ft of tubing was damaged with multiple punctures. Cut and replaced tubing.<br>No lock on well, lock was installed. |

# FORM FOR GROUNDWATER SAMPLING

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Project: <b>Woodbury County Sanitary Landfill</b> |                                |
| Monitoring Well/Piezometer ID: <b>PZ-2B</b>       | Date: <b>11/18/2025</b>        |
| Gradient: <b>Down</b>                             | Sampler: <b>Michael Morgan</b> |

| A. MW/PIEZOMETER CONDITIONS       |               |
|-----------------------------------|---------------|
| Well/Piezometer Capped? <b>No</b> | <b>1" PVC</b> |
| Litter/Standing Water? <b>No</b>  |               |

| B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL) |                                     |
|-----------------------------------------------------------|-------------------------------------|
| Measured Well Total Depth (feet):                         | 52.2                                |
| Initial Static Water Level (feet):                        | 22.07                               |
| Initial Groundwater Elevation (ft-amsl):                  | 116.31                              |
| Equipment Used:                                           | Dedicated Tubing – Peristaltic Pump |

| C. WELL PURGING                                                  |                            |                               |                                                |                         |             |                    |  |
|------------------------------------------------------------------|----------------------------|-------------------------------|------------------------------------------------|-------------------------|-------------|--------------------|--|
| FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES |                            |                               |                                                |                         |             |                    |  |
| Time                                                             | Temperature<br>(°C)<br>10% | Dissolved<br>Oxygen<br>(mg/L) | Specific<br>Conductivity<br>(µS/cm)<br>+/- 10% | pH<br>(S.U.)<br>+/- 0.1 | ORP<br>(mV) | Turbidity<br>(NTU) |  |
| 4:32 PM                                                          | Purging start time.        |                               |                                                |                         |             |                    |  |
| 4:35 PM                                                          | 9.4                        | 3.8                           | 946.6                                          | 7.01                    | -94.9       | 2.8                |  |
| 4:38 PM                                                          | 9.7                        | 1.8                           | 964.3                                          | 6.93                    | -99.1       | 2.1                |  |
| 4:41 PM                                                          | 9.9                        | 1.1                           | 972.6                                          | 6.92                    | -98.7       | 1.9                |  |
| 4:44 PM                                                          | 9.8                        | 0.7                           | 976.8                                          | 6.92                    | -97.4       | 2.0                |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
|                                                                  |                            |                               |                                                |                         |             |                    |  |
| Parameters stabilized, sample collected.                         |                            |                               |                                                |                         |             |                    |  |

|                                                |        |
|------------------------------------------------|--------|
| Quantity of Water Removed from Well (liters):  | 1.5    |
| Was well pumped/bailed dry?                    | No     |
| Total Amount of Time Purged (minutes:seconds): | 12:00  |
| Average Purge Rate (mL/min):                   | 125.00 |

| D. WELL MAINTENANCE                                     |                              |
|---------------------------------------------------------|------------------------------|
| Does the well require any future maintenance? <b>No</b> |                              |
| If yes, explain:                                        |                              |
| Additional Comments:                                    | Color: clear    Odor: sulfur |



Appendix B-1

Laboratory Analytical Data Sheets

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ben Madson

SCS Engineers

1690 All State Court

Suite 100

West Des Moines, Iowa 50265

Generated 8/21/2025 3:55:06 PM Revision 1

## JOB DESCRIPTION

1st 2025 Semi-Annual Groundwater Sampling  
Woodbury County Sanitary Landfill (HMSP)

## JOB NUMBER

310-309320-1

# Eurofins Cedar Falls

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



Authorized for release by  
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# Case Narrative

Client: SCS Engineers  
Project: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1

**Job ID: 310-309320-1**

**Eurofins Cedar Falls**

## Job Narrative 310-309320-1

### REVISION

The report being provided is a revision of the original report sent on 7/2/2025. The report (revision 1) is being revised due to Updated analyte list for sample MW-2.

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### **Receipt**

The samples were received on 6/20/2025 1:49 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.2°C and 3.2°C.

### **Receipt Exceptions**

COC requests sulfide analysis, did not receive sulfide bottle.

### **GC/MS VOA**

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-458497 recovered above the upper control limit for Trichlorofluoromethane (22.5%D) and Dichlorodifluoromethane (28.6%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-458497/4).

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

### **GC VOA**

Method RSK\_175: The pH of the following sample was outside the required criteria when verified by the laboratory. The sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: MW-8 (310-309320-2).

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

### **GC Semi VOA**

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

### **Herbicides**

Method 8151A: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for preparation batch 500-823279 and analytical batch 500-823371 recovered outside control limits for the following analyte: Silvex (2,4,5-TP). This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

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

### **Pesticides**

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

### **HPLC/IC**

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

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## Case Narrative

Client: SCS Engineers  
Project: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1

### Job ID: 310-309320-1 (Continued)

Eurofins Cedar Falls

#### Metals

Method 6020B: The initial calibration verification (ICV) result for batch 310-459126 was above the upper control limit. The affected analytes are: silver. Sample results were non-detects, and have been reported as qualified data.

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

#### General Chemistry

Method 9034\_Calc: Elevated reporting limits are provided for the following sample due to insufficient sample provided for analysis: MW-8 (310-309320-2).

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

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Sample Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

| Lab Sample ID | Client Sample ID | Matrix       | Collected      | Received       | Sample Origin |
|---------------|------------------|--------------|----------------|----------------|---------------|
| 310-309320-1  | MW-2             | Ground Water | 06/19/25 16:53 | 06/20/25 13:49 | Iowa          |
| 310-309320-2  | MW-8             | Ground Water | 06/19/25 11:47 | 06/20/25 13:49 | Iowa          |
| 310-309320-3  | Trip Blank       | Trip Blank   | 06/19/25 00:00 | 06/20/25 13:49 | Iowa          |

- 1
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# Detection Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Client Sample ID: MW-2

## Lab Sample ID: 310-309320-1

| Analyte                  | Result   | Qualifier | RL       | MDL      | Unit | Dil Fac | D | Method    | Prep Type |
|--------------------------|----------|-----------|----------|----------|------|---------|---|-----------|-----------|
| 1,1-Dichloroethane       | 8.79     |           | 1.00     | 0.220    | ug/L | 1       |   | 8260D     | Total/NA  |
| 1,2-Dichloropropane      | 0.827    | J         | 1.00     | 0.270    | ug/L | 1       |   | 8260D     | Total/NA  |
| Benzene                  | 0.294    | J         | 0.500    | 0.220    | ug/L | 1       |   | 8260D     | Total/NA  |
| cis-1,2-Dichloroethene   | 11.5     |           | 1.00     | 0.210    | ug/L | 1       |   | 8260D     | Total/NA  |
| Dichlorodifluoromethane  | 1.41     | J         | 3.00     | 0.250    | ug/L | 1       |   | 8260D     | Total/NA  |
| Tetrachloroethene        | 5.62     |           | 1.00     | 0.480    | ug/L | 1       |   | 8260D     | Total/NA  |
| trans-1,2-Dichloroethene | 0.683    | J         | 1.00     | 0.270    | ug/L | 1       |   | 8260D     | Total/NA  |
| Trichloroethene          | 10.2     |           | 1.00     | 0.430    | ug/L | 1       |   | 8260D     | Total/NA  |
| Vinyl chloride           | 0.376    | J         | 1.00     | 0.180    | ug/L | 1       |   | 8260D     | Total/NA  |
| Arsenic                  | 0.000608 | J         | 0.00200  | 0.000530 | mg/L | 1       |   | 6020B     | Total/NA  |
| Barium                   | 0.605    |           | 0.00200  | 0.000660 | mg/L | 1       |   | 6020B     | Total/NA  |
| Cadmium                  | 0.000922 |           | 0.000200 | 0.000100 | mg/L | 1       |   | 6020B     | Total/NA  |
| Cobalt                   | 0.000600 |           | 0.000500 | 0.000170 | mg/L | 1       |   | 6020B     | Total/NA  |
| Nickel                   | 0.00577  |           | 0.00500  | 0.00230  | mg/L | 1       |   | 6020B     | Total/NA  |
| Vanadium                 | 0.00274  | J B       | 0.00500  | 0.00170  | mg/L | 1       |   | 6020B     | Total/NA  |
| Total Suspended Solids   | 1.63     | J         | 1.88     | 1.31     | mg/L | 1       |   | I-3765-85 | Total/NA  |

## Client Sample ID: MW-8

## Lab Sample ID: 310-309320-2

| Analyte                 | Result   | Qualifier | RL       | MDL      | Unit | Dil Fac | D | Method    | Prep Type |
|-------------------------|----------|-----------|----------|----------|------|---------|---|-----------|-----------|
| 1,1,1-Trichloroethane   | 0.286    | J         | 1.00     | 0.190    | ug/L | 1       |   | 8260D     | Total/NA  |
| 1,1-Dichloroethane      | 39.5     |           | 1.00     | 0.220    | ug/L | 1       |   | 8260D     | Total/NA  |
| 1,2-Dichloropropane     | 1.29     |           | 1.00     | 0.270    | ug/L | 1       |   | 8260D     | Total/NA  |
| Benzene                 | 1.51     |           | 0.500    | 0.220    | ug/L | 1       |   | 8260D     | Total/NA  |
| Chloroethane            | 2.20     | J         | 4.00     | 0.790    | ug/L | 1       |   | 8260D     | Total/NA  |
| cis-1,2-Dichloroethene  | 6.84     |           | 1.00     | 0.210    | ug/L | 1       |   | 8260D     | Total/NA  |
| Dichlorodifluoromethane | 14.1     |           | 3.00     | 0.250    | ug/L | 1       |   | 8260D     | Total/NA  |
| Tetrachloroethene       | 1.28     |           | 1.00     | 0.480    | ug/L | 1       |   | 8260D     | Total/NA  |
| Trichloroethene         | 19.5     |           | 1.00     | 0.430    | ug/L | 1       |   | 8260D     | Total/NA  |
| Trichlorofluoromethane  | 1.22     | J         | 4.00     | 0.380    | ug/L | 1       |   | 8260D     | Total/NA  |
| Vinyl chloride          | 2.09     |           | 1.00     | 0.180    | ug/L | 1       |   | 8260D     | Total/NA  |
| Methane                 | 3670     |           | 10.0     | 1.74     | ug/L | 10      |   | RSK-175   | Total/NA  |
| 2,4-D                   | 1.25     |           | 1.00     | 0.126    | ug/L | 1       |   | 8151A     | Total/NA  |
| Sulfate                 | 15.4     |           | 1.00     | 0.420    | mg/L | 1       |   | 9056A     | Total/NA  |
| Antimony                | 0.00119  | J         | 0.00200  | 0.00100  | mg/L | 1       |   | 6020B     | Total/NA  |
| Arsenic                 | 0.000836 | J         | 0.00200  | 0.000530 | mg/L | 1       |   | 6020B     | Total/NA  |
| Barium                  | 0.980    |           | 0.00200  | 0.000660 | mg/L | 1       |   | 6020B     | Total/NA  |
| Chromium                | 0.00698  |           | 0.00500  | 0.00180  | mg/L | 1       |   | 6020B     | Total/NA  |
| Cobalt                  | 0.000774 |           | 0.000500 | 0.000170 | mg/L | 1       |   | 6020B     | Total/NA  |
| Lead                    | 0.000487 | J         | 0.000500 | 0.000330 | mg/L | 1       |   | 6020B     | Total/NA  |
| Nickel                  | 0.00425  | J         | 0.00500  | 0.00230  | mg/L | 1       |   | 6020B     | Total/NA  |
| Vanadium                | 0.00185  | J         | 0.00500  | 0.00170  | mg/L | 1       |   | 6020B     | Total/NA  |
| Iron                    | 0.492    |           | 0.100    | 0.0500   | mg/L | 1       |   | 6020B     | Total/NA  |
| Manganese               | 0.0522   |           | 0.0100   | 0.00360  | mg/L | 1       |   | 6020B     | Total/NA  |
| Total Suspended Solids  | 9.75     |           | 1.88     | 1.31     | mg/L | 1       |   | I-3765-85 | Total/NA  |

## Client Sample ID: Trip Blank

## Lab Sample ID: 310-309320-3

No Detections.

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-2

Lab Sample ID: 310-309320-1

Date Collected: 06/19/25 16:53

Matrix: Ground Water

Date Received: 06/20/25 13:49

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.190 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.470 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,1-Dichloroethane          | 8.79   |           | 1.00  | 0.220 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.560 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,1-Dichloropropene         | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.590 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,2,4-Trichlorobenzene      | <5.00  |           | 5.00  | 0.750 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,2-Dichloropropane         | 0.827  | J         | 1.00  | 0.270 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,3-Dichlorobenzene         | <1.00  |           | 1.00  | 0.300 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,3-Dichloropropane         | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.230 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 2,2-Dichloropropane         | <4.00  |           | 4.00  | 0.690 | ug/L |   |          | 06/23/25 21:10 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/23/25 21:10 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 2.00  | ug/L |   |          | 06/23/25 21:10 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/23/25 21:10 | 1       |
| Acetone                     | <10.0  |           | 10.0  | 3.10  | ug/L |   |          | 06/23/25 21:10 | 1       |
| Acrolein                    | <10.0  |           | 10.0  | 3.60  | ug/L |   |          | 06/23/25 21:10 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 06/23/25 21:10 | 1       |
| Allyl chloride              | <2.00  |           | 2.00  | 0.700 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Benzene                     | 0.294  | J         | 0.500 | 0.220 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 0.540 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 0.780 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 06/23/25 21:10 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 0.750 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.790 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 06/23/25 21:10 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Chloroprene                 | <1.00  |           | 1.00  | 0.230 | ug/L |   |          | 06/23/25 21:10 | 1       |
| cis-1,2-Dichloroethene      | 11.5   |           | 1.00  | 0.210 | ug/L |   |          | 06/27/25 13:13 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 0.250 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Dichlorodifluoromethane     | 1.41   | J         | 3.00  | 0.250 | ug/L |   |          | 06/27/25 13:13 | 1       |
| Ethyl methacrylate          | <2.00  |           | 2.00  | 0.680 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.310 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 7.00  | ug/L |   |          | 06/23/25 21:10 | 1       |
| Methacrylonitrile           | <10.0  |           | 10.0  | 3.30  | ug/L |   |          | 06/23/25 21:10 | 1       |
| Methyl methacrylate         | <2.00  |           | 2.00  | 0.760 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 06/23/25 21:10 | 1       |
| Naphthalene                 | <5.00  |           | 5.00  | 3.00  | ug/L |   |          | 06/23/25 21:10 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-2

Lab Sample ID: 310-309320-1

Date Collected: 06/19/25 16:53

Matrix: Ground Water

Date Received: 06/20/25 13:49

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                         | Result         | Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------|----------------|-----------|------|-------|------|---|----------|----------------|---------|
| Propionitrile                   | <10.0          |           | 10.0 | 3.40  | ug/L |   |          | 06/23/25 21:10 | 1       |
| Styrene                         | <1.00          |           | 1.00 | 0.370 | ug/L |   |          | 06/23/25 21:10 | 1       |
| <b>Tetrachloroethene</b>        | <b>5.62</b>    |           | 1.00 | 0.480 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Toluene                         | <1.00          |           | 1.00 | 0.430 | ug/L |   |          | 06/23/25 21:10 | 1       |
| <b>trans-1,2-Dichloroethene</b> | <b>0.683 J</b> |           | 1.00 | 0.270 | ug/L |   |          | 06/23/25 21:10 | 1       |
| trans-1,3-Dichloropropene       | <5.00          |           | 5.00 | 0.560 | ug/L |   |          | 06/23/25 21:10 | 1       |
| trans-1,4-Dichloro-2-butene     | <10.0          |           | 10.0 | 1.10  | ug/L |   |          | 06/23/25 21:10 | 1       |
| <b>Trichloroethene</b>          | <b>10.2</b>    |           | 1.00 | 0.430 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Trichlorofluoromethane          | <4.00          |           | 4.00 | 0.380 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Vinyl acetate                   | <10.0          |           | 10.0 | 2.50  | ug/L |   |          | 06/23/25 21:10 | 1       |
| <b>Vinyl chloride</b>           | <b>0.376 J</b> |           | 1.00 | 0.180 | ug/L |   |          | 06/23/25 21:10 | 1       |
| Xylenes, Total                  | <3.00          |           | 3.00 | 0.400 | ug/L |   |          | 06/23/25 21:10 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 113       |           | 76 - 130 |          | 06/23/25 21:10 | 1       |
| Dibromofluoromethane (Surr) | 114       |           | 76 - 130 |          | 06/27/25 13:13 | 1       |
| Toluene-d8 (Surr)           | 89        |           | 80 - 120 |          | 06/23/25 21:10 | 1       |
| Toluene-d8 (Surr)           | 99        |           | 80 - 120 |          | 06/27/25 13:13 | 1       |
| 4-Bromofluorobenzene (Surr) | 107       |           | 80 - 120 |          | 06/23/25 21:10 | 1       |
| 4-Bromofluorobenzene (Surr) | 101       |           | 80 - 120 |          | 06/27/25 13:13 | 1       |

## Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

| Analyte      | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Acetonitrile | <10.0  |           | 10.0 | 2.60 | mg/L |   |          | 06/24/25 14:47 | 1       |
| Isobutanol   | <10.0  |           | 10.0 | 2.40 | mg/L |   |          | 06/24/25 14:47 | 1       |

## Method: SW846 8081B - Organochlorine Pesticides (GC)

| Analyte               | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| 4,4'-DDD              | <0.0907 |           | 0.0907 | 0.0227  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| 4,4'-DDE              | <0.0907 |           | 0.0907 | 0.0272  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| 4,4'-DDT              | <0.0907 |           | 0.0907 | 0.0181  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Aldrin                | <0.0907 |           | 0.0907 | 0.0199  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| alpha-BHC             | <0.0907 |           | 0.0907 | 0.00907 | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| beta-BHC              | <0.0907 |           | 0.0907 | 0.0381  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Chlordane (technical) | <1.81   |           | 1.81   | 0.354   | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| delta-BHC             | <0.0907 |           | 0.0907 | 0.0290  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Dieldrin              | <0.0907 |           | 0.0907 | 0.0190  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Endosulfan I          | <0.0907 |           | 0.0907 | 0.0254  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Endosulfan II         | <0.0907 |           | 0.0907 | 0.0236  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Endosulfan sulfate    | <0.0907 |           | 0.0907 | 0.0163  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Endrin                | <0.0907 |           | 0.0907 | 0.0254  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Endrin aldehyde       | <0.0907 |           | 0.0907 | 0.0245  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| gamma-BHC (Lindane)   | <0.0907 |           | 0.0907 | 0.00907 | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Heptachlor            | <0.0907 |           | 0.0907 | 0.0209  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Heptachlor epoxide    | <0.0907 |           | 0.0907 | 0.0290  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Methoxychlor          | <0.0907 |           | 0.0907 | 0.0290  | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |
| Toxaphene             | <1.81   |           | 1.81   | 0.907   | ug/L |   | 06/23/25 12:26 | 06/26/25 14:54 | 1       |

| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 76        |           | 10 - 150 | 06/23/25 12:26 | 06/26/25 14:54 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-2

Lab Sample ID: 310-309320-1

Date Collected: 06/19/25 16:53

Matrix: Ground Water

Date Received: 06/20/25 13:49

## Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

| Surrogate            | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 86        |           | 17 - 150 | 06/23/25 12:26 | 06/26/25 14:54 | 1       |

## Method: SW846 8151A - Herbicides (GC)

| Analyte           | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| 2,4-D             | <1.00  |           | 1.00 | 0.126 | ug/L |   | 06/25/25 10:43 | 06/26/25 01:42 | 1       |
| Silvex (2,4,5-TP) | <1.00  | *+        | 1.00 | 0.105 | ug/L |   | 06/25/25 10:43 | 06/26/25 01:42 | 1       |
| 2,4,5-T           | <1.00  |           | 1.00 | 0.140 | ug/L |   | 06/25/25 10:43 | 06/26/25 01:42 | 1       |

| Surrogate | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------------|----------------|---------|
| DCAA      | 91        |           | 25 - 130 | 06/25/25 10:43 | 06/26/25 01:42 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte   | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | <0.00200  |           | 0.00200  | 0.00100  | mg/L |   | 06/26/25 09:00 | 06/30/25 16:18 | 1       |
| Arsenic   | 0.000608  | J         | 0.00200  | 0.000530 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Barium    | 0.605     |           | 0.00200  | 0.000660 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Beryllium | <0.00100  |           | 0.00100  | 0.000330 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Cadmium   | 0.000922  |           | 0.000200 | 0.000100 | mg/L |   | 06/26/25 09:00 | 06/30/25 16:18 | 1       |
| Chromium  | <0.00500  |           | 0.00500  | 0.00180  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Cobalt    | 0.000600  |           | 0.000500 | 0.000170 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Copper    | <0.00500  |           | 0.00500  | 0.00320  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Lead      | <0.000500 |           | 0.000500 | 0.000330 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Nickel    | 0.00577   |           | 0.00500  | 0.00230  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Selenium  | <0.00500  |           | 0.00500  | 0.00140  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Silver    | <0.00100  | ^1+       | 0.00100  | 0.000500 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Thallium  | <0.00100  |           | 0.00100  | 0.000570 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Vanadium  | 0.00274   | J B       | 0.00500  | 0.00170  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Zinc      | <0.0200   |           | 0.0200   | 0.0130   | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |
| Tin       | <0.00500  |           | 0.00500  | 0.00250  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:38 | 1       |

## Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Mercury | <0.000200 |           | 0.000200 | 0.000110 | mg/L |   | 06/25/25 11:19 | 06/26/25 09:52 | 1       |

## General Chemistry

| Analyte                                 | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------------------------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Cyanide, Total (SW846 9012B)            | <0.0100 |           | 0.0100 | 0.00350 | mg/L |   | 06/25/25 09:00 | 06/25/25 21:32 | 1       |
| Sulfide (SW846 9034)                    | <1.00   |           | 1.00   | 0.231   | mg/L |   | 06/24/25 18:15 | 06/25/25 03:04 | 1       |
| Total Suspended Solids (USGS I-3765-85) | 1.63    | J         | 1.88   | 1.31    | mg/L |   |                | 06/23/25 14:43 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-8

Lab Sample ID: 310-309320-2

Date Collected: 06/19/25 11:47

Matrix: Ground Water

Date Received: 06/20/25 13:49

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                        | Result       | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------------------------|--------------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane      | <1.00        |           | 1.00  | 0.380 | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>1,1,1-Trichloroethane</b>   | <b>0.286</b> | <b>J</b>  | 1.00  | 0.190 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,1,2,2-Tetrachloroethane      | <1.00        |           | 1.00  | 0.470 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,1,2-Trichloroethane          | <1.00        |           | 1.00  | 0.450 | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>1,1-Dichloroethane</b>      | <b>39.5</b>  |           | 1.00  | 0.220 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,1-Dichloroethene             | <2.00        |           | 2.00  | 0.560 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,1-Dichloropropene            | <1.00        |           | 1.00  | 0.430 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,2,3-Trichloropropane         | <1.00        |           | 1.00  | 0.590 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,2,4-Trichlorobenzene         | <5.00        |           | 5.00  | 0.750 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,2-Dibromo-3-chloropropane    | <5.00        |           | 5.00  | 1.20  | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,2-Dibromoethane (EDB)        | <1.00        |           | 1.00  | 0.340 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,2-Dichlorobenzene            | <1.00        |           | 1.00  | 0.370 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,2-Dichloroethane             | <1.00        |           | 1.00  | 0.390 | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>1,2-Dichloropropane</b>     | <b>1.29</b>  |           | 1.00  | 0.270 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,3-Dichlorobenzene            | <1.00        |           | 1.00  | 0.300 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,3-Dichloropropane            | <1.00        |           | 1.00  | 0.400 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 1,4-Dichlorobenzene            | <1.00        |           | 1.00  | 0.230 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 2,2-Dichloropropane            | <4.00        |           | 4.00  | 0.690 | ug/L |   |          | 06/23/25 21:32 | 1       |
| 2-Butanone (MEK)               | <10.0        |           | 10.0  | 2.10  | ug/L |   |          | 06/23/25 21:32 | 1       |
| 2-Hexanone                     | <10.0        |           | 10.0  | 2.00  | ug/L |   |          | 06/23/25 21:32 | 1       |
| 4-Methyl-2-pentanone (MIBK)    | <10.0        |           | 10.0  | 2.10  | ug/L |   |          | 06/23/25 21:32 | 1       |
| Acetone                        | <10.0        |           | 10.0  | 3.10  | ug/L |   |          | 06/23/25 21:32 | 1       |
| Acrolein                       | <10.0        |           | 10.0  | 3.60  | ug/L |   |          | 06/23/25 21:32 | 1       |
| Acrylonitrile                  | <5.00        |           | 5.00  | 2.20  | ug/L |   |          | 06/23/25 21:32 | 1       |
| Allyl chloride                 | <2.00        |           | 2.00  | 0.700 | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>Benzene</b>                 | <b>1.51</b>  |           | 0.500 | 0.220 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Bromochloromethane             | <5.00        |           | 5.00  | 0.540 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Bromodichloromethane           | <1.00        |           | 1.00  | 0.390 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Bromoform                      | <5.00        |           | 5.00  | 0.780 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Bromomethane                   | <4.00        |           | 4.00  | 1.10  | ug/L |   |          | 06/23/25 21:32 | 1       |
| Carbon disulfide               | <1.00        |           | 1.00  | 0.450 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Carbon tetrachloride           | <2.00        |           | 2.00  | 0.650 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Chlorobenzene                  | <1.00        |           | 1.00  | 0.400 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Chlorodibromomethane           | <5.00        |           | 5.00  | 0.750 | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>Chloroethane</b>            | <b>2.20</b>  | <b>J</b>  | 4.00  | 0.790 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Chloroform                     | <3.00        |           | 3.00  | 1.30  | ug/L |   |          | 06/23/25 21:32 | 1       |
| Chloromethane                  | <3.00        |           | 3.00  | 0.610 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Chloroprene                    | <1.00        |           | 1.00  | 0.230 | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>cis-1,2-Dichloroethene</b>  | <b>6.84</b>  |           | 1.00  | 0.210 | ug/L |   |          | 06/27/25 13:34 | 1       |
| cis-1,3-Dichloropropene        | <5.00        |           | 5.00  | 0.250 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Dibromomethane                 | <1.00        |           | 1.00  | 0.330 | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>Dichlorodifluoromethane</b> | <b>14.1</b>  |           | 3.00  | 0.250 | ug/L |   |          | 06/27/25 13:34 | 1       |
| Ethyl methacrylate             | <2.00        |           | 2.00  | 0.680 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Ethylbenzene                   | <1.00        |           | 1.00  | 0.310 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Iodomethane                    | <10.0        |           | 10.0  | 7.00  | ug/L |   |          | 06/23/25 21:32 | 1       |
| Methacrylonitrile              | <10.0        |           | 10.0  | 3.30  | ug/L |   |          | 06/23/25 21:32 | 1       |
| Methyl methacrylate            | <2.00        |           | 2.00  | 0.760 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Methylene chloride             | <5.00        |           | 5.00  | 1.70  | ug/L |   |          | 06/23/25 21:32 | 1       |
| Naphthalene                    | <5.00        |           | 5.00  | 3.00  | ug/L |   |          | 06/23/25 21:32 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-8

Lab Sample ID: 310-309320-2

Date Collected: 06/19/25 11:47

Matrix: Ground Water

Date Received: 06/20/25 13:49

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                       | Result        | Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------------------|---------------|-----------|------|-------|------|---|----------|----------------|---------|
| Propionitrile                 | <10.0         |           | 10.0 | 3.40  | ug/L |   |          | 06/23/25 21:32 | 1       |
| Styrene                       | <1.00         |           | 1.00 | 0.370 | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>Tetrachloroethene</b>      | <b>1.28</b>   |           | 1.00 | 0.480 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Toluene                       | <1.00         |           | 1.00 | 0.430 | ug/L |   |          | 06/23/25 21:32 | 1       |
| trans-1,2-Dichloroethene      | <1.00         |           | 1.00 | 0.270 | ug/L |   |          | 06/23/25 21:32 | 1       |
| trans-1,3-Dichloropropene     | <5.00         |           | 5.00 | 0.560 | ug/L |   |          | 06/23/25 21:32 | 1       |
| trans-1,4-Dichloro-2-butene   | <10.0         |           | 10.0 | 1.10  | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>Trichloroethene</b>        | <b>19.5</b>   |           | 1.00 | 0.430 | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>Trichlorofluoromethane</b> | <b>1.22 J</b> |           | 4.00 | 0.380 | ug/L |   |          | 06/27/25 13:34 | 1       |
| Vinyl acetate                 | <10.0         |           | 10.0 | 2.50  | ug/L |   |          | 06/23/25 21:32 | 1       |
| <b>Vinyl chloride</b>         | <b>2.09</b>   |           | 1.00 | 0.180 | ug/L |   |          | 06/23/25 21:32 | 1       |
| Xylenes, Total                | <3.00         |           | 3.00 | 0.400 | ug/L |   |          | 06/23/25 21:32 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 116       |           | 76 - 130 |          | 06/23/25 21:32 | 1       |
| Dibromofluoromethane (Surr) | 114       |           | 76 - 130 |          | 06/27/25 13:34 | 1       |
| Toluene-d8 (Surr)           | 88        |           | 80 - 120 |          | 06/23/25 21:32 | 1       |
| Toluene-d8 (Surr)           | 98        |           | 80 - 120 |          | 06/27/25 13:34 | 1       |
| 4-Bromofluorobenzene (Surr) | 105       |           | 80 - 120 |          | 06/23/25 21:32 | 1       |
| 4-Bromofluorobenzene (Surr) | 99        |           | 80 - 120 |          | 06/27/25 13:34 | 1       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte        | Result      | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------|-------------|-----------|------|------|------|---|----------|----------------|---------|
| <b>Methane</b> | <b>3670</b> |           | 10.0 | 1.74 | ug/L |   |          | 07/01/25 10:40 | 10      |

| Surrogate             | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,1,1-Trifluoroethane | 100       |           | 60 - 140 |          | 07/01/25 10:40 | 10      |

## Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

| Analyte      | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Acetonitrile | <10.0  |           | 10.0 | 2.60 | mg/L |   |          | 06/24/25 15:07 | 1       |
| Isobutanol   | <10.0  |           | 10.0 | 2.40 | mg/L |   |          | 06/24/25 15:07 | 1       |

## Method: SW846 8081B - Organochlorine Pesticides (GC)

| Analyte               | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| 4,4'-DDD              | <0.0900 |           | 0.0900 | 0.0225  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| 4,4'-DDE              | <0.0900 |           | 0.0900 | 0.0270  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| 4,4'-DDT              | <0.0900 |           | 0.0900 | 0.0180  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Aldrin                | <0.0900 |           | 0.0900 | 0.0198  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| alpha-BHC             | <0.0900 |           | 0.0900 | 0.00900 | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| beta-BHC              | <0.0900 |           | 0.0900 | 0.0378  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Chlordane (technical) | <1.80   |           | 1.80   | 0.351   | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| delta-BHC             | <0.0900 |           | 0.0900 | 0.0288  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Dieldrin              | <0.0900 |           | 0.0900 | 0.0189  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Endosulfan I          | <0.0900 |           | 0.0900 | 0.0252  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Endosulfan II         | <0.0900 |           | 0.0900 | 0.0234  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Endosulfan sulfate    | <0.0900 |           | 0.0900 | 0.0162  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Endrin                | <0.0900 |           | 0.0900 | 0.0252  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Endrin aldehyde       | <0.0900 |           | 0.0900 | 0.0243  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| gamma-BHC (Lindane)   | <0.0900 |           | 0.0900 | 0.00900 | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Heptachlor            | <0.0900 |           | 0.0900 | 0.0207  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-8

Lab Sample ID: 310-309320-2

Date Collected: 06/19/25 11:47

Matrix: Ground Water

Date Received: 06/20/25 13:49

## Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte                       | Result    | Qualifier | RL       | MDL    | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|--------|------|---|----------------|----------------|---------|
| Heptachlor epoxide            | <0.0900   |           | 0.0900   | 0.0288 | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Methoxychlor                  | <0.0900   |           | 0.0900   | 0.0288 | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Toxaphene                     | <1.80     |           | 1.80     | 0.900  | ug/L |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |        |      |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 70        |           | 10 - 150 |        |      |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |
| Tetrachloro-m-xylene          | 85        |           | 17 - 150 |        |      |   | 06/23/25 12:26 | 06/26/25 15:07 | 1       |

## Method: SW846 8151A - Herbicides (GC)

| Analyte           | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------|-----------|-----------|----------|-------|------|---|----------------|----------------|---------|
| 2,4-D             | 1.25      |           | 1.00     | 0.126 | ug/L |   | 06/25/25 10:43 | 06/26/25 01:59 | 1       |
| Silvex (2,4,5-TP) | <1.00     | *+        | 1.00     | 0.105 | ug/L |   | 06/25/25 10:43 | 06/26/25 01:59 | 1       |
| 2,4,5-T           | <1.00     |           | 1.00     | 0.140 | ug/L |   | 06/25/25 10:43 | 06/26/25 01:59 | 1       |
| Surrogate         | %Recovery | Qualifier | Limits   |       |      |   | Prepared       | Analyzed       | Dil Fac |
| DCAA              | 72        |           | 25 - 130 |       |      |   | 06/25/25 10:43 | 06/26/25 01:59 | 1       |

## Method: SW846 9056A - Anions, Ion Chromatography

| Analyte      | Result | Qualifier | RL    | MDL    | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|-------|--------|------|---|----------|----------------|---------|
| Nitrate as N | <0.200 |           | 0.200 | 0.0780 | mg/L |   |          | 06/20/25 20:29 | 1       |
| Sulfate      | 15.4   |           | 1.00  | 0.420  | mg/L |   |          | 06/20/25 20:29 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte   | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | 0.00119   | J         | 0.00200  | 0.00100  | mg/L |   | 06/26/25 09:00 | 06/30/25 16:21 | 1       |
| Arsenic   | 0.000836  | J         | 0.00200  | 0.000530 | mg/L |   | 06/26/25 09:00 | 06/30/25 16:21 | 1       |
| Barium    | 0.980     |           | 0.00200  | 0.000660 | mg/L |   | 06/26/25 09:00 | 06/30/25 16:21 | 1       |
| Beryllium | <0.00100  |           | 0.00100  | 0.000330 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |
| Cadmium   | <0.000200 |           | 0.000200 | 0.000100 | mg/L |   | 06/26/25 09:00 | 06/30/25 16:21 | 1       |
| Chromium  | 0.00698   |           | 0.00500  | 0.00180  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |
| Cobalt    | 0.000774  |           | 0.000500 | 0.000170 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |
| Copper    | <0.00500  |           | 0.00500  | 0.00320  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |
| Lead      | 0.000487  | J         | 0.000500 | 0.000330 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |
| Nickel    | 0.00425   | J         | 0.00500  | 0.00230  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |
| Selenium  | <0.00500  |           | 0.00500  | 0.00140  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |
| Silver    | <0.00100  | ^1+       | 0.00100  | 0.000500 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |
| Thallium  | <0.00100  |           | 0.00100  | 0.000570 | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |
| Vanadium  | 0.00185   | J         | 0.00500  | 0.00170  | mg/L |   | 06/26/25 09:00 | 06/30/25 16:21 | 1       |
| Zinc      | <0.0200   |           | 0.0200   | 0.0130   | mg/L |   | 06/26/25 09:00 | 06/30/25 16:21 | 1       |
| Tin       | <0.00500  |           | 0.00500  | 0.00250  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |
| Iron      | 0.492     |           | 0.100    | 0.0500   | mg/L |   | 06/26/25 09:00 | 06/30/25 16:21 | 1       |
| Manganese | 0.0522    |           | 0.0100   | 0.00360  | mg/L |   | 06/26/25 09:00 | 06/28/25 20:41 | 1       |

## Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Mercury | <0.000200 |           | 0.000200 | 0.000110 | mg/L |   | 06/25/25 11:19 | 06/26/25 09:55 | 1       |

## General Chemistry

| Analyte                      | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Cyanide, Total (SW846 9012B) | <0.0100 |           | 0.0100 | 0.00350 | mg/L |   | 06/25/25 09:00 | 06/25/25 21:32 | 1       |
| Sulfide (SW846 9034)         | <2.50   |           | 2.50   | 0.578   | mg/L |   | 06/24/25 18:22 | 06/25/25 03:12 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-8  
Date Collected: 06/19/25 11:47  
Date Received: 06/20/25 13:49

Lab Sample ID: 310-309320-2  
Matrix: Ground Water

| General Chemistry (Continued)           |        |           |      |      |      |   |          |                |         |
|-----------------------------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Analyte                                 | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
| Total Suspended Solids (USGS I-3765-85) | 9.75   |           | 1.88 | 1.31 | mg/L |   |          | 06/23/25 14:43 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank

Lab Sample ID: 310-309320-3

Date Collected: 06/19/25 00:00

Matrix: Trip Blank

Date Received: 06/20/25 13:49

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.190 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.470 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,1-Dichloroethane          | <1.00  |           | 1.00  | 0.220 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.560 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,1-Dichloropropene         | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.590 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,2,4-Trichlorobenzene      | <5.00  |           | 5.00  | 0.750 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,3-Dichlorobenzene         | <1.00  |           | 1.00  | 0.300 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,3-Dichloropropane         | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.230 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 2,2-Dichloropropane         | <4.00  |           | 4.00  | 0.690 | ug/L |   |          | 06/23/25 19:17 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/23/25 19:17 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 2.00  | ug/L |   |          | 06/23/25 19:17 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Acetone                     | <10.0  |           | 10.0  | 3.10  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Acrolein                    | <10.0  |           | 10.0  | 3.60  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Allyl chloride              | <2.00  |           | 2.00  | 0.700 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Benzene                     | <0.500 |           | 0.500 | 0.220 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 0.540 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/27/25 12:29 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 0.780 | ug/L |   |          | 06/27/25 12:29 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 0.750 | ug/L |   |          | 06/27/25 12:29 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.790 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Chloroprene                 | <1.00  |           | 1.00  | 0.230 | ug/L |   |          | 06/23/25 19:17 | 1       |
| cis-1,2-Dichloroethene      | <1.00  |           | 1.00  | 0.210 | ug/L |   |          | 06/27/25 12:29 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 0.250 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Dichlorodifluoromethane     | <3.00  |           | 3.00  | 0.250 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Ethyl methacrylate          | <2.00  |           | 2.00  | 0.680 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.310 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 7.00  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Methacrylonitrile           | <10.0  |           | 10.0  | 3.30  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Methyl methacrylate         | <2.00  |           | 2.00  | 0.760 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Naphthalene                 | <5.00  |           | 5.00  | 3.00  | ug/L |   |          | 06/23/25 19:17 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank

Lab Sample ID: 310-309320-3

Date Collected: 06/19/25 00:00

Matrix: Trip Blank

Date Received: 06/20/25 13:49

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                     | Result | Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|------|-------|------|---|----------|----------------|---------|
| Propionitrile               | <10.0  |           | 10.0 | 3.40  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Styrene                     | <1.00  |           | 1.00 | 0.370 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00 | 0.480 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Toluene                     | <1.00  |           | 1.00 | 0.430 | ug/L |   |          | 06/23/25 19:17 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00 | 0.270 | ug/L |   |          | 06/23/25 19:17 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00 | 0.560 | ug/L |   |          | 06/23/25 19:17 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0 | 1.10  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Trichloroethene             | <1.00  |           | 1.00 | 0.430 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00 | 0.380 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0 | 2.50  | ug/L |   |          | 06/23/25 19:17 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00 | 0.180 | ug/L |   |          | 06/23/25 19:17 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00 | 0.400 | ug/L |   |          | 06/23/25 19:17 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 115       |           | 76 - 130 |          | 06/23/25 19:17 | 1       |
| Dibromofluoromethane (Surr) | 112       |           | 76 - 130 |          | 06/27/25 12:29 | 1       |
| Toluene-d8 (Surr)           | 89        |           | 80 - 120 |          | 06/23/25 19:17 | 1       |
| Toluene-d8 (Surr)           | 100       |           | 80 - 120 |          | 06/27/25 12:29 | 1       |
| 4-Bromofluorobenzene (Surr) | 104       |           | 80 - 120 |          | 06/23/25 19:17 | 1       |
| 4-Bromofluorobenzene (Surr) | 102       |           | 80 - 120 |          | 06/27/25 12:29 | 1       |

# Definitions/Glossary

Client: SCS Engineers

Job ID: 310-309320-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Qualifiers

### GC/MS VOA

| 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. |

### GC Semi VOA

| Qualifier | Qualifier Description                                      |
|-----------|------------------------------------------------------------|
| *+        | LCS and/or LCSD is outside acceptance limits, high biased. |

### Metals

| Qualifier | Qualifier Description                                                                                                                                                       |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ^1+       | Initial Calibration Verification (ICV) is outside acceptance limits, high biased.                                                                                           |
| ^3+       | Reporting Limit Check Standard is outside acceptance limits, high biased                                                                                                    |
| B         | Compound was found in the blank and sample.                                                                                                                                 |
| F5        | Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both. |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.                                                              |

### General Chemistry

| 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                                                                                       |

Eurofins Cedar Falls

# Surrogate Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |
|---------------|------------------|------------------------------------------------|-----------------|-----------------|
|               |                  | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |
| 310-309320-1  | MW-2             | 113                                            | 89              | 107             |
| 310-309320-1  | MW-2             | 114                                            | 99              | 101             |
| 310-309320-2  | MW-8             | 116                                            | 88              | 105             |
| 310-309320-2  | MW-8             | 114                                            | 98              | 99              |

### Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Trip Blank

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |
|---------------|------------------|------------------------------------------------|-----------------|-----------------|
|               |                  | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |
| 310-309320-3  | Trip Blank       | 115                                            | 89              | 104             |
| 310-309320-3  | Trip Blank       | 112                                            | 100             | 102             |

### Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID    | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |
|------------------|--------------------|------------------------------------------------|-----------------|-----------------|
|                  |                    | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |
| LCS 310-458497/7 | Lab Control Sample | 98                                             | 93              | 101             |
| LCS 310-458497/8 | Lab Control Sample | 110                                            | 89              | 108             |
| LCS 310-458995/6 | Lab Control Sample | 95                                             | 101             | 98              |
| LCS 310-458995/7 | Lab Control Sample | 107                                            | 103             | 99              |
| MB 310-458497/6  | Method Blank       | 110                                            | 91              | 104             |
| MB 310-458995/5  | Method Blank       | 104                                            | 100             | 101             |

### Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

## Method: RSK-175 - Dissolved Gases (GC)

Matrix: Ground Water

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |  |  |
|---------------|------------------|------------------------------------------------|--|--|
|               |                  | TFE1<br>(60-140)                               |  |  |
| 310-309320-2  | MW-8             | 100                                            |  |  |

### Surrogate Legend

TFE = 1,1,1-Trifluoroethane

Eurofins Cedar Falls

# Surrogate Summary

Client: SCS Engineers

Job ID: 310-309320-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: RSK-175 - Dissolved Gases (GC)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID    | Client Sample ID   | TFE1<br>(60-140) |
|------------------|--------------------|------------------|
| LCS 240-662111/4 | Lab Control Sample | 100              |
| MB 240-662111/3  | Method Blank       | 105              |

#### Surrogate Legend

TFE = 1,1,1-Trifluoroethane

## Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Ground Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | DCB2<br>(10-150) | TCX2<br>(17-150) |
|---------------|------------------|------------------|------------------|
| 310-309320-1  | MW-2             | 76               | 86               |
| 310-309320-2  | MW-8             | 70               | 85               |

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

## Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID     | Client Sample ID | DCB2<br>(10-150) | TCX2<br>(17-150) |
|-------------------|------------------|------------------|------------------|
| LB 310-458046/1-D | Method Blank     | 83               | 100              |

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

## Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID   | DCB1<br>(10-150) | TCX1<br>(17-150) |
|--------------------|--------------------|------------------|------------------|
| LCS 310-458464/2-A | Lab Control Sample | 61               | 62               |
| MB 310-458464/1-A  | Method Blank       | 63               | 68               |

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

## Method: 8151A - Herbicides (GC)

Matrix: Ground Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | DCPAA2<br>(25-130) |
|---------------|------------------|--------------------|
| 310-309320-1  | MW-2             | 91                 |
| 310-309320-2  | MW-8             | 72                 |

#### Surrogate Legend

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# Surrogate Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling  
DCPAA = DCAA

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Method: 8151A - Herbicides (GC)  
Matrix: Water

Prep Type: Total/NA

| Percent Surrogate Recovery (Acceptance Limits) |                        |                    |
|------------------------------------------------|------------------------|--------------------|
| Lab Sample ID                                  | Client Sample ID       | DCPAA2<br>(25-130) |
| LCS 500-823279/2-A                             | Lab Control Sample     | 92                 |
| LCSD 500-823279/3-A                            | Lab Control Sample Dup | 93                 |
| MB 500-823279/1-A                              | Method Blank           | 70                 |
| Surrogate Legend                               |                        |                    |
| DCPAA = DCAA                                   |                        |                    |

# QC Sample Results

Client: SCS Engineers

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-458497/6

Matrix: Water

Analysis Batch: 458497

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00     |              | 1.00  | 0.380 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,1,1-Trichloroethane       | <1.00     |              | 1.00  | 0.190 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00     |              | 1.00  | 0.470 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,1,2-Trichloroethane       | <1.00     |              | 1.00  | 0.450 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,1-Dichloroethane          | <1.00     |              | 1.00  | 0.220 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,1-Dichloroethene          | <2.00     |              | 2.00  | 0.560 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,1-Dichloropropene         | <1.00     |              | 1.00  | 0.430 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,2,3-Trichloropropane      | <1.00     |              | 1.00  | 0.590 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,2,4-Trichlorobenzene      | <5.00     |              | 5.00  | 0.750 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00     |              | 5.00  | 1.20  | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00     |              | 1.00  | 0.340 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,2-Dichlorobenzene         | <1.00     |              | 1.00  | 0.370 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,2-Dichloroethane          | <1.00     |              | 1.00  | 0.390 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,2-Dichloropropane         | <1.00     |              | 1.00  | 0.270 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,3-Dichlorobenzene         | <1.00     |              | 1.00  | 0.300 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,3-Dichloropropane         | <1.00     |              | 1.00  | 0.400 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 1,4-Dichlorobenzene         | <1.00     |              | 1.00  | 0.230 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 2,2-Dichloropropane         | <4.00     |              | 4.00  | 0.690 | ug/L |   |          | 06/23/25 17:24 | 1       |
| 2-Butanone (MEK)            | <10.0     |              | 10.0  | 2.10  | ug/L |   |          | 06/23/25 17:24 | 1       |
| 2-Hexanone                  | <10.0     |              | 10.0  | 2.00  | ug/L |   |          | 06/23/25 17:24 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0     |              | 10.0  | 2.10  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Acetone                     | <10.0     |              | 10.0  | 3.10  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Acrolein                    | <10.0     |              | 10.0  | 3.60  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Acrylonitrile               | <5.00     |              | 5.00  | 2.20  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Allyl chloride              | <2.00     |              | 2.00  | 0.700 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Benzene                     | <0.500    |              | 0.500 | 0.220 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Bromochloromethane          | <5.00     |              | 5.00  | 0.540 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Bromodichloromethane        | <1.00     |              | 1.00  | 0.390 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Bromoform                   | <5.00     |              | 5.00  | 0.780 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Bromomethane                | <4.00     |              | 4.00  | 1.10  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Carbon disulfide            | <1.00     |              | 1.00  | 0.450 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Carbon tetrachloride        | <2.00     |              | 2.00  | 0.650 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Chlorobenzene               | <1.00     |              | 1.00  | 0.400 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Chlorodibromomethane        | <5.00     |              | 5.00  | 0.750 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Chloroethane                | <4.00     |              | 4.00  | 0.790 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Chloroform                  | <3.00     |              | 3.00  | 1.30  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Chloromethane               | <3.00     |              | 3.00  | 0.610 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Chloroprene                 | <1.00     |              | 1.00  | 0.230 | ug/L |   |          | 06/23/25 17:24 | 1       |
| cis-1,3-Dichloropropene     | <5.00     |              | 5.00  | 0.250 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Dibromomethane              | <1.00     |              | 1.00  | 0.330 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Dichlorodifluoromethane     | <3.00     |              | 3.00  | 0.250 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Ethyl methacrylate          | <2.00     |              | 2.00  | 0.680 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Ethylbenzene                | <1.00     |              | 1.00  | 0.310 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Iodomethane                 | <10.0     |              | 10.0  | 7.00  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Methacrylonitrile           | <10.0     |              | 10.0  | 3.30  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Methyl methacrylate         | <2.00     |              | 2.00  | 0.760 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Methylene chloride          | <5.00     |              | 5.00  | 1.70  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Naphthalene                 | <5.00     |              | 5.00  | 3.00  | ug/L |   |          | 06/23/25 17:24 | 1       |

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-309320-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-458497/6

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458497

| Analyte                     | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|------|-------|------|---|----------|----------------|---------|
| Propionitrile               | <10.0     |              | 10.0 | 3.40  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Styrene                     | <1.00     |              | 1.00 | 0.370 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Tetrachloroethene           | <1.00     |              | 1.00 | 0.480 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Toluene                     | <1.00     |              | 1.00 | 0.430 | ug/L |   |          | 06/23/25 17:24 | 1       |
| trans-1,2-Dichloroethene    | <1.00     |              | 1.00 | 0.270 | ug/L |   |          | 06/23/25 17:24 | 1       |
| trans-1,3-Dichloropropene   | <5.00     |              | 5.00 | 0.560 | ug/L |   |          | 06/23/25 17:24 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0     |              | 10.0 | 1.10  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Trichloroethene             | <1.00     |              | 1.00 | 0.430 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Trichlorofluoromethane      | <4.00     |              | 4.00 | 0.380 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Vinyl acetate               | <10.0     |              | 10.0 | 2.50  | ug/L |   |          | 06/23/25 17:24 | 1       |
| Vinyl chloride              | <1.00     |              | 1.00 | 0.180 | ug/L |   |          | 06/23/25 17:24 | 1       |
| Xylenes, Total              | <3.00     |              | 3.00 | 0.400 | ug/L |   |          | 06/23/25 17:24 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 110          |              | 76 - 130 |          | 06/23/25 17:24 | 1       |
| Toluene-d8 (Surr)           | 91           |              | 80 - 120 |          | 06/23/25 17:24 | 1       |
| 4-Bromofluorobenzene (Surr) | 104          |              | 80 - 120 |          | 06/23/25 17:24 | 1       |

Lab Sample ID: LCS 310-458497/7

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458497

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,1,1,2-Tetrachloroethane   | 20.0        | 19.09      |               | ug/L |   | 95   | 70 - 121    |
| 1,1,1-Trichloroethane       | 20.0        | 21.13      |               | ug/L |   | 106  | 69 - 130    |
| 1,1,2,2-Tetrachloroethane   | 20.0        | 18.78      |               | ug/L |   | 94   | 70 - 122    |
| 1,1,2-Trichloroethane       | 20.0        | 19.83      |               | ug/L |   | 99   | 75 - 121    |
| 1,1-Dichloroethane          | 20.0        | 19.15      |               | ug/L |   | 96   | 69 - 127    |
| 1,1-Dichloroethene          | 20.0        | 20.68      |               | ug/L |   | 103  | 64 - 134    |
| 1,1-Dichloropropene         | 20.0        | 22.12      |               | ug/L |   | 111  | 70 - 133    |
| 1,2,3-Trichloropropane      | 20.0        | 18.45      |               | ug/L |   | 92   | 70 - 122    |
| 1,2,4-Trichlorobenzene      | 20.0        | 19.30      |               | ug/L |   | 97   | 69 - 125    |
| 1,2-Dibromo-3-chloropropane | 20.0        | 19.84      |               | ug/L |   | 99   | 62 - 132    |
| 1,2-Dibromoethane (EDB)     | 20.0        | 20.41      |               | ug/L |   | 102  | 74 - 122    |
| 1,2-Dichlorobenzene         | 20.0        | 18.66      |               | ug/L |   | 93   | 74 - 120    |
| 1,2-Dichloroethane          | 20.0        | 18.69      |               | ug/L |   | 93   | 68 - 125    |
| 1,2-Dichloropropane         | 20.0        | 21.06      |               | ug/L |   | 105  | 72 - 128    |
| 1,3-Dichlorobenzene         | 20.0        | 18.58      |               | ug/L |   | 93   | 71 - 120    |
| 1,3-Dichloropropane         | 20.0        | 18.87      |               | ug/L |   | 94   | 72 - 125    |
| 1,4-Dichlorobenzene         | 20.0        | 17.98      |               | ug/L |   | 90   | 72 - 120    |
| 2,2-Dichloropropane         | 20.0        | 22.54      |               | ug/L |   | 113  | 51 - 146    |
| 2-Butanone (MEK)            | 40.0        | 40.98      |               | ug/L |   | 102  | 60 - 134    |
| 2-Hexanone                  | 40.0        | 39.19      |               | ug/L |   | 98   | 62 - 139    |
| 4-Methyl-2-pentanone (MIBK) | 40.0        | 36.89      |               | ug/L |   | 92   | 62 - 136    |
| Acetone                     | 40.0        | 38.99      |               | ug/L |   | 97   | 59 - 136    |
| Acrolein                    | 94.8        | 102.5      |               | ug/L |   | 108  | 50 - 150    |
| Acrylonitrile               | 200         | 202.4      |               | ug/L |   | 101  | 50 - 150    |
| Allyl chloride              | 20.0        | 19.02      |               | ug/L |   | 95   | 61 - 136    |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Job ID: 310-309320-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-458497/7

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458497

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|-------------|
| Benzene                     | 20.0        | 20.63      |               | ug/L |   | 103  | 71 - 125    |
| Bromochloromethane          | 20.0        | 22.17      |               | ug/L |   | 111  | 69 - 131    |
| Bromodichloromethane        | 20.0        | 19.44      |               | ug/L |   | 97   | 70 - 122    |
| Bromoform                   | 20.0        | 17.70      |               | ug/L |   | 88   | 62 - 122    |
| Carbon disulfide            | 20.0        | 19.85      |               | ug/L |   | 99   | 58 - 137    |
| Carbon tetrachloride        | 20.0        | 21.41      |               | ug/L |   | 107  | 63 - 136    |
| Chlorobenzene               | 20.0        | 18.75      |               | ug/L |   | 94   | 74 - 120    |
| Chlorodibromomethane        | 20.0        | 17.09      |               | ug/L |   | 85   | 69 - 121    |
| Chloroform                  | 20.0        | 18.92      |               | ug/L |   | 95   | 72 - 122    |
| Chloroprene                 | 20.0        | 20.94      |               | ug/L |   | 105  | 67 - 136    |
| cis-1,2-Dichloroethene      | 20.0        | 21.17      |               | ug/L |   | 106  | 72 - 123    |
| cis-1,3-Dichloropropene     | 20.0        | 17.03      |               | ug/L |   | 85   | 72 - 123    |
| Dibromomethane              | 20.0        | 20.49      |               | ug/L |   | 102  | 72 - 122    |
| Ethyl methacrylate          | 20.0        | 20.05      |               | ug/L |   | 100  | 68 - 128    |
| Ethylbenzene                | 20.0        | 19.13      |               | ug/L |   | 96   | 75 - 120    |
| Iodomethane                 | 20.0        | 14.03      |               | ug/L |   | 70   | 18 - 150    |
| Methacrylonitrile           | 200         | 215.1      |               | ug/L |   | 108  | 67 - 128    |
| Methyl methacrylate         | 40.0        | 43.19      |               | ug/L |   | 108  | 69 - 129    |
| Methylene chloride          | 20.0        | 21.88      |               | ug/L |   | 109  | 72 - 128    |
| Naphthalene                 | 20.0        | 19.81      |               | ug/L |   | 99   | 69 - 126    |
| Propionitrile               | 200         | 209.0      |               | ug/L |   | 105  | 68 - 131    |
| Styrene                     | 20.0        | 19.83      |               | ug/L |   | 99   | 74 - 122    |
| Tetrachloroethene           | 20.0        | 20.82      |               | ug/L |   | 104  | 70 - 128    |
| Toluene                     | 20.0        | 19.23      |               | ug/L |   | 96   | 74 - 120    |
| trans-1,2-Dichloroethene    | 20.0        | 21.09      |               | ug/L |   | 105  | 67 - 127    |
| trans-1,3-Dichloropropene   | 20.0        | 16.31      |               | ug/L |   | 82   | 67 - 123    |
| trans-1,4-Dichloro-2-butene | 20.0        | 16.59      |               | ug/L |   | 83   | 50 - 150    |
| Trichloroethene             | 20.0        | 21.21      |               | ug/L |   | 106  | 70 - 128    |
| Vinyl acetate               | 40.0        | 39.46      |               | ug/L |   | 99   | 50 - 150    |
| Xylenes, Total              | 40.0        | 39.91      |               | ug/L |   | 100  | 74 - 121    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| Dibromofluoromethane (Surr) | 98            |               | 76 - 130 |
| Toluene-d8 (Surr)           | 93            |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 101           |               | 80 - 120 |

Lab Sample ID: LCS 310-458497/8

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458497

| Analyte                 | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------------------|-------------|------------|---------------|------|---|------|-------------|
| Bromomethane            | 20.0        | 25.71      |               | ug/L |   | 129  | 33 - 138    |
| Chloroethane            | 20.0        | 25.06      |               | ug/L |   | 125  | 59 - 139    |
| Chloromethane           | 20.0        | 25.94      |               | ug/L |   | 130  | 52 - 146    |
| Dichlorodifluoromethane | 20.0        | 24.22      |               | ug/L |   | 121  | 45 - 150    |
| Trichlorofluoromethane  | 20.0        | 24.62      |               | ug/L |   | 123  | 55 - 150    |
| Vinyl chloride          | 20.0        | 25.20      |               | ug/L |   | 126  | 60 - 142    |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Job ID: 310-309320-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-458497/8

Matrix: Water

Analysis Batch: 458497

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Surrogate                   | LCS LCS   |           | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| Dibromofluoromethane (Surr) | 110       |           | 76 - 130 |
| Toluene-d8 (Surr)           | 89        |           | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 108       |           | 80 - 120 |

Lab Sample ID: MB 310-458995/5

Matrix: Water

Analysis Batch: 458995

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00     |              | 1.00  | 0.380 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,1,1-Trichloroethane       | <1.00     |              | 1.00  | 0.190 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00     |              | 1.00  | 0.470 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,1,2-Trichloroethane       | <1.00     |              | 1.00  | 0.450 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,1-Dichloroethane          | <1.00     |              | 1.00  | 0.220 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,1-Dichloroethene          | <2.00     |              | 2.00  | 0.560 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,1-Dichloropropene         | <1.00     |              | 1.00  | 0.430 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,2,4-Trichlorobenzene      | <5.00     |              | 5.00  | 0.750 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00     |              | 5.00  | 1.20  | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00     |              | 1.00  | 0.340 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,2-Dichlorobenzene         | <1.00     |              | 1.00  | 0.370 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,2-Dichloroethane          | <1.00     |              | 1.00  | 0.390 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,2-Dichloropropane         | <1.00     |              | 1.00  | 0.270 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,3-Dichlorobenzene         | <1.00     |              | 1.00  | 0.300 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,3-Dichloropropane         | <1.00     |              | 1.00  | 0.400 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 1,4-Dichlorobenzene         | <1.00     |              | 1.00  | 0.230 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 2,2-Dichloropropane         | <4.00     |              | 4.00  | 0.690 | ug/L |   |          | 06/27/25 10:40 | 1       |
| 2-Hexanone                  | <10.0     |              | 10.0  | 2.00  | ug/L |   |          | 06/27/25 10:40 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0     |              | 10.0  | 2.10  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Acetone                     | <10.0     |              | 10.0  | 3.10  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Acrolein                    | <10.0     |              | 10.0  | 3.60  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Acrylonitrile               | <5.00     |              | 5.00  | 2.20  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Allyl chloride              | <2.00     |              | 2.00  | 0.700 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Benzene                     | <0.500    |              | 0.500 | 0.220 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Bromochloromethane          | <5.00     |              | 5.00  | 0.540 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Bromodichloromethane        | <1.00     |              | 1.00  | 0.390 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Bromoform                   | <5.00     |              | 5.00  | 0.780 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Bromomethane                | <4.00     |              | 4.00  | 1.10  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Carbon disulfide            | <1.00     |              | 1.00  | 0.450 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Carbon tetrachloride        | <2.00     |              | 2.00  | 0.650 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Chlorobenzene               | <1.00     |              | 1.00  | 0.400 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Chlorodibromomethane        | <5.00     |              | 5.00  | 0.750 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Chloroethane                | <4.00     |              | 4.00  | 0.790 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Chloroform                  | <3.00     |              | 3.00  | 1.30  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Chloromethane               | <3.00     |              | 3.00  | 0.610 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Chloroprene                 | <1.00     |              | 1.00  | 0.230 | ug/L |   |          | 06/27/25 10:40 | 1       |
| cis-1,2-Dichloroethene      | <1.00     |              | 1.00  | 0.210 | ug/L |   |          | 06/27/25 10:40 | 1       |
| cis-1,3-Dichloropropene     | <5.00     |              | 5.00  | 0.250 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Dibromomethane              | <1.00     |              | 1.00  | 0.330 | ug/L |   |          | 06/27/25 10:40 | 1       |

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-309320-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-458995/5

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458995

| Analyte                     | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|------|-------|------|---|----------|----------------|---------|
| Dichlorodifluoromethane     | <3.00     |              | 3.00 | 0.250 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Ethyl methacrylate          | <2.00     |              | 2.00 | 0.680 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Ethylbenzene                | <1.00     |              | 1.00 | 0.310 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Iodomethane                 | <10.0     |              | 10.0 | 7.00  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Methacrylonitrile           | <10.0     |              | 10.0 | 3.30  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Methyl methacrylate         | <2.00     |              | 2.00 | 0.760 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Methylene chloride          | <5.00     |              | 5.00 | 1.70  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Naphthalene                 | <5.00     |              | 5.00 | 3.00  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Propionitrile               | <10.0     |              | 10.0 | 3.40  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Styrene                     | <1.00     |              | 1.00 | 0.370 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Tetrachloroethene           | <1.00     |              | 1.00 | 0.480 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Toluene                     | <1.00     |              | 1.00 | 0.430 | ug/L |   |          | 06/27/25 10:40 | 1       |
| trans-1,2-Dichloroethene    | <1.00     |              | 1.00 | 0.270 | ug/L |   |          | 06/27/25 10:40 | 1       |
| trans-1,3-Dichloropropene   | <5.00     |              | 5.00 | 0.560 | ug/L |   |          | 06/27/25 10:40 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0     |              | 10.0 | 1.10  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Trichloroethene             | <1.00     |              | 1.00 | 0.430 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Trichlorofluoromethane      | <4.00     |              | 4.00 | 0.380 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Vinyl acetate               | <10.0     |              | 10.0 | 2.50  | ug/L |   |          | 06/27/25 10:40 | 1       |
| Vinyl chloride              | <1.00     |              | 1.00 | 0.180 | ug/L |   |          | 06/27/25 10:40 | 1       |
| Xylenes, Total              | <3.00     |              | 3.00 | 0.400 | ug/L |   |          | 06/27/25 10:40 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 104          |              | 76 - 130 |          | 06/27/25 10:40 | 1       |
| Toluene-d8 (Surr)           | 100          |              | 80 - 120 |          | 06/27/25 10:40 | 1       |
| 4-Bromofluorobenzene (Surr) | 101          |              | 80 - 120 |          | 06/27/25 10:40 | 1       |

Lab Sample ID: LCS 310-458995/6

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458995

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,1,1,2-Tetrachloroethane   | 10.0        | 8.909      |               | ug/L |   | 89   | 70 - 121    |
| 1,1,1-Trichloroethane       | 10.0        | 9.305      |               | ug/L |   | 93   | 69 - 130    |
| 1,1,2,2-Tetrachloroethane   | 10.0        | 9.921      |               | ug/L |   | 99   | 70 - 122    |
| 1,1,2-Trichloroethane       | 10.0        | 9.394      |               | ug/L |   | 94   | 75 - 121    |
| 1,1-Dichloroethane          | 10.0        | 9.447      |               | ug/L |   | 94   | 69 - 127    |
| 1,1-Dichloroethene          | 10.0        | 9.210      |               | ug/L |   | 92   | 64 - 134    |
| 1,1-Dichloropropene         | 10.0        | 9.337      |               | ug/L |   | 93   | 70 - 133    |
| 1,2,4-Trichlorobenzene      | 10.0        | 10.33      |               | ug/L |   | 103  | 69 - 125    |
| 1,2-Dibromo-3-chloropropane | 10.0        | 9.115      |               | ug/L |   | 91   | 62 - 132    |
| 1,2-Dibromoethane (EDB)     | 10.0        | 8.774      |               | ug/L |   | 88   | 74 - 122    |
| 1,2-Dichlorobenzene         | 10.0        | 9.237      |               | ug/L |   | 92   | 74 - 120    |
| 1,2-Dichloroethane          | 10.0        | 9.865      |               | ug/L |   | 99   | 68 - 125    |
| 1,2-Dichloropropane         | 10.0        | 9.593      |               | ug/L |   | 96   | 72 - 128    |
| 1,3-Dichlorobenzene         | 10.0        | 9.323      |               | ug/L |   | 93   | 71 - 120    |
| 1,3-Dichloropropane         | 10.0        | 9.538      |               | ug/L |   | 95   | 72 - 125    |
| 1,4-Dichlorobenzene         | 10.0        | 8.770      |               | ug/L |   | 88   | 72 - 120    |
| 2,2-Dichloropropane         | 10.0        | 10.18      |               | ug/L |   | 102  | 51 - 146    |

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-309320-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-458995/6

Matrix: Water

Analysis Batch: 458995

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|-------------|
| 2-Hexanone                  | 20.0        | 18.21      |               | ug/L |   | 91   | 62 - 139    |
| 4-Methyl-2-pentanone (MIBK) | 20.0        | 17.53      |               | ug/L |   | 88   | 62 - 136    |
| Acetone                     | 20.0        | 20.33      |               | ug/L |   | 102  | 59 - 136    |
| Acrolein                    | 47.4        | 51.94      |               | ug/L |   | 110  | 50 - 150    |
| Acrylonitrile               | 100         | 88.51      |               | ug/L |   | 89   | 50 - 150    |
| Allyl chloride              | 10.0        | 10.09      |               | ug/L |   | 101  | 61 - 136    |
| Benzene                     | 10.0        | 8.840      |               | ug/L |   | 88   | 71 - 125    |
| Bromochloromethane          | 10.0        | 9.198      |               | ug/L |   | 92   | 69 - 131    |
| Bromodichloromethane        | 10.0        | 8.910      |               | ug/L |   | 89   | 70 - 122    |
| Bromoform                   | 10.0        | 9.164      |               | ug/L |   | 92   | 62 - 122    |
| Carbon disulfide            | 10.0        | 9.218      |               | ug/L |   | 92   | 58 - 137    |
| Carbon tetrachloride        | 10.0        | 8.567      |               | ug/L |   | 86   | 63 - 136    |
| Chlorobenzene               | 10.0        | 8.989      |               | ug/L |   | 90   | 74 - 120    |
| Chlorodibromomethane        | 10.0        | 8.846      |               | ug/L |   | 88   | 69 - 121    |
| Chloroform                  | 10.0        | 9.504      |               | ug/L |   | 95   | 72 - 122    |
| Chloroprene                 | 10.0        | 8.860      |               | ug/L |   | 89   | 67 - 136    |
| cis-1,2-Dichloroethene      | 10.0        | 9.204      |               | ug/L |   | 92   | 72 - 123    |
| cis-1,3-Dichloropropene     | 10.0        | 9.620      |               | ug/L |   | 96   | 72 - 123    |
| Dibromomethane              | 10.0        | 9.306      |               | ug/L |   | 93   | 72 - 122    |
| Ethyl methacrylate          | 10.0        | 8.852      |               | ug/L |   | 89   | 68 - 128    |
| Ethylbenzene                | 10.0        | 8.882      |               | ug/L |   | 89   | 75 - 120    |
| Iodomethane                 | 10.0        | 7.383      | J             | ug/L |   | 74   | 18 - 150    |
| Methacrylonitrile           | 100         | 92.25      |               | ug/L |   | 92   | 67 - 128    |
| Methyl methacrylate         | 20.0        | 19.03      |               | ug/L |   | 95   | 69 - 129    |
| Methylene chloride          | 10.0        | 9.327      |               | ug/L |   | 93   | 72 - 128    |
| Naphthalene                 | 10.0        | 9.437      |               | ug/L |   | 94   | 69 - 126    |
| Propionitrile               | 100         | 88.76      |               | ug/L |   | 89   | 68 - 131    |
| Styrene                     | 10.0        | 8.390      |               | ug/L |   | 84   | 74 - 122    |
| Tetrachloroethene           | 10.0        | 9.155      |               | ug/L |   | 92   | 70 - 128    |
| Toluene                     | 10.0        | 9.175      |               | ug/L |   | 92   | 74 - 120    |
| trans-1,2-Dichloroethene    | 10.0        | 9.294      |               | ug/L |   | 93   | 67 - 127    |
| trans-1,3-Dichloropropene   | 10.0        | 9.244      |               | ug/L |   | 92   | 67 - 123    |
| trans-1,4-Dichloro-2-butene | 10.0        | 9.458      | J             | ug/L |   | 95   | 50 - 150    |
| Trichloroethene             | 10.0        | 8.538      |               | ug/L |   | 85   | 70 - 128    |
| Vinyl acetate               | 20.0        | 19.94      |               | ug/L |   | 100  | 50 - 150    |
| Xylenes, Total              | 20.0        | 17.55      |               | ug/L |   | 88   | 74 - 121    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| Dibromofluoromethane (Surr) | 95            |               | 76 - 130 |
| Toluene-d8 (Surr)           | 101           |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 98            |               | 80 - 120 |

Lab Sample ID: LCS 310-458995/7

Matrix: Water

Analysis Batch: 458995

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte      | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------|-------------|------------|---------------|------|---|------|-------------|
| Bromomethane | 20.0        | 15.82      |               | ug/L |   | 79   | 33 - 138    |

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-309320-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-458995/7

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458995

| Analyte                 | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------------------|-------------|------------|---------------|------|---|------|-------------|
| Chloroethane            | 20.0        | 16.72      |               | ug/L |   | 84   | 59 - 139    |
| Chloromethane           | 20.0        | 16.48      |               | ug/L |   | 82   | 52 - 146    |
| Dichlorodifluoromethane | 20.0        | 13.11      |               | ug/L |   | 66   | 45 - 150    |
| Trichlorofluoromethane  | 20.0        | 15.66      |               | ug/L |   | 78   | 55 - 150    |
| Vinyl chloride          | 20.0        | 16.27      |               | ug/L |   | 81   | 60 - 142    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| Dibromofluoromethane (Surr) | 107           |               | 76 - 130 |
| Toluene-d8 (Surr)           | 103           |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 99            |               | 80 - 120 |

## Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-662111/3

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 662111

| Analyte | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|------|-------|------|---|----------|----------------|---------|
| Methane | <1.00     |              | 1.00 | 0.174 | ug/L |   |          | 07/01/25 08:57 | 1       |

| Surrogate             | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,1,1-Trifluoroethane | 105          |              | 60 - 140 |          | 07/01/25 08:57 | 1       |

Lab Sample ID: LCS 240-662111/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 662111

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Methane | 284         | 283.7      |               | ug/L |   | 100  | 80 - 120    |

| Surrogate             | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------|---------------|---------------|----------|
| 1,1,1-Trifluoroethane | 100           |               | 60 - 140 |

## Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 310-458551/4

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458551

| Analyte      | MB Result | MB Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|-----------|--------------|------|------|------|---|----------|----------------|---------|
| Acetonitrile | <10.0     |              | 10.0 | 2.60 | mg/L |   |          | 06/24/25 10:55 | 1       |
| Isobutanol   | <10.0     |              | 10.0 | 2.40 | mg/L |   |          | 06/24/25 10:55 | 1       |

Lab Sample ID: LCS 310-458551/5

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458551

| Analyte      | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------|-------------|------------|---------------|------|---|------|-------------|
| Acetonitrile | 99.1        | 104.4      |               | mg/L |   | 105  | 67 - 131    |

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# QC Sample Results

Client: SCS Engineers

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LB 310-458046/1-D

Matrix: Water

Analysis Batch: 458691

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458464

| Analyte               | LB Result | LB Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|-----------|--------------|--------|---------|------|---|----------------|----------------|---------|
| 4,4'-DDD              | <0.0921   |              | 0.0921 | 0.0230  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| 4,4'-DDE              | <0.0921   |              | 0.0921 | 0.0276  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| 4,4'-DDT              | <0.0921   |              | 0.0921 | 0.0184  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Aldrin                | <0.0921   |              | 0.0921 | 0.0203  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| alpha-BHC             | <0.0921   |              | 0.0921 | 0.00921 | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| beta-BHC              | <0.0921   |              | 0.0921 | 0.0387  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Chlordane (technical) | <1.84     |              | 1.84   | 0.359   | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| delta-BHC             | <0.0921   |              | 0.0921 | 0.0295  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Dieldrin              | <0.0921   |              | 0.0921 | 0.0193  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Endosulfan I          | <0.0921   |              | 0.0921 | 0.0258  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Endosulfan II         | <0.0921   |              | 0.0921 | 0.0239  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Endosulfan sulfate    | <0.0921   |              | 0.0921 | 0.0166  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Endrin                | <0.0921   |              | 0.0921 | 0.0258  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Endrin aldehyde       | <0.0921   |              | 0.0921 | 0.0249  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| gamma-BHC (Lindane)   | <0.0921   |              | 0.0921 | 0.00921 | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Heptachlor            | <0.0921   |              | 0.0921 | 0.0212  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Heptachlor epoxide    | <0.0921   |              | 0.0921 | 0.0295  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Methoxychlor          | <0.0921   |              | 0.0921 | 0.0295  | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Toxaphene             | <1.84     |              | 1.84   | 0.921   | ug/L |   | 06/23/25 12:25 | 06/25/25 11:22 | 1       |

| Surrogate                     | LB %Recovery | LB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|--------------|--------------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 83           |              | 10 - 150 | 06/23/25 12:25 | 06/25/25 11:22 | 1       |
| Tetrachloro-m-xylene          | 100          |              | 17 - 150 | 06/23/25 12:25 | 06/25/25 11:22 | 1       |

Lab Sample ID: MB 310-458464/1-A

Matrix: Water

Analysis Batch: 458545

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458464

| Analyte               | MB Result | MB Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|-----------|--------------|--------|---------|------|---|----------------|----------------|---------|
| 4,4'-DDD              | <0.0986   |              | 0.0986 | 0.0246  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| 4,4'-DDE              | <0.0986   |              | 0.0986 | 0.0296  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| 4,4'-DDT              | <0.0986   |              | 0.0986 | 0.0197  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Aldrin                | <0.0986   |              | 0.0986 | 0.0217  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| alpha-BHC             | <0.0986   |              | 0.0986 | 0.00986 | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| beta-BHC              | <0.0986   |              | 0.0986 | 0.0414  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Chlordane (technical) | <1.97     |              | 1.97   | 0.385   | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| delta-BHC             | <0.0986   |              | 0.0986 | 0.0315  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Dieldrin              | <0.0986   |              | 0.0986 | 0.0207  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Endosulfan I          | <0.0986   |              | 0.0986 | 0.0276  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Endosulfan II         | <0.0986   |              | 0.0986 | 0.0256  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Endosulfan sulfate    | <0.0986   |              | 0.0986 | 0.0177  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Endrin                | <0.0986   |              | 0.0986 | 0.0276  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Endrin aldehyde       | <0.0986   |              | 0.0986 | 0.0266  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| gamma-BHC (Lindane)   | <0.0986   |              | 0.0986 | 0.00986 | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Heptachlor            | <0.0986   |              | 0.0986 | 0.0227  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Heptachlor epoxide    | <0.0986   |              | 0.0986 | 0.0315  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Methoxychlor          | <0.0986   |              | 0.0986 | 0.0315  | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Toxaphene             | <1.97     |              | 1.97   | 0.986   | ug/L |   | 06/23/25 12:25 | 06/24/25 11:13 | 1       |

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-309320-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 310-458464/1-A

Matrix: Water

Analysis Batch: 458545

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458464

| Surrogate                     | MB<br>%Recovery | MB<br>Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------------|-----------------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 63              |                 | 10 - 150 | 06/23/25 12:25 | 06/24/25 11:13 | 1       |
| Tetrachloro-m-xylene          | 68              |                 | 17 - 150 | 06/23/25 12:25 | 06/24/25 11:13 | 1       |

Lab Sample ID: LCS 310-458464/2-A

Matrix: Water

Analysis Batch: 458545

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458464

| Analyte             | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|---------------------|----------------|---------------|------------------|------|---|------|----------------|
| 4,4'-DDD            | 2.78           | 2.527         |                  | ug/L |   | 91   | 28 - 150       |
| 4,4'-DDE            | 2.78           | 2.160         |                  | ug/L |   | 78   | 10 - 150       |
| 4,4'-DDT            | 2.78           | 1.444         |                  | ug/L |   | 52   | 10 - 150       |
| Aldrin              | 2.78           | 1.871         |                  | ug/L |   | 67   | 10 - 146       |
| alpha-BHC           | 2.78           | 2.431         |                  | ug/L |   | 88   | 57 - 149       |
| beta-BHC            | 2.78           | 2.371         |                  | ug/L |   | 85   | 53 - 145       |
| delta-BHC           | 2.78           | 2.221         |                  | ug/L |   | 80   | 49 - 148       |
| Dieldrin            | 2.78           | 2.503         |                  | ug/L |   | 90   | 43 - 150       |
| Endosulfan I        | 2.78           | 2.228         |                  | ug/L |   | 80   | 26 - 133       |
| Endosulfan II       | 2.78           | 2.084         |                  | ug/L |   | 75   | 38 - 139       |
| Endosulfan sulfate  | 2.78           | 2.534         |                  | ug/L |   | 91   | 54 - 150       |
| Endrin              | 2.78           | 2.457         |                  | ug/L |   | 88   | 41 - 150       |
| Endrin aldehyde     | 2.78           | 1.971         |                  | ug/L |   | 71   | 42 - 147       |
| gamma-BHC (Lindane) | 2.78           | 2.432         |                  | ug/L |   | 88   | 57 - 150       |
| Heptachlor          | 2.78           | 1.947         |                  | ug/L |   | 70   | 16 - 135       |
| Heptachlor epoxide  | 2.78           | 2.539         |                  | ug/L |   | 91   | 49 - 150       |
| Methoxychlor        | 2.78           | 1.952         |                  | ug/L |   | 70   | 16 - 150       |

| Surrogate                     | LCS<br>%Recovery | LCS<br>Qualifier | Limits   |
|-------------------------------|------------------|------------------|----------|
| DCB Decachlorobiphenyl (Surr) | 61               |                  | 10 - 150 |
| Tetrachloro-m-xylene          | 62               |                  | 17 - 150 |

## Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 500-823279/1-A

Matrix: Water

Analysis Batch: 823371

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 823279

| Analyte           | MB<br>Result | MB<br>Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------|--------------|-----------------|------|-------|------|---|----------------|----------------|---------|
| 2,4-D             | <1.00        |                 | 1.00 | 0.126 | ug/L |   | 06/25/25 10:43 | 06/25/25 23:20 | 1       |
| Silvex (2,4,5-TP) | <1.00        |                 | 1.00 | 0.105 | ug/L |   | 06/25/25 10:43 | 06/25/25 23:20 | 1       |
| 2,4,5-T           | <1.00        |                 | 1.00 | 0.140 | ug/L |   | 06/25/25 10:43 | 06/25/25 23:20 | 1       |

| Surrogate | MB<br>%Recovery | MB<br>Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------------|-----------------|----------|----------------|----------------|---------|
| DCAA      | 70              |                 | 25 - 130 | 06/25/25 10:43 | 06/25/25 23:20 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 500-823279/2-A  
Matrix: Water  
Analysis Batch: 823371

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 823279

| Analyte           | Spike Added   | LCS Result    | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------------|---------------|---------------|---------------|------|---|------|-------------|
| 2,4-D             | 10.0          | 10.09         |               | ug/L |   | 101  | 30 - 115    |
| Silvex (2,4,5-TP) | 2.50          | 3.177         | *+            | ug/L |   | 127  | 32 - 115    |
| 2,4,5-T           | 2.53          | 2.902         |               | ug/L |   | 115  | 30 - 115    |
| Surrogate         | LCS %Recovery | LCS Qualifier | Limits        |      |   |      |             |
| DCAA              | 92            |               | 25 - 130      |      |   |      |             |

Lab Sample ID: LCSD 500-823279/3-A  
Matrix: Water  
Analysis Batch: 823371

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 823279

| Analyte           | Spike Added    | LCSD Result    | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|-------------------|----------------|----------------|----------------|------|---|------|-------------|-----|-----------|
| 2,4-D             | 10.0           | 9.938          |                | ug/L |   | 99   | 30 - 115    | 1   | 20        |
| Silvex (2,4,5-TP) | 2.50           | 2.943          | *+             | ug/L |   | 118  | 32 - 115    | 8   | 20        |
| 2,4,5-T           | 2.53           | 2.807          |                | ug/L |   | 111  | 30 - 115    | 3   | 20        |
| Surrogate         | LCSD %Recovery | LCSD Qualifier | Limits         |      |   |      |             |     |           |
| DCAA              | 93             |                | 25 - 130       |      |   |      |             |     |           |

## Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-458567/3  
Matrix: Water  
Analysis Batch: 458567

Client Sample ID: Method Blank  
Prep Type: Total/NA

| Analyte      | MB Result | MB Qualifier | RL    | MDL    | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|-----------|--------------|-------|--------|------|---|----------|----------------|---------|
| Nitrate as N | <0.200    |              | 0.200 | 0.0780 | mg/L |   |          | 06/19/25 12:54 | 1       |

Lab Sample ID: LCS 310-458567/4  
Matrix: Water  
Analysis Batch: 458567

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

| Analyte      | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------|-------------|------------|---------------|------|---|------|-------------|
| Nitrate as N | 2.00        | 2.009      |               | mg/L |   | 100  | 90 - 110    |

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-458767/1-A  
Matrix: Water  
Analysis Batch: 459126

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 458767

| Analyte   | MB Result | MB Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|----------|----------|------|---|----------------|----------------|---------|
| Arsenic   | <0.00200  |              | 0.00200  | 0.000530 | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Barium    | <0.00200  |              | 0.00200  | 0.000660 | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Beryllium | <0.00100  |              | 0.00100  | 0.000330 | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Chromium  | <0.00500  |              | 0.00500  | 0.00180  | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Cobalt    | <0.000500 |              | 0.000500 | 0.000170 | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Copper    | <0.00500  |              | 0.00500  | 0.00320  | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Lead      | <0.000500 |              | 0.000500 | 0.000330 | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-458767/1-A  
Matrix: Water  
Analysis Batch: 459126

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 458767

| Analyte   | MB Result | MB Qualifier | RL      | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|---------|----------|------|---|----------------|----------------|---------|
| Nickel    | <0.00500  |              | 0.00500 | 0.00230  | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Selenium  | <0.00500  |              | 0.00500 | 0.00140  | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Silver    | <0.00100  | ^1+          | 0.00100 | 0.000500 | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Thallium  | <0.00100  |              | 0.00100 | 0.000570 | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Zinc      | <0.0200   |              | 0.0200  | 0.0130   | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Tin       | <0.00500  |              | 0.00500 | 0.00250  | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Iron      | <0.100    |              | 0.100   | 0.0500   | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |
| Manganese | <0.0100   |              | 0.0100  | 0.00360  | mg/L |   | 06/26/25 09:00 | 06/28/25 19:51 | 1       |

Lab Sample ID: MB 310-458767/1-A  
Matrix: Water  
Analysis Batch: 459222

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 458767

| Analyte  | MB Result | MB Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|--------------|----------|----------|------|---|----------------|----------------|---------|
| Antimony | <0.00200  |              | 0.00200  | 0.00100  | mg/L |   | 06/26/25 09:00 | 06/30/25 15:35 | 1       |
| Cadmium  | <0.000200 |              | 0.000200 | 0.000100 | mg/L |   | 06/26/25 09:00 | 06/30/25 15:35 | 1       |
| Vanadium | <0.00500  |              | 0.00500  | 0.00170  | mg/L |   | 06/26/25 09:00 | 06/30/25 15:35 | 1       |

Lab Sample ID: LCS 310-458767/2-A  
Matrix: Water  
Analysis Batch: 459126

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 458767

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------|-------------|------------|---------------|------|---|------|-------------|
| Arsenic   | 0.200       | 0.1949     |               | mg/L |   | 97   | 80 - 120    |
| Barium    | 0.100       | 0.09852    |               | mg/L |   | 99   | 80 - 120    |
| Beryllium | 0.100       | 0.09271    |               | mg/L |   | 93   | 80 - 120    |
| Chromium  | 0.100       | 0.09353    |               | mg/L |   | 94   | 80 - 120    |
| Cobalt    | 0.100       | 0.09153    |               | mg/L |   | 92   | 80 - 120    |
| Copper    | 0.200       | 0.1882     |               | mg/L |   | 94   | 80 - 120    |
| Lead      | 0.200       | 0.1908     |               | mg/L |   | 95   | 80 - 120    |
| Nickel    | 0.200       | 0.1832     |               | mg/L |   | 92   | 80 - 120    |
| Selenium  | 0.400       | 0.3759     |               | mg/L |   | 94   | 80 - 120    |
| Silver    | 0.100       | 0.1096     | ^1+           | mg/L |   | 110  | 80 - 120    |
| Thallium  | 0.100       | 0.08971    |               | mg/L |   | 90   | 80 - 120    |
| Zinc      | 0.200       | 0.1865     |               | mg/L |   | 93   | 80 - 120    |
| Tin       | 0.200       | 0.1949     |               | mg/L |   | 97   | 80 - 120    |
| Iron      | 0.200       | 0.2038     |               | mg/L |   | 102  | 80 - 120    |
| Manganese | 0.100       | 0.09334    |               | mg/L |   | 93   | 80 - 120    |

Lab Sample ID: LCS 310-458767/2-A  
Matrix: Water  
Analysis Batch: 459222

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 458767

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|------|---|------|-------------|
| Antimony | 0.200       | 0.2106     |               | mg/L |   | 105  | 80 - 120    |
| Cadmium  | 0.100       | 0.09738    |               | mg/L |   | 97   | 80 - 120    |
| Vanadium | 0.100       | 0.09728    |               | mg/L |   | 97   | 80 - 120    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-309320-2 DU  
Matrix: Ground Water  
Analysis Batch: 459126

Client Sample ID: MW-8  
Prep Type: Total/NA  
Prep Batch: 458767

| Analyte   | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|-----------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Antimony  | 0.00107       | J ^3+            | <0.00200  | ^3+          | mg/L |   | NC  | 20    |
| Arsenic   | 0.00103       | J                | 0.0008350 | J F5         | mg/L |   | 21  | 20    |
| Barium    | 1.02          |                  | 0.9709    |              | mg/L |   | 5   | 20    |
| Beryllium | <0.00100      |                  | <0.00100  |              | mg/L |   | NC  | 20    |
| Chromium  | 0.00698       |                  | 0.008340  |              | mg/L |   | 18  | 20    |
| Cobalt    | 0.000774      |                  | 0.0007390 |              | mg/L |   | 5   | 20    |
| Copper    | <0.00500      |                  | <0.00500  |              | mg/L |   | NC  | 20    |
| Lead      | 0.000487      | J                | 0.0004760 | J            | mg/L |   | 2   | 20    |
| Nickel    | 0.00425       | J                | 0.004556  | J            | mg/L |   | 7   | 20    |
| Selenium  | <0.00500      |                  | <0.00500  |              | mg/L |   | NC  | 20    |
| Thallium  | <0.00100      |                  | <0.00100  |              | mg/L |   | NC  | 20    |
| Vanadium  | 0.00235       | J B              | 0.002052  | J            | mg/L |   | 13  | 20    |
| Zinc      | <0.0200       |                  | <0.0200   |              | mg/L |   | NC  | 20    |
| Tin       | <0.00500      |                  | <0.00500  |              | mg/L |   | NC  | 20    |
| Iron      | 0.479         |                  | 0.5031    |              | mg/L |   | 5   | 20    |
| Manganese | 0.0522        |                  | 0.04882   |              | mg/L |   | 7   | 20    |

Lab Sample ID: 310-309320-2 DU  
Matrix: Ground Water  
Analysis Batch: 459222

Client Sample ID: MW-8  
Prep Type: Total/NA  
Prep Batch: 458767

| Analyte  | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|----------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Antimony | 0.00119       | J                | 0.001113  | J            | mg/L |   | 7   | 20    |
| Arsenic  | 0.000836      | J                | 0.0008060 | J            | mg/L |   | 4   | 20    |
| Barium   | 0.980         |                  | 0.9301    |              | mg/L |   | 5   | 20    |
| Cadmium  | <0.000200     |                  | <0.000200 |              | mg/L |   | NC  | 20    |
| Vanadium | 0.00185       | J                | 0.001900  | J            | mg/L |   | 3   | 20    |
| Zinc     | <0.0200       |                  | <0.0200   |              | mg/L |   | NC  | 20    |
| Iron     | 0.492         |                  | 0.5089    |              | mg/L |   | 3   | 20    |

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-458672/1-A  
Matrix: Water  
Analysis Batch: 458854

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 458672

| Analyte | MB Result | MB Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|----------|----------|------|---|----------------|----------------|---------|
| Mercury | <0.000200 |              | 0.000200 | 0.000110 | mg/L |   | 06/25/25 11:19 | 06/26/25 09:01 | 1       |

Lab Sample ID: LCS 310-458672/2-A  
Matrix: Water  
Analysis Batch: 458854

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 458672

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Mercury | 0.00167     | 0.001682   |               | mg/L |   | 101  | 80 - 120    |

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-309320-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 310-458707/1-A

Matrix: Water

Analysis Batch: 458789

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458707

| Analyte        | MB<br>Result | MB<br>Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Cyanide, Total | <0.0100      |                 | 0.0100 | 0.00350 | mg/L |   | 06/25/25 09:00 | 06/25/25 21:24 | 1       |

Lab Sample ID: LCS 310-458707/2-A

Matrix: Water

Analysis Batch: 458789

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458707

| Analyte        | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|----------------|----------------|---------------|------------------|------|---|------|----------------|
| Cyanide, Total | 0.200          | 0.1888        |                  | mg/L |   | 94   | 90 - 110       |

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-823195/1-A

Matrix: Water

Analysis Batch: 823196

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 823195

| Analyte | MB<br>Result | MB<br>Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------------|-----------------|------|-------|------|---|----------------|----------------|---------|
| Sulfide | <1.00        |                 | 1.00 | 0.231 | mg/L |   | 06/24/25 18:00 | 06/25/25 02:47 | 1       |

Lab Sample ID: LCS 500-823195/2-A

Matrix: Water

Analysis Batch: 823196

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 823195

| Analyte | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|---------|----------------|---------------|------------------|------|---|------|----------------|
| Sulfide | 3.97           | 3.430         |                  | mg/L |   | 86   | 80 - 120       |

## Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-458485/1

Matrix: Water

Analysis Batch: 458485

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                | MB<br>Result | MB<br>Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------------|-----------------|------|------|------|---|----------|----------------|---------|
| Total Suspended Solids | <5.00        |                 | 5.00 | 3.50 | mg/L |   |          | 06/23/25 14:43 | 1       |

Lab Sample ID: LCS 310-458485/2

Matrix: Water

Analysis Batch: 458485

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|------------------------|----------------|---------------|------------------|------|---|------|----------------|
| Total Suspended Solids | 100            | 98.00         |                  | mg/L |   | 98   | 82 - 117       |

# QC Association Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## GC/MS VOA

### Analysis Batch: 458497

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1     | MW-2               | Total/NA  | Ground Water | 8260D  |            |
| 310-309320-2     | MW-8               | Total/NA  | Ground Water | 8260D  |            |
| 310-309320-3     | Trip Blank         | Total/NA  | Trip Blank   | 8260D  |            |
| MB 310-458497/6  | Method Blank       | Total/NA  | Water        | 8260D  |            |
| LCS 310-458497/7 | Lab Control Sample | Total/NA  | Water        | 8260D  |            |
| LCS 310-458497/8 | Lab Control Sample | Total/NA  | Water        | 8260D  |            |

### Analysis Batch: 458995

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1     | MW-2               | Total/NA  | Ground Water | 8260D  |            |
| 310-309320-2     | MW-8               | Total/NA  | Ground Water | 8260D  |            |
| 310-309320-3     | Trip Blank         | Total/NA  | Trip Blank   | 8260D  |            |
| MB 310-458995/5  | Method Blank       | Total/NA  | Water        | 8260D  |            |
| LCS 310-458995/6 | Lab Control Sample | Total/NA  | Water        | 8260D  |            |
| LCS 310-458995/7 | Lab Control Sample | Total/NA  | Water        | 8260D  |            |

## GC VOA

### Analysis Batch: 662111

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix       | Method  | Prep Batch |
|------------------|--------------------|-----------|--------------|---------|------------|
| 310-309320-2     | MW-8               | Total/NA  | Ground Water | RSK-175 |            |
| MB 240-662111/3  | Method Blank       | Total/NA  | Water        | RSK-175 |            |
| LCS 240-662111/4 | Lab Control Sample | Total/NA  | Water        | RSK-175 |            |

## GC Semi VOA

### Leach Batch: 458046

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| LB 310-458046/1-D | Method Blank     | Total/NA  | Water  | 1311   |            |

### Prep Batch: 458464

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1       | MW-2               | Total/NA  | Ground Water | 3511   |            |
| 310-309320-2       | MW-8               | Total/NA  | Ground Water | 3511   |            |
| LB 310-458046/1-D  | Method Blank       | Total/NA  | Water        | 3511   | 458046     |
| MB 310-458464/1-A  | Method Blank       | Total/NA  | Water        | 3511   |            |
| LCS 310-458464/2-A | Lab Control Sample | Total/NA  | Water        | 3511   |            |

### Analysis Batch: 458545

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| MB 310-458464/1-A  | Method Blank       | Total/NA  | Water  | 8081B  | 458464     |
| LCS 310-458464/2-A | Lab Control Sample | Total/NA  | Water  | 8081B  | 458464     |

### Analysis Batch: 458551

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1     | MW-2               | Total/NA  | Ground Water | 8015C  |            |
| 310-309320-2     | MW-8               | Total/NA  | Ground Water | 8015C  |            |
| MB 310-458551/4  | Method Blank       | Total/NA  | Water        | 8015C  |            |
| LCS 310-458551/5 | Lab Control Sample | Total/NA  | Water        | 8015C  |            |

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# QC Association Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## GC Semi VOA

### Analysis Batch: 458691

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| LB 310-458046/1-D | Method Blank     | Total/NA  | Water  | 8081B  | 458464     |

### Analysis Batch: 458777

| Lab Sample ID | Client Sample ID | Prep Type | Matrix       | Method | Prep Batch |
|---------------|------------------|-----------|--------------|--------|------------|
| 310-309320-1  | MW-2             | Total/NA  | Ground Water | 8081B  | 458464     |
| 310-309320-2  | MW-8             | Total/NA  | Ground Water | 8081B  | 458464     |

### Prep Batch: 823279

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix       | Method | Prep Batch |
|---------------------|------------------------|-----------|--------------|--------|------------|
| 310-309320-1        | MW-2                   | Total/NA  | Ground Water | 8151A  | 823279     |
| 310-309320-2        | MW-8                   | Total/NA  | Ground Water | 8151A  |            |
| MB 500-823279/1-A   | Method Blank           | Total/NA  | Water        | 8151A  |            |
| LCS 500-823279/2-A  | Lab Control Sample     | Total/NA  | Water        | 8151A  |            |
| LCSD 500-823279/3-A | Lab Control Sample Dup | Total/NA  | Water        | 8151A  |            |

### Analysis Batch: 823371

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix       | Method | Prep Batch |
|---------------------|------------------------|-----------|--------------|--------|------------|
| 310-309320-1        | MW-2                   | Total/NA  | Ground Water | 8151A  | 823279     |
| 310-309320-2        | MW-8                   | Total/NA  | Ground Water | 8151A  | 823279     |
| MB 500-823279/1-A   | Method Blank           | Total/NA  | Water        | 8151A  | 823279     |
| LCS 500-823279/2-A  | Lab Control Sample     | Total/NA  | Water        | 8151A  | 823279     |
| LCSD 500-823279/3-A | Lab Control Sample Dup | Total/NA  | Water        | 8151A  | 823279     |

## HPLC/IC

### Analysis Batch: 458567

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-2     | MW-8               | Total/NA  | Ground Water | 9056A  | 9056A      |
| MB 310-458567/3  | Method Blank       | Total/NA  | Water        | 9056A  |            |
| LCS 310-458567/4 | Lab Control Sample | Total/NA  | Water        | 9056A  |            |

## Metals

### Prep Batch: 458672

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1       | MW-2               | Total/NA  | Ground Water | 7470A  | 7470A      |
| 310-309320-2       | MW-8               | Total/NA  | Ground Water | 7470A  |            |
| MB 310-458672/1-A  | Method Blank       | Total/NA  | Water        | 7470A  |            |
| LCS 310-458672/2-A | Lab Control Sample | Total/NA  | Water        | 7470A  |            |

### Prep Batch: 458767

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1       | MW-2               | Total/NA  | Ground Water | 3005A  | 3005A      |
| 310-309320-2       | MW-8               | Total/NA  | Ground Water | 3005A  |            |
| MB 310-458767/1-A  | Method Blank       | Total/NA  | Water        | 3005A  |            |
| LCS 310-458767/2-A | Lab Control Sample | Total/NA  | Water        | 3005A  |            |
| 310-309320-2 DU    | MW-8               | Total/NA  | Ground Water | 3005A  |            |

### Analysis Batch: 458854

| Lab Sample ID | Client Sample ID | Prep Type | Matrix       | Method | Prep Batch |
|---------------|------------------|-----------|--------------|--------|------------|
| 310-309320-1  | MW-2             | Total/NA  | Ground Water | 7470A  | 458672     |
| 310-309320-2  | MW-8             | Total/NA  | Ground Water | 7470A  | 458672     |

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# QC Association Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Metals (Continued)

### Analysis Batch: 458854 (Continued)

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| MB 310-458672/1-A  | Method Blank       | Total/NA  | Water  | 7470A  | 458672     |
| LCS 310-458672/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  | 458672     |

### Analysis Batch: 459126

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1       | MW-2               | Total/NA  | Ground Water | 6020B  | 458767     |
| 310-309320-2       | MW-8               | Total/NA  | Ground Water | 6020B  | 458767     |
| MB 310-458767/1-A  | Method Blank       | Total/NA  | Water        | 6020B  | 458767     |
| LCS 310-458767/2-A | Lab Control Sample | Total/NA  | Water        | 6020B  | 458767     |
| 310-309320-2 DU    | MW-8               | Total/NA  | Ground Water | 6020B  | 458767     |

### Analysis Batch: 459222

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1       | MW-2               | Total/NA  | Ground Water | 6020B  | 458767     |
| 310-309320-2       | MW-8               | Total/NA  | Ground Water | 6020B  | 458767     |
| MB 310-458767/1-A  | Method Blank       | Total/NA  | Water        | 6020B  | 458767     |
| LCS 310-458767/2-A | Lab Control Sample | Total/NA  | Water        | 6020B  | 458767     |
| 310-309320-2 DU    | MW-8               | Total/NA  | Ground Water | 6020B  | 458767     |

## General Chemistry

### Analysis Batch: 458485

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix       | Method    | Prep Batch |
|------------------|--------------------|-----------|--------------|-----------|------------|
| 310-309320-1     | MW-2               | Total/NA  | Ground Water | I-3765-85 |            |
| 310-309320-2     | MW-8               | Total/NA  | Ground Water | I-3765-85 |            |
| MB 310-458485/1  | Method Blank       | Total/NA  | Water        | I-3765-85 |            |
| LCS 310-458485/2 | Lab Control Sample | Total/NA  | Water        | I-3765-85 |            |

### Prep Batch: 458707

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1       | MW-2               | Total/NA  | Ground Water | 9012B  |            |
| 310-309320-2       | MW-8               | Total/NA  | Ground Water | 9012B  |            |
| MB 310-458707/1-A  | Method Blank       | Total/NA  | Water        | 9012B  |            |
| LCS 310-458707/2-A | Lab Control Sample | Total/NA  | Water        | 9012B  |            |

### Analysis Batch: 458789

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1       | MW-2               | Total/NA  | Ground Water | 9012B  | 458707     |
| 310-309320-2       | MW-8               | Total/NA  | Ground Water | 9012B  | 458707     |
| MB 310-458707/1-A  | Method Blank       | Total/NA  | Water        | 9012B  | 458707     |
| LCS 310-458707/2-A | Lab Control Sample | Total/NA  | Water        | 9012B  | 458707     |

### Prep Batch: 823195

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1       | MW-2               | Total/NA  | Ground Water | 9030B  |            |
| 310-309320-2       | MW-8               | Total/NA  | Ground Water | 9030B  |            |
| MB 500-823195/1-A  | Method Blank       | Total/NA  | Water        | 9030B  |            |
| LCS 500-823195/2-A | Lab Control Sample | Total/NA  | Water        | 9030B  |            |

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# QC Association Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## General Chemistry

Analysis Batch: 823196

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-309320-1       | MW-2               | Total/NA  | Ground Water | 9034   | 823195     |
| 310-309320-2       | MW-8               | Total/NA  | Ground Water | 9034   | 823195     |
| MB 500-823195/1-A  | Method Blank       | Total/NA  | Water        | 9034   | 823195     |
| LCS 500-823195/2-A | Lab Control Sample | Total/NA  | Water        | 9034   | 823195     |

# Lab Chronicle

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

**Client Sample ID: MW-2**

**Date Collected: 06/19/25 16:53**

**Date Received: 06/20/25 13:49**

**Lab Sample ID: 310-309320-1**

**Matrix: Ground Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed                         |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------------------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458995       | WSE8    | EET CF  | 06/27/25 13:13                               |
| Total/NA  | Analysis   | 8260D        |     | 1               | 458497       | WSE8    | EET CF  | 06/23/25 21:10                               |
| Total/NA  | Analysis   | 8015C        |     | 1               | 458551       | BW2O    | EET CF  | 06/24/25 14:47                               |
| Total/NA  | Prep       | 3511         |     |                 | 458464       | BW2O    | EET CF  | 06/23/25 12:26                               |
| Total/NA  | Analysis   | 8081B        |     | 1               | 458777       | BW2O    | EET CF  | 06/26/25 14:54                               |
| Total/NA  | Prep       | 8151A        |     |                 | 823279       | DAK     | EET CHI | 06/25/25 10:43                               |
| Total/NA  | Analysis   | 8151A        |     | 1               | 823371       | H7CM    | EET CHI | 06/26/25 01:42                               |
| Total/NA  | Prep       | 3005A        |     |                 | 458767       | WK2X    | EET CF  | 06/26/25 09:00                               |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459222       | NFT2    | EET CF  | 06/30/25 16:18                               |
| Total/NA  | Prep       | 3005A        |     |                 | 458767       | WK2X    | EET CF  | 06/26/25 09:00                               |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459126       | NFT2    | EET CF  | 06/28/25 20:38                               |
| Total/NA  | Prep       | 7470A        |     |                 | 458672       | F5MW    | EET CF  | 06/25/25 11:19                               |
| Total/NA  | Analysis   | 7470A        |     | 1               | 458854       | F5MW    | EET CF  | 06/26/25 09:52                               |
| Total/NA  | Prep       | 9012B        |     |                 | 458707       | ENB7    | EET CF  | 06/25/25 09:00                               |
| Total/NA  | Analysis   | 9012B        |     | 1               | 458789       | ZJX4    | EET CF  | 06/25/25 21:32                               |
| Total/NA  | Prep       | 9030B        |     |                 | 823195       | CLB     | EET CHI | 06/24/25 18:15 - 06/24/25 18:22 <sup>1</sup> |
| Total/NA  | Analysis   | 9034         |     | 1               | 823196       | CLB     | EET CHI | 06/25/25 03:04 - 06/25/25 03:12 <sup>1</sup> |
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 458485       | E6KR    | EET CF  | 06/23/25 14:43                               |

**Client Sample ID: MW-8**

**Date Collected: 06/19/25 11:47**

**Date Received: 06/20/25 13:49**

**Lab Sample ID: 310-309320-2**

**Matrix: Ground Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed                         |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------------------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458995       | WSE8    | EET CF  | 06/27/25 13:34                               |
| Total/NA  | Analysis   | 8260D        |     | 1               | 458497       | WSE8    | EET CF  | 06/23/25 21:32                               |
| Total/NA  | Analysis   | RSK-175      |     | 10              | 662111       | JBN     | EET CLE | 07/01/25 10:40                               |
| Total/NA  | Analysis   | 8015C        |     | 1               | 458551       | BW2O    | EET CF  | 06/24/25 15:07                               |
| Total/NA  | Prep       | 3511         |     |                 | 458464       | BW2O    | EET CF  | 06/23/25 12:26                               |
| Total/NA  | Analysis   | 8081B        |     | 1               | 458777       | BW2O    | EET CF  | 06/26/25 15:07                               |
| Total/NA  | Prep       | 8151A        |     |                 | 823279       | DAK     | EET CHI | 06/25/25 10:43                               |
| Total/NA  | Analysis   | 8151A        |     | 1               | 823371       | H7CM    | EET CHI | 06/26/25 01:59                               |
| Total/NA  | Analysis   | 9056A        |     | 1               | 458567       | QTZ5    | EET CF  | 06/20/25 20:29                               |
| Total/NA  | Prep       | 3005A        |     |                 | 458767       | WK2X    | EET CF  | 06/26/25 09:00                               |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459222       | NFT2    | EET CF  | 06/30/25 16:21                               |
| Total/NA  | Prep       | 3005A        |     |                 | 458767       | WK2X    | EET CF  | 06/26/25 09:00                               |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459126       | NFT2    | EET CF  | 06/28/25 20:41                               |
| Total/NA  | Prep       | 7470A        |     |                 | 458672       | F5MW    | EET CF  | 06/25/25 11:19                               |
| Total/NA  | Analysis   | 7470A        |     | 1               | 458854       | F5MW    | EET CF  | 06/26/25 09:55                               |
| Total/NA  | Prep       | 9012B        |     |                 | 458707       | ENB7    | EET CF  | 06/25/25 09:00                               |
| Total/NA  | Analysis   | 9012B        |     | 1               | 458789       | ZJX4    | EET CF  | 06/25/25 21:32                               |
| Total/NA  | Prep       | 9030B        |     |                 | 823195       | CLB     | EET CHI | 06/24/25 18:22 - 06/24/25 18:30 <sup>1</sup> |
| Total/NA  | Analysis   | 9034         |     | 1               | 823196       | CLB     | EET CHI | 06/25/25 03:12 - 06/25/25 03:21 <sup>1</sup> |

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# Lab Chronicle

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

**Client Sample ID: MW-8**

**Date Collected: 06/19/25 11:47**

**Date Received: 06/20/25 13:49**

**Lab Sample ID: 310-309320-2**

**Matrix: Ground Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 458485       | E6KR    | EET CF | 06/23/25 14:43       |

**Client Sample ID: Trip Blank**

**Date Collected: 06/19/25 00:00**

**Date Received: 06/20/25 13:49**

**Lab Sample ID: 310-309320-3**

**Matrix: Trip Blank**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458995       | WSE8    | EET CF | 06/27/25 12:29       |
| Total/NA  | Analysis   | 8260D        |     | 1               | 458497       | WSE8    | EET CF | 06/23/25 19:17       |

<sup>1</sup> This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

## Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

# Accreditation/Certification Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority                                                                                                                                                                                             | Program     | Identification Number | Expiration Date        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|------------------------|
| Iowa                                                                                                                                                                                                  | State       | 007                   | 07-10-25               |
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. |             |                       |                        |
| Analysis Method                                                                                                                                                                                       | Prep Method | Matrix                | Analyte                |
| 8260D                                                                                                                                                                                                 |             | Ground Water          | 1,2,4-Trichlorobenzene |
| 8260D                                                                                                                                                                                                 |             | Ground Water          | Allyl chloride         |
| 8260D                                                                                                                                                                                                 |             | Ground Water          | Ethyl methacrylate     |
| 8260D                                                                                                                                                                                                 |             | Trip Blank            | 1,2,4-Trichlorobenzene |
| 8260D                                                                                                                                                                                                 |             | Trip Blank            | Allyl chloride         |
| 8260D                                                                                                                                                                                                 |             | Trip Blank            | Ethyl methacrylate     |

## Laboratory: Eurofins Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority                                                                                                                                                                                             | Program     | Identification Number | Expiration Date |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|-----------------|
| Iowa                                                                                                                                                                                                  | State       | 082                   | 05-01-26        |
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. |             |                       |                 |
| Analysis Method                                                                                                                                                                                       | Prep Method | Matrix                | Analyte         |
| 8151A                                                                                                                                                                                                 | 8151A       | Ground Water          | 2,4,5-T         |

## Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

| Authority          | Program             | Identification Number | Expiration Date |
|--------------------|---------------------|-----------------------|-----------------|
| Connecticut        | State               | PH-0806               | 12-31-26        |
| Georgia            | State               | 4062                  | 02-27-26        |
| Illinois           | NELAP               | 200004                | 07-02-25        |
| Iowa               | State               | 421                   | 06-01-27        |
| Kansas             | NELAP               | E-10336               | 01-31-26        |
| Kentucky (UST)     | State               | 112225                | 02-28-26        |
| Kentucky (WW)      | State               | KY98016               | 12-31-25        |
| Minnesota          | NELAP               | 039-999-348           | 12-31-25        |
| New Hampshire      | NELAP               | 225024                | 09-30-25        |
| New Jersey         | NELAP               | OH001                 | 06-30-26        |
| New York           | NELAP               | 10975                 | 04-01-26        |
| North Dakota       | State               | R-244                 | 02-27-26        |
| Ohio               | State               | 8303                  | 11-04-25        |
| Ohio VAP           | State               | ORELAP 4062           | 02-28-26        |
| Oregon             | NELAP               | 4062                  | 07-10-25        |
| Pennsylvania       | NELAP               | 68-00340              | 07-20-25        |
| Texas              | NELAP               | T104704517            | 08-31-25        |
| US Fish & Wildlife | US Federal Programs | A26406                | 02-28-26        |
| USDA               | US Federal Programs | P330-18-00281         | 01-05-27        |
| Virginia           | NELAP               | 460175                | 09-15-25        |
| West Virginia DEP  | State               | 210                   | 12-31-25        |
| Wisconsin          | State               | 399167560             | 08-07-25        |

# Method Summary

Client: SCS Engineers

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309320-1

SDG: Woodbury County Sanitary Landfill (HMSP)

| Method    | Method Description                                             | Protocol | Laboratory |
|-----------|----------------------------------------------------------------|----------|------------|
| 8260D     | Volatile Organic Compounds by GC/MS                            | SW846    | EET CF     |
| RSK-175   | Dissolved Gases (GC)                                           | RSK      | EET CLE    |
| 8015C     | Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) | SW846    | EET CF     |
| 8081B     | Organochlorine Pesticides (GC)                                 | SW846    | EET CF     |
| 8151A     | Herbicides (GC)                                                | SW846    | EET CHI    |
| 9056A     | Anions, Ion Chromatography                                     | SW846    | EET CF     |
| 6020B     | Metals (ICP/MS)                                                | SW846    | EET CF     |
| 7470A     | Mercury (CVAA)                                                 | SW846    | EET CF     |
| 9012B     | Cyanide, Total and/or Amenable                                 | SW846    | EET CF     |
| 9034      | Sulfide, Acid soluble and Insoluble (Titrimetric)              | SW846    | EET CHI    |
| I-3765-85 | Residue, Non-filterable (TSS)                                  | USGS     | EET CF     |
| 3005A     | Preparation, Total Metals                                      | SW846    | EET CF     |
| 3511      | Microextraction of Organic Compounds                           | SW846    | EET CF     |
| 5030B     | Purge and Trap                                                 | SW846    | EET CF     |
| 7470A     | Preparation, Mercury                                           | SW846    | EET CF     |
| 8151A     | Extraction (Herbicides)                                        | SW846    | EET CHI    |
| 9012B     | Cyanide, Total and/or Amenable, Distillation                   | SW846    | EET CF     |
| 9030B     | Sulfide, Distillation (Acid Soluble and Insoluble)             | SW846    | EET CHI    |

## Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

## Laboratory References:

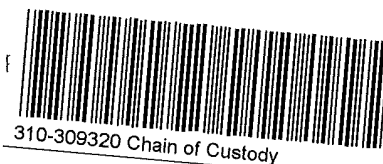
EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



Environment Testing  
America



### Cooler/Sample Receipt and Temperature Log Form

|                                                                                                                                                                                                                                                                                                                                                                   |                        |                                                                     |                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Client Information</b>                                                                                                                                                                                                                                                                                                                                         |                        |                                                                     |                                                                                               |
| Client: <u>SCS</u>                                                                                                                                                                                                                                                                                                                                                |                        |                                                                     |                                                                                               |
| City/State:                                                                                                                                                                                                                                                                                                                                                       | CITY                   | STATE                                                               | Project                                                                                       |
| <b>Receipt Information</b>                                                                                                                                                                                                                                                                                                                                        |                        |                                                                     |                                                                                               |
| Date/Time Received                                                                                                                                                                                                                                                                                                                                                | DATE<br><u>6-20-25</u> | TIME<br><u>1605</u>                                                 | Received By: <u>EH</u>                                                                        |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ |                        |                                                                     |                                                                                               |
| <b>Condition of Cooler/Containers</b>                                                                                                                                                                                                                                                                                                                             |                        |                                                                     |                                                                                               |
| Sample(s) received in Cooler?                                                                                                                                                                                                                                                                                                                                     |                        | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID.                                                                            |
| Multiple Coolers?                                                                                                                                                                                                                                                                                                                                                 |                        | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>2</u> of <u>2</u>                                                         |
| Cooler Custody Seals Present?                                                                                                                                                                                                                                                                                                                                     |                        | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Sample Custody Seals Present?                                                                                                                                                                                                                                                                                                                                     |                        | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trip Blank Present?                                                                                                                                                                                                                                                                                                                                               |                        | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓                                                    |
| <b>Temperature Record</b>                                                                                                                                                                                                                                                                                                                                         |                        |                                                                     |                                                                                               |
| Coolant <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE                                                                                                                                                                        |                        |                                                                     |                                                                                               |
| Thermometer ID: <u>AA</u>                                                                                                                                                                                                                                                                                                                                         |                        | Correction Factor (°C): <u>0</u>                                    |                                                                                               |
| • Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                                    |                        |                                                                     |                                                                                               |
| Uncorrected Temp (°C): <u>3.2</u>                                                                                                                                                                                                                                                                                                                                 |                        | Corrected Temp (°C) <u>3.2</u>                                      |                                                                                               |
| <b>• Sample Container Temperature</b>                                                                                                                                                                                                                                                                                                                             |                        |                                                                     |                                                                                               |
| Container(s) used:                                                                                                                                                                                                                                                                                                                                                | CONTAINER 1            |                                                                     | CONTAINER 2                                                                                   |
| Uncorrected Temp (°C)                                                                                                                                                                                                                                                                                                                                             |                        |                                                                     |                                                                                               |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                              |                        |                                                                     |                                                                                               |
| <b>Exceptions Noted</b>                                                                                                                                                                                                                                                                                                                                           |                        |                                                                     |                                                                                               |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                         |                        |                                                                     |                                                                                               |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                            |                        |                                                                     |                                                                                               |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                  |                        |                                                                     |                                                                                               |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login                                                                                                                                                                                                                                                                                             |                        |                                                                     |                                                                                               |
| <b>Additional Comments</b>                                                                                                                                                                                                                                                                                                                                        |                        |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                   |                        |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                   |                        |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                   |                        |                                                                     |                                                                                               |

Eurofins TestAmerica, Cedar Falls  
3019 Venture Way  
Cedar Falls IA 50613-6907  
phone 319 277 2401 fax 319 277 2425

## Chain of Custody Record

TestAmerica Omaha SC  
263 curiofins

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Project Manager: Ben Madison

|                                                                                                                                                                                                      |      |                                                                                                                                        |             |                             |        |              |                                                                                                                                |                         |                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------|--------|--------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------|
| Client Contact                                                                                                                                                                                       |      | Email: bmadison@scsengineers.com                                                                                                       |             | Site Contact: Ben Madison   |        | Date:        |                                                                                                                                | COC No                  |                                                                       |
| SCS Engineers                                                                                                                                                                                        |      | Cell 515-776-9255                                                                                                                      |             | Lab Contact: S. Miller      |        | Carrier:     |                                                                                                                                | 1 of 2 COCs             |                                                                       |
| 1690 All-State Court, Suite 100                                                                                                                                                                      |      | Analysis Turnaround Time                                                                                                               |             |                             |        |              |                                                                                                                                | Sampler                 |                                                                       |
| West Des Moines, IA 50265                                                                                                                                                                            |      | <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS                                                           |             |                             |        |              |                                                                                                                                | For Lab Use Only:       |                                                                       |
| 515-631-6160                                                                                                                                                                                         |      | Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day |             |                             |        |              |                                                                                                                                | Walk-in Client:         |                                                                       |
| Project Name: 1st 2025 Semi-Annual Groundwater Sampling                                                                                                                                              |      |                                                                                                                                        |             |                             |        |              |                                                                                                                                | Lab Sampling            |                                                                       |
| Site: Woodbury County Sanitary Landfill (HMSP)                                                                                                                                                       |      |                                                                                                                                        |             |                             |        |              |                                                                                                                                | Job / SDG No            |                                                                       |
| P O # 27223172 25                                                                                                                                                                                    |      |                                                                                                                                        |             |                             |        |              |                                                                                                                                |                         |                                                                       |
| Sample Identification                                                                                                                                                                                |      | Sample Date                                                                                                                            | Sample Time | Sample Type (C=Comp G=Grab) | Matrix | # of Cont.   | Sample Specific Notes.                                                                                                         |                         |                                                                       |
| MW-2                                                                                                                                                                                                 | 6-19 | 16:53                                                                                                                                  | G           | GW                          |        |              |                                                                                                                                |                         |                                                                       |
| MW-3                                                                                                                                                                                                 | —    | —                                                                                                                                      | G           | GW                          |        |              |                                                                                                                                |                         |                                                                       |
| MW-5                                                                                                                                                                                                 |      |                                                                                                                                        | G           | GW                          |        |              |                                                                                                                                |                         |                                                                       |
| MW-6                                                                                                                                                                                                 |      |                                                                                                                                        | G           | GW                          |        |              |                                                                                                                                |                         |                                                                       |
| MW-8                                                                                                                                                                                                 | 6-19 | 11:47                                                                                                                                  | G           | GW                          |        |              |                                                                                                                                |                         |                                                                       |
| PZ-2B                                                                                                                                                                                                |      |                                                                                                                                        | G           | GW                          |        |              |                                                                                                                                |                         |                                                                       |
| MW-D                                                                                                                                                                                                 |      |                                                                                                                                        | G           | GW                          |        |              |                                                                                                                                |                         |                                                                       |
| Trip Blank                                                                                                                                                                                           |      |                                                                                                                                        |             |                             |        |              |                                                                                                                                | X                       | Include trip blanks in every cooler containing VOC sample containers. |
| Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other                                                                                                                              |      |                                                                                                                                        |             |                             |        |              | Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)                                            |                         |                                                                       |
| Possible Hazard Identification:<br>Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. |      |                                                                                                                                        |             |                             |        |              |                                                                                                                                |                         |                                                                       |
| <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown                     |      |                                                                                                                                        |             |                             |        |              | <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for Months |                         |                                                                       |
| Special Instructions/QC Requirements & Comments Natural Attenuation Parameters Dissolved Methane Iron Nitrate, Manganese And Sulfate                                                                 |      |                                                                                                                                        |             |                             |        |              |                                                                                                                                |                         |                                                                       |
| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                       |      | Custody Seal No                                                                                                                        |             | Received by:                |        | Company:     |                                                                                                                                | Date/Time               |                                                                       |
| Relinquished by: Garrett Hoover                                                                                                                                                                      |      | Company: SCS                                                                                                                           |             | Date/Time: 6-19-25          |        | Company: 7-2 |                                                                                                                                | Date/Time: 6-20-25 0700 |                                                                       |
| Relinquished by:                                                                                                                                                                                     |      | Company: 21                                                                                                                            |             | Date/Time: 6-20-25          |        | Company:     |                                                                                                                                | Date/Time:              |                                                                       |
| Relinquished by:                                                                                                                                                                                     |      | Company:                                                                                                                               |             | Date/Time:                  |        | Company:     |                                                                                                                                | Date/Time: 6/20/25 1605 |                                                                       |

Form No. CA-C-WI-002, Rev. 4.23, dated 4/16/2019





Environment Testing  
America



### Cooler/Sample Receipt and Temperature Log Form

|                                                                                                                                                                                                                                                                                                                                                                  |                     |                                                                     |                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Client Information</b>                                                                                                                                                                                                                                                                                                                                        |                     |                                                                     |                                                                                               |
| Client: <u>SCS</u>                                                                                                                                                                                                                                                                                                                                               |                     |                                                                     |                                                                                               |
| City/State.                                                                                                                                                                                                                                                                                                                                                      | CITY                | STATE                                                               | Project                                                                                       |
| <b>Receipt Information</b>                                                                                                                                                                                                                                                                                                                                       |                     |                                                                     |                                                                                               |
| Date/Time Received                                                                                                                                                                                                                                                                                                                                               | DATE <u>6-20-25</u> | TIME <u>1605</u>                                                    | Received By <u>EH</u>                                                                         |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other _____ |                     |                                                                     |                                                                                               |
| <b>Condition of Cooler/Containers</b>                                                                                                                                                                                                                                                                                                                            |                     |                                                                     |                                                                                               |
| Sample(s) received in Cooler?                                                                                                                                                                                                                                                                                                                                    |                     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID                                                                             |
| Multiple Coolers?                                                                                                                                                                                                                                                                                                                                                |                     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>2</u> of <u>2</u>                                                         |
| Cooler Custody Seals Present?                                                                                                                                                                                                                                                                                                                                    |                     | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Sample Custody Seals Present?                                                                                                                                                                                                                                                                                                                                    |                     | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trip Blank Present?                                                                                                                                                                                                                                                                                                                                              |                     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓                                                    |
| <b>Temperature Record</b>                                                                                                                                                                                                                                                                                                                                        |                     |                                                                     |                                                                                               |
| Coolant <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other _____ <input type="checkbox"/> NONE                                                                                                                                                                        |                     |                                                                     |                                                                                               |
| Thermometer ID: <u>AA</u>                                                                                                                                                                                                                                                                                                                                        |                     | Correction Factor (°C): <u>0</u>                                    |                                                                                               |
| • Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                                   |                     |                                                                     |                                                                                               |
| Uncorrected Temp (°C): <u>3.2</u>                                                                                                                                                                                                                                                                                                                                |                     | Corrected Temp (°C) <u>3.2</u>                                      |                                                                                               |
| • Sample Container Temperature                                                                                                                                                                                                                                                                                                                                   |                     |                                                                     |                                                                                               |
| Container(s) used:                                                                                                                                                                                                                                                                                                                                               | CONTAINER 1         |                                                                     | CONTAINER 2                                                                                   |
| Uncorrected Temp (°C):                                                                                                                                                                                                                                                                                                                                           |                     |                                                                     |                                                                                               |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                             |                     |                                                                     |                                                                                               |
| <b>Exceptions Noted</b>                                                                                                                                                                                                                                                                                                                                          |                     |                                                                     |                                                                                               |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                              |                     |                                                                     |                                                                                               |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                 |                     |                                                                     |                                                                                               |
| NOTE If yes, contact PM before proceeding If no, proceed with login                                                                                                                                                                                                                                                                                              |                     |                                                                     |                                                                                               |
| <b>Additional Comments</b>                                                                                                                                                                                                                                                                                                                                       |                     |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                  |                     |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                  |                     |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                  |                     |                                                                     |                                                                                               |

Eurofins TestAmerica, Cedar Falls  
3019 Venture Way  
Cedar Falls IA 50613-6907  
phone 319 277 2401 fax 319 277 2425

## Chain of Custody Record

TestAmerica Omaha SC  
208 eurofins

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

|                                                                                                                                                                                  |      |                                                                                                                                        |             |                              |        |            |                         |                          |            |                 |                     |                 |                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------|--------|------------|-------------------------|--------------------------|------------|-----------------|---------------------|-----------------|--------------------------------------------------------------------------------------|
| Client Contact                                                                                                                                                                   |      | Project Manager Ben Madson                                                                                                             |             | Site Contact: Ben Madson     |        | Date:      |                         | COC No                   |            |                 |                     |                 |                                                                                      |
| SCS Engineers                                                                                                                                                                    |      | Email: bmadson@scsengineers.com                                                                                                        |             | Lab Contact: S. Miller       |        | Carrier:   |                         | 1 of 2 COCs              |            |                 |                     |                 |                                                                                      |
| 1690 All-State Court, Suite 100                                                                                                                                                  |      | Cell 515-776-9255                                                                                                                      |             |                              |        |            |                         | Sampler                  |            |                 |                     |                 |                                                                                      |
| West Des Moines, IA 50265                                                                                                                                                        |      | Analysis Turnaround Time                                                                                                               |             |                              |        |            |                         | For Lab Use Only.        |            |                 |                     |                 |                                                                                      |
| 515-631-6160                                                                                                                                                                     |      | <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS                                                           |             |                              |        |            |                         | Walk-in Client:          |            |                 |                     |                 |                                                                                      |
|                                                                                                                                                                                  |      | Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day |             |                              |        |            |                         | Lab Sampling             |            |                 |                     |                 |                                                                                      |
| Project Name 1st 2025 Semi-Annual Groundwater Sampling                                                                                                                           |      |                                                                                                                                        |             |                              |        |            |                         | Job / SDG No             |            |                 |                     |                 |                                                                                      |
| Site Woodbury County Sanitary Landfill (HMSP)                                                                                                                                    |      |                                                                                                                                        |             |                              |        |            |                         |                          |            |                 |                     |                 |                                                                                      |
| P O # 27223172 25                                                                                                                                                                |      |                                                                                                                                        |             |                              |        |            |                         |                          |            |                 |                     |                 |                                                                                      |
| Sample Identification                                                                                                                                                            |      | Sample Date                                                                                                                            | Sample Time | Sample Type (G=Comp, G=Grab) | Matrix | # of Cont. | Filtered Sample (Y / N) | Perform MS / MSD (Y / N) | Appendix I | Appendix II     | Natural Attenuation | Trip Blank      | Sample Specific Notes                                                                |
| MW-2                                                                                                                                                                             | 6-19 | 16:53                                                                                                                                  | G           | GW                           |        |            |                         |                          | X          | X               |                     |                 | Natural Attenuation Parameters, Dissolved Methane Iron Nitrate Manganese And Sulfate |
| MW-3                                                                                                                                                                             | ---  | ---                                                                                                                                    | G           | GW                           |        |            |                         |                          | X          | X               |                     |                 |                                                                                      |
| MW-5                                                                                                                                                                             |      |                                                                                                                                        | G           | GW                           |        |            |                         |                          | X          | X               |                     |                 |                                                                                      |
| MW-6                                                                                                                                                                             |      |                                                                                                                                        | G           | GW                           |        |            |                         |                          | X          | X               |                     |                 |                                                                                      |
| MW-8                                                                                                                                                                             | 6-19 | 11:47                                                                                                                                  | G           | GW                           |        |            |                         |                          | X          | X               |                     |                 |                                                                                      |
| PZ-2B                                                                                                                                                                            |      |                                                                                                                                        | G           | GW                           |        |            |                         |                          | X          | X               |                     |                 |                                                                                      |
| MW-D                                                                                                                                                                             |      |                                                                                                                                        | G           | GW                           |        |            |                         |                          | X          | X               |                     |                 |                                                                                      |
| Trip Blank                                                                                                                                                                       |      |                                                                                                                                        |             |                              |        |            |                         |                          |            |                 |                     | X               | Include trip blanks in every cooler containing VOC sample containers.                |
| Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other                                                                                                            |      |                                                                                                                                        |             |                              |        |            |                         |                          |            |                 |                     |                 |                                                                                      |
| Possible Hazard Identification                                                                                                                                                   |      |                                                                                                                                        |             |                              |        |            |                         |                          |            |                 |                     |                 |                                                                                      |
| Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample                 |      |                                                                                                                                        |             |                              |        |            |                         |                          |            |                 |                     |                 |                                                                                      |
| <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown |      |                                                                                                                                        |             |                              |        |            |                         |                          |            |                 |                     |                 |                                                                                      |
| Special Instructions/QC Requirements & Comments. Natural Attenuation Parameters, Dissolved Methane Iron Nitrate Manganese And Sulfate                                            |      |                                                                                                                                        |             |                              |        |            |                         |                          |            |                 |                     |                 |                                                                                      |
| Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                    |      | Custody Seal No                                                                                                                        |             | Received by:                 |        | Company:   |                         | Date/Time:               |            | Date/Time:      |                     | Date/Time:      |                                                                                      |
| Relinquished by: <i>Corratt Koon</i>                                                                                                                                             |      | Company: SCS                                                                                                                           |             | Received by:                 |        | Company:   |                         | Date/Time: 6-20-25       |            | Date/Time: 0700 |                     | Date/Time: 0700 |                                                                                      |
| Relinquished by:                                                                                                                                                                 |      | Company: L-1                                                                                                                           |             | Received by:                 |        | Company:   |                         | Date/Time: 6-20-25       |            | Date/Time: 0700 |                     | Date/Time: 0700 |                                                                                      |
| Relinquished by:                                                                                                                                                                 |      | Company:                                                                                                                               |             | Received in Laboratory by:   |        | Company:   |                         | Date/Time: 6-20-25       |            | Date/Time: 1005 |                     | Date/Time: 1005 |                                                                                      |

\_\_\_\_\_

[illegible][illegible]

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form  
 IR GUN # 17 (CF 4.2 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.4

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity \_\_\_\_\_ Yes ☒ No ☒  
 -Were the seals on the outside of the cooler(s) signed & dated? Yes ☒ No ☒  
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes ☒ No ☒  
 -Were tamper/custody seals intact and uncompromised? Yes ☒ No ☒

3. Shippers' packing slip attached to the cooler(s)? ☒ Yes ☒ No  
 4. Did custody papers accompany the sample(s)? ☒ Yes ☒ No  
 5. Were the custody papers relinquished & signed in the appropriate place? ☒ Yes ☒ No  
 6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes ☒ No ☒  
 7. Did all bottles arrive in good condition (Unbroken)? ☒ Yes ☒ No  
 8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? ☒ Yes ☒ No  
 9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? ☒ Yes ☒ No  
 10. Were correct bottle(s) used for the test(s) indicated? ☒ Yes ☒ No  
 11. Sufficient quantity received to perform indicated analyses? ☒ Yes ☒ No  
 12. Are these work share samples and all listed on the COC? ☒ Yes ☒ No  
 If yes, Questions 13-17 have been checked at the originating laboratory.

13. Were all preserved sample(s) at the correct pH upon receipt? Yes ☒ No ☒ NA ☒ pH Strip Lot# HC-6  
 14. Were VOAs on the COC? Yes ☒ No ☒  
 15. Were air bubbles >6 mm in any VOA vials? ☒ Yes ☒ No ☒ NA ☒ Larger than this.  
 16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # \_\_\_\_\_ Yes ☒ No ☒  
 17. Was a LL Hg or Me Hg trip blank present? Yes ☒ No ☒

Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other  
 Concerning \_\_\_\_\_

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page Labeled by: \_\_\_\_\_  
 Labels Verified by: \_\_\_\_\_

19. SAMPLE CONDITION  
 Sample(s) \_\_\_\_\_ were received after the recommended holding time had expired.  
 Sample(s) \_\_\_\_\_ were received in a broken container.  
 Sample(s) \_\_\_\_\_ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION  
 Sample(s) \_\_\_\_\_ were further preserved in the laboratory  
 Time preserved: \_\_\_\_\_ Preservative(s) added/Lot number(s): \_\_\_\_\_  
 VOA Sample Preservation - Date/Time VOAs Frozen: \_\_\_\_\_

EUROFINS TESTAMERICA  
3019 VENTURE WAY  
CEDAR FALLS, IA 50613  
UNITED STATES US

DATE: 23 JUN 25  
ACTWGT: 18.40 LB  
CAD: 0870970/CAFE33908

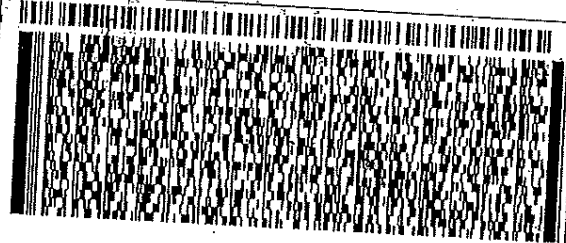
BILL SENDER

TO: SHIPPING/RECEIVING  
EUROFINS ENVIRONMENT TESTING NORTH  
180 S. VAN BUREN AVENUE

BARBERTON OH 44203

(330) 497-9396

REF: S310-107914



FedEx  
Express



TRKH 4085 8620 2021  
0201

TUE - 24 JUN 10:30A  
PRIORITY OVERNIGHT

**XS CAKA**

44203

OH-US CLE





3019 Venture Way  
Cedar Falls, IA 50613  
Phone 319-277-2401 Fax 319-277-2425

8/21/2025 (Rev. 1)

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-309320-1

SDG Number: Woodbury County Sanitary Landfill (HMSP)

**Login Number: 309320**

**List Number: 1**

**Creator: Homolar, Dana J**

**List Source: Eurofins Cedar Falls**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | N/A    |         |
| The cooler's custody seal, if present, is intact.                                        | True   |         |
| Sample custody seals, if present, are 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 is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   |         |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | 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   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-309320-1  
SDG Number: Woodbury County Sanitary Landfill (HMSP)

**Login Number: 309320**

**List Number: 3**

**Creator: Babayode, Daniel**

**List Source: Eurofins Chicago**

**List Creation: 06/24/25 04:55 PM**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | True   |         |
| The cooler's custody seal, if present, is intact.                                        | True   |         |
| Sample custody seals, if present, are intact.                                            | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.           | True   |         |
| Samples were received on ice.                                                            | True   |         |
| Cooler Temperature is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   | 1.5     |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | False  |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | 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   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | N/A    |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Nathan Ohrt  
SCS Engineers  
1690 All State Court  
Suite 100  
West Des Moines, Iowa 50265  
Generated 8/21/2025 4:02:37 PM Revision 2

## JOB DESCRIPTION

1st 2025 Semi-Annual Groundwater Sampling  
Woodbury County Sanitary Landfill (HMSP)  
2025 Semi-Annual HMSP

## JOB NUMBER

310-309488-1

# Eurofins Cedar Falls

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



Authorized for release by  
Samuel Miller, Project Management Assistant I  
[Samuel.Miller@et.eurofinsus.com](mailto:Samuel.Miller@et.eurofinsus.com)  
(319)595-2008

Generated  
8/21/2025 4:02:37 PM  
Revision 2

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## Case Narrative

Client: SCS Engineers  
Project: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1

**Job ID: 310-309488-1**

**Eurofins Cedar Falls**

### **Job Narrative 310-309488-1**

#### REVISION

The report being provided is a revision of the original report sent on 7/8/2025. The report (revision 2) is being revised due to Updated analyte list for samples MW-5 and MW-6.

#### Report revision history

Revision 1 - 7/9/2025 - Reason - Updated primary contact on report.

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

#### **Receipt**

The samples were received on 6/24/2025 4:00 PM. 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 -0.2°C.

#### **GC/MS VOA**

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

#### **Metals**

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

#### **General Chemistry**

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

Eurofins Cedar Falls

# Sample Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

| Lab Sample ID | Client Sample ID | Matrix      | Collected      | Received       | Sample Origin |
|---------------|------------------|-------------|----------------|----------------|---------------|
| 310-309488-2  | MW-5             | Groundwater | 06/19/25 15:02 | 06/24/25 16:00 | Iowa          |
| 310-309488-3  | MW-6             | Groundwater | 06/19/25 13:44 | 06/24/25 16:00 | Iowa          |
| 310-309488-4  | MW-D             | Groundwater | 06/19/25 15:32 | 06/24/25 16:00 | Iowa          |
| 310-309488-5  | Trip Blank       | Trip Blank  | 06/19/25 00:00 | 06/24/25 16:00 | Iowa          |

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

## Detection Summary

Client: SCS Engineers

Job ID: 310-309488-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

### Client Sample ID: MW-5

### Lab Sample ID: 310-309488-2

| Analyte                | Result   | Qualifier | RL       | MDL      | Unit | Dil Fac | D | Method    | Prep Type |
|------------------------|----------|-----------|----------|----------|------|---------|---|-----------|-----------|
| Antimony               | 0.00132  | J         | 0.00200  | 0.00100  | mg/L | 1       |   | 6020B     | Total/NA  |
| Arsenic                | 0.00154  | J         | 0.00200  | 0.000530 | mg/L | 1       |   | 6020B     | Total/NA  |
| Barium                 | 0.0277   |           | 0.00200  | 0.000660 | mg/L | 1       |   | 6020B     | Total/NA  |
| Cobalt                 | 0.000232 | J         | 0.000500 | 0.000170 | mg/L | 1       |   | 6020B     | Total/NA  |
| Total Suspended Solids | 1.38     | J         | 1.88     | 1.31     | mg/L | 1       |   | I-3765-85 | Total/NA  |

### Client Sample ID: MW-6

### Lab Sample ID: 310-309488-3

| Analyte                | Result   | Qualifier | RL       | MDL      | Unit | Dil Fac | D | Method    | Prep Type |
|------------------------|----------|-----------|----------|----------|------|---------|---|-----------|-----------|
| Antimony               | 0.00113  | J         | 0.00200  | 0.00100  | mg/L | 1       |   | 6020B     | Total/NA  |
| Arsenic                | 0.000941 | J         | 0.00200  | 0.000530 | mg/L | 1       |   | 6020B     | Total/NA  |
| Barium                 | 0.522    |           | 0.00200  | 0.000660 | mg/L | 1       |   | 6020B     | Total/NA  |
| Cadmium                | 0.000132 | J         | 0.000200 | 0.000100 | mg/L | 1       |   | 6020B     | Total/NA  |
| Cobalt                 | 0.00203  |           | 0.000500 | 0.000170 | mg/L | 1       |   | 6020B     | Total/NA  |
| Copper                 | 0.00380  | J         | 0.00500  | 0.00320  | mg/L | 1       |   | 6020B     | Total/NA  |
| Lead                   | 0.00154  |           | 0.000500 | 0.000330 | mg/L | 1       |   | 6020B     | Total/NA  |
| Nickel                 | 0.00329  | J         | 0.00500  | 0.00230  | mg/L | 1       |   | 6020B     | Total/NA  |
| Selenium               | 0.00636  |           | 0.00500  | 0.00140  | mg/L | 1       |   | 6020B     | Total/NA  |
| Vanadium               | 0.00292  | J B       | 0.00500  | 0.00170  | mg/L | 1       |   | 6020B     | Total/NA  |
| Total Suspended Solids | 72.0     |           | 15.0     | 10.5     | mg/L | 1       |   | I-3765-85 | Total/NA  |

### Client Sample ID: MW-D

### Lab Sample ID: 310-309488-4

| Analyte  | Result   | Qualifier | RL       | MDL      | Unit | Dil Fac | D | Method | Prep Type |
|----------|----------|-----------|----------|----------|------|---------|---|--------|-----------|
| Antimony | 0.00171  | J         | 0.00200  | 0.00100  | mg/L | 1       |   | 6020B  | Total/NA  |
| Arsenic  | 0.00190  | J         | 0.00200  | 0.000530 | mg/L | 1       |   | 6020B  | Total/NA  |
| Barium   | 0.0277   |           | 0.00200  | 0.000660 | mg/L | 1       |   | 6020B  | Total/NA  |
| Cobalt   | 0.000186 | J         | 0.000500 | 0.000170 | mg/L | 1       |   | 6020B  | Total/NA  |
| Selenium | 0.00142  | J         | 0.00500  | 0.00140  | mg/L | 1       |   | 6020B  | Total/NA  |

### Client Sample ID: Trip Blank

### Lab Sample ID: 310-309488-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-5

Lab Sample ID: 310-309488-2

Date Collected: 06/19/25 15:02

Matrix: Groundwater

Date Received: 06/24/25 16:00

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.190 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.470 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,1-Dichloroethane          | <1.00  |           | 1.00  | 0.220 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.560 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.590 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.230 | ug/L |   |          | 06/25/25 20:31 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/25/25 20:31 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 2.00  | ug/L |   |          | 06/25/25 20:31 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/25/25 20:31 | 1       |
| Acetone                     | <10.0  |           | 10.0  | 3.10  | ug/L |   |          | 06/25/25 20:31 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 06/25/25 20:31 | 1       |
| Benzene                     | <0.500 |           | 0.500 | 0.220 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 0.540 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 0.780 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 06/25/25 20:31 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 0.750 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.790 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 06/25/25 20:31 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 06/25/25 20:31 | 1       |
| cis-1,2-Dichloroethene      | <1.00  |           | 1.00  | 0.210 | ug/L |   |          | 06/25/25 20:31 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 0.250 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.310 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 7.00  | ug/L |   |          | 06/25/25 20:31 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 06/25/25 20:31 | 1       |
| Styrene                     | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00  | 0.480 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Toluene                     | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 06/25/25 20:31 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 06/25/25 20:31 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00  | 0.560 | ug/L |   |          | 06/25/25 20:31 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0  | 1.10  | ug/L |   |          | 06/25/25 20:31 | 1       |
| Trichloroethene             | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00  | 0.380 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0  | 2.50  | ug/L |   |          | 06/25/25 20:31 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00  | 0.180 | ug/L |   |          | 06/25/25 20:31 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00  | 0.400 | ug/L |   |          | 06/25/25 20:31 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 105       |           | 76 - 130 |          | 06/25/25 20:31 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-5

Lab Sample ID: 310-309488-2

Date Collected: 06/19/25 15:02

Matrix: Groundwater

Date Received: 06/24/25 16:00

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 104       |           | 80 - 120 |          | 06/25/25 20:31 | 1       |
| 4-Bromofluorobenzene (Surr) | 99        |           | 80 - 120 |          | 06/25/25 20:31 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte   | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | 0.00132   | J         | 0.00200  | 0.00100  | mg/L |   | 06/30/25 09:00 | 07/07/25 15:24 | 1       |
| Arsenic   | 0.00154   | J         | 0.00200  | 0.000530 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Barium    | 0.0277    |           | 0.00200  | 0.000660 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Beryllium | <0.00100  |           | 0.00100  | 0.000330 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Cadmium   | <0.000200 |           | 0.000200 | 0.000100 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Chromium  | <0.00500  |           | 0.00500  | 0.00180  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Cobalt    | 0.000232  | J         | 0.000500 | 0.000170 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Copper    | <0.00500  |           | 0.00500  | 0.00320  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Lead      | <0.000500 |           | 0.000500 | 0.000330 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Nickel    | <0.00500  |           | 0.00500  | 0.00230  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Selenium  | <0.00500  |           | 0.00500  | 0.00140  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Silver    | <0.00100  |           | 0.00100  | 0.000500 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Thallium  | <0.00100  |           | 0.00100  | 0.000570 | mg/L |   | 06/30/25 09:00 | 07/07/25 15:24 | 1       |
| Vanadium  | <0.00500  |           | 0.00500  | 0.00170  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |
| Zinc      | <0.0200   |           | 0.0200   | 0.0130   | mg/L |   | 06/30/25 09:00 | 07/03/25 18:54 | 1       |

## General Chemistry

| Analyte                                 | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Total Suspended Solids (USGS I-3765-85) | 1.38   | J         | 1.88 | 1.31 | mg/L |   |          | 06/25/25 09:11 | 1       |



# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-6

Lab Sample ID: 310-309488-3

Date Collected: 06/19/25 13:44

Matrix: Groundwater

Date Received: 06/24/25 16:00

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.190 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.470 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,1-Dichloroethane          | <1.00  |           | 1.00  | 0.220 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.560 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.590 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.230 | ug/L |   |          | 06/25/25 20:54 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/25/25 20:54 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 2.00  | ug/L |   |          | 06/25/25 20:54 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/25/25 20:54 | 1       |
| Acetone                     | <10.0  |           | 10.0  | 3.10  | ug/L |   |          | 06/25/25 20:54 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 06/25/25 20:54 | 1       |
| Benzene                     | <0.500 |           | 0.500 | 0.220 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 0.540 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 0.780 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 06/25/25 20:54 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 0.750 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.790 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 06/25/25 20:54 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 06/25/25 20:54 | 1       |
| cis-1,2-Dichloroethene      | <1.00  |           | 1.00  | 0.210 | ug/L |   |          | 06/25/25 20:54 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 0.250 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.310 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 7.00  | ug/L |   |          | 06/25/25 20:54 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 06/25/25 20:54 | 1       |
| Styrene                     | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00  | 0.480 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Toluene                     | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 06/25/25 20:54 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 06/25/25 20:54 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00  | 0.560 | ug/L |   |          | 06/25/25 20:54 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0  | 1.10  | ug/L |   |          | 06/25/25 20:54 | 1       |
| Trichloroethene             | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00  | 0.380 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0  | 2.50  | ug/L |   |          | 06/25/25 20:54 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00  | 0.180 | ug/L |   |          | 06/25/25 20:54 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00  | 0.400 | ug/L |   |          | 06/25/25 20:54 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 103       |           | 76 - 130 |          | 06/25/25 20:54 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

**Client Sample ID: MW-6**

**Lab Sample ID: 310-309488-3**

Date Collected: 06/19/25 13:44

Matrix: Groundwater

Date Received: 06/24/25 16:00

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 107       |           | 80 - 120 |          | 06/25/25 20:54 | 1       |
| 4-Bromofluorobenzene (Surr) | 101       |           | 80 - 120 |          | 06/25/25 20:54 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte   | Result   | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | 0.00113  | J         | 0.00200  | 0.00100  | mg/L |   | 06/30/25 09:00 | 07/07/25 15:27 | 1       |
| Arsenic   | 0.000941 | J         | 0.00200  | 0.000530 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Barium    | 0.522    |           | 0.00200  | 0.000660 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Beryllium | <0.00100 |           | 0.00100  | 0.000330 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Cadmium   | 0.000132 | J         | 0.000200 | 0.000100 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Chromium  | <0.00500 |           | 0.00500  | 0.00180  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Cobalt    | 0.00203  |           | 0.000500 | 0.000170 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Copper    | 0.00380  | J         | 0.00500  | 0.00320  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Lead      | 0.00154  |           | 0.000500 | 0.000330 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Nickel    | 0.00329  | J         | 0.00500  | 0.00230  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Selenium  | 0.00636  |           | 0.00500  | 0.00140  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Silver    | <0.00100 |           | 0.00100  | 0.000500 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Thallium  | <0.00100 |           | 0.00100  | 0.000570 | mg/L |   | 06/30/25 09:00 | 07/07/25 15:27 | 1       |
| Vanadium  | 0.00292  | J B       | 0.00500  | 0.00170  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |
| Zinc      | <0.0200  |           | 0.0200   | 0.0130   | mg/L |   | 06/30/25 09:00 | 07/03/25 18:58 | 1       |

## General Chemistry

| Analyte                                 | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| Sulfide (SW846 9034)                    | <1.00  |           | 1.00 | 0.231 | mg/L |   | 06/26/25 18:15 | 06/26/25 23:37 | 1       |
| Total Suspended Solids (USGS I-3765-85) | 72.0   |           | 15.0 | 10.5  | mg/L |   |                | 06/25/25 09:11 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-D

Lab Sample ID: 310-309488-4

Date Collected: 06/19/25 15:32

Matrix: Groundwater

Date Received: 06/24/25 16:00

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.190 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.470 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,1-Dichloroethane          | <1.00  |           | 1.00  | 0.220 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.560 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.590 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.230 | ug/L |   |          | 06/25/25 21:16 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/25/25 21:16 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 2.00  | ug/L |   |          | 06/25/25 21:16 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/25/25 21:16 | 1       |
| Acetone                     | <10.0  |           | 10.0  | 3.10  | ug/L |   |          | 06/25/25 21:16 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 06/25/25 21:16 | 1       |
| Benzene                     | <0.500 |           | 0.500 | 0.220 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 0.540 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 0.780 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 06/25/25 21:16 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 0.750 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.790 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 06/25/25 21:16 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 06/25/25 21:16 | 1       |
| cis-1,2-Dichloroethene      | <1.00  |           | 1.00  | 0.210 | ug/L |   |          | 06/25/25 21:16 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 0.250 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.310 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 7.00  | ug/L |   |          | 06/25/25 21:16 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 06/25/25 21:16 | 1       |
| Styrene                     | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00  | 0.480 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Toluene                     | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 06/25/25 21:16 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 06/25/25 21:16 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00  | 0.560 | ug/L |   |          | 06/25/25 21:16 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0  | 1.10  | ug/L |   |          | 06/25/25 21:16 | 1       |
| Trichloroethene             | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00  | 0.380 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0  | 2.50  | ug/L |   |          | 06/25/25 21:16 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00  | 0.180 | ug/L |   |          | 06/25/25 21:16 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00  | 0.400 | ug/L |   |          | 06/25/25 21:16 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 106       |           | 76 - 130 |          | 06/25/25 21:16 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: MW-D

Lab Sample ID: 310-309488-4

Date Collected: 06/19/25 15:32

Matrix: Groundwater

Date Received: 06/24/25 16:00

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 105       |           | 80 - 120 |          | 06/25/25 21:16 | 1       |
| 4-Bromofluorobenzene (Surr) | 100       |           | 80 - 120 |          | 06/25/25 21:16 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte   | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | 0.00171   | J         | 0.00200  | 0.00100  | mg/L |   | 06/30/25 09:00 | 07/07/25 15:29 | 1       |
| Arsenic   | 0.00190   | J         | 0.00200  | 0.000530 | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Barium    | 0.0277    |           | 0.00200  | 0.000660 | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Beryllium | <0.00100  |           | 0.00100  | 0.000330 | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Cadmium   | <0.000200 |           | 0.000200 | 0.000100 | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Chromium  | <0.00500  |           | 0.00500  | 0.00180  | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Cobalt    | 0.000186  | J         | 0.000500 | 0.000170 | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Copper    | <0.00500  |           | 0.00500  | 0.00320  | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Lead      | <0.000500 |           | 0.000500 | 0.000330 | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Nickel    | <0.00500  |           | 0.00500  | 0.00230  | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Selenium  | 0.00142   | J         | 0.00500  | 0.00140  | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Silver    | <0.00100  |           | 0.00100  | 0.000500 | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Thallium  | <0.00100  |           | 0.00100  | 0.000570 | mg/L |   | 06/30/25 09:00 | 07/07/25 15:29 | 1       |
| Vanadium  | <0.00500  |           | 0.00500  | 0.00170  | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |
| Zinc      | <0.0200   |           | 0.0200   | 0.0130   | mg/L |   | 06/30/25 09:00 | 07/03/25 19:02 | 1       |

## General Chemistry

| Analyte                                 | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Total Suspended Solids (USGS I-3765-85) | <2.73  |           | 2.73 | 1.91 | mg/L |   |          | 06/25/25 09:11 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank

Lab Sample ID: 310-309488-5

Date Collected: 06/19/25 00:00

Matrix: Trip Blank

Date Received: 06/24/25 16:00

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.190 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.470 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,1-Dichloroethane          | <1.00  |           | 1.00  | 0.220 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.560 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.590 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.230 | ug/L |   |          | 06/25/25 20:08 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/25/25 20:08 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 2.00  | ug/L |   |          | 06/25/25 20:08 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 06/25/25 20:08 | 1       |
| Acetone                     | <10.0  |           | 10.0  | 3.10  | ug/L |   |          | 06/25/25 20:08 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 06/25/25 20:08 | 1       |
| Benzene                     | <0.500 |           | 0.500 | 0.220 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 0.540 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 0.780 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 06/25/25 20:08 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 0.750 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.790 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 06/25/25 20:08 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 06/25/25 20:08 | 1       |
| cis-1,2-Dichloroethene      | <1.00  |           | 1.00  | 0.210 | ug/L |   |          | 06/25/25 20:08 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 0.250 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Dichlorodifluoromethane     | <3.00  |           | 3.00  | 0.250 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.310 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 7.00  | ug/L |   |          | 06/25/25 20:08 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 06/25/25 20:08 | 1       |
| Styrene                     | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00  | 0.480 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Toluene                     | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 06/25/25 20:08 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 06/25/25 20:08 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00  | 0.560 | ug/L |   |          | 06/25/25 20:08 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0  | 1.10  | ug/L |   |          | 06/25/25 20:08 | 1       |
| Trichloroethene             | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00  | 0.380 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0  | 2.50  | ug/L |   |          | 06/25/25 20:08 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00  | 0.180 | ug/L |   |          | 06/25/25 20:08 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00  | 0.400 | ug/L |   |          | 06/25/25 20:08 | 1       |

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Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank  
Date Collected: 06/19/25 00:00  
Date Received: 06/24/25 16:00

Lab Sample ID: 310-309488-5  
Matrix: Trip Blank

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 103       |           | 76 - 130 |          | 06/25/25 20:08 | 1       |
| Toluene-d8 (Surr)           | 105       |           | 80 - 120 |          | 06/25/25 20:08 | 1       |
| 4-Bromofluorobenzene (Surr) | 100       |           | 80 - 120 |          | 06/25/25 20:08 | 1       |

## Definitions/Glossary

Client: SCS Engineers

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1

SDG: Woodbury County Sanitary Landfill (HMSP)

### Qualifiers

#### Metals

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| B         | Compound was found in the blank and sample.                                                                    |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

#### General Chemistry

| 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                                                                                       |

# Surrogate Summary

Client: SCS Engineers

Job ID: 310-309488-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Groundwater

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |  |  |  |  |
|---------------|------------------|------------------------------------------------|-----------------|-----------------|--|--|--|--|
|               |                  | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |  |  |  |  |
| 310-309488-2  | MW-5             | 105                                            | 104             | 99              |  |  |  |  |
| 310-309488-3  | MW-6             | 103                                            | 107             | 101             |  |  |  |  |
| 310-309488-4  | MW-D             | 106                                            | 105             | 100             |  |  |  |  |

### Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Trip Blank

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |  |  |  |  |
|---------------|------------------|------------------------------------------------|-----------------|-----------------|--|--|--|--|
|               |                  | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |  |  |  |  |
| 310-309488-5  | Trip Blank       | 103                                            | 105             | 100             |  |  |  |  |

### Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID    | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |  |  |  |  |
|------------------|--------------------|------------------------------------------------|-----------------|-----------------|--|--|--|--|
|                  |                    | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |  |  |  |  |
| LCS 310-458762/6 | Lab Control Sample | 97                                             | 107             | 98              |  |  |  |  |
| LCS 310-458762/7 | Lab Control Sample | 102                                            | 105             | 99              |  |  |  |  |
| MB 310-458762/5  | Method Blank       | 103                                            | 107             | 101             |  |  |  |  |

### Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)



# QC Sample Results

Client: SCS Engineers

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-458762/5

Matrix: Water

Analysis Batch: 458762

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00     |              | 1.00  | 0.380 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,1,1-Trichloroethane       | <1.00     |              | 1.00  | 0.190 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00     |              | 1.00  | 0.470 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,1,2-Trichloroethane       | <1.00     |              | 1.00  | 0.450 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,1-Dichloroethane          | <1.00     |              | 1.00  | 0.220 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,1-Dichloroethene          | <2.00     |              | 2.00  | 0.560 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,2,3-Trichloropropane      | <1.00     |              | 1.00  | 0.590 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00     |              | 5.00  | 1.20  | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00     |              | 1.00  | 0.340 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,2-Dichlorobenzene         | <1.00     |              | 1.00  | 0.370 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,2-Dichloroethane          | <1.00     |              | 1.00  | 0.390 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,2-Dichloropropane         | <1.00     |              | 1.00  | 0.270 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 1,4-Dichlorobenzene         | <1.00     |              | 1.00  | 0.230 | ug/L |   |          | 06/25/25 18:36 | 1       |
| 2-Butanone (MEK)            | <10.0     |              | 10.0  | 2.10  | ug/L |   |          | 06/25/25 18:36 | 1       |
| 2-Hexanone                  | <10.0     |              | 10.0  | 2.00  | ug/L |   |          | 06/25/25 18:36 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0     |              | 10.0  | 2.10  | ug/L |   |          | 06/25/25 18:36 | 1       |
| Acetone                     | <10.0     |              | 10.0  | 3.10  | ug/L |   |          | 06/25/25 18:36 | 1       |
| Acrylonitrile               | <5.00     |              | 5.00  | 2.20  | ug/L |   |          | 06/25/25 18:36 | 1       |
| Benzene                     | <0.500    |              | 0.500 | 0.220 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Bromochloromethane          | <5.00     |              | 5.00  | 0.540 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Bromodichloromethane        | <1.00     |              | 1.00  | 0.390 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Bromoform                   | <5.00     |              | 5.00  | 0.780 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Bromomethane                | <4.00     |              | 4.00  | 1.10  | ug/L |   |          | 06/25/25 18:36 | 1       |
| Carbon disulfide            | <1.00     |              | 1.00  | 0.450 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Carbon tetrachloride        | <2.00     |              | 2.00  | 0.650 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Chlorobenzene               | <1.00     |              | 1.00  | 0.400 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Chlorodibromomethane        | <5.00     |              | 5.00  | 0.750 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Chloroethane                | <4.00     |              | 4.00  | 0.790 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Chloroform                  | <3.00     |              | 3.00  | 1.30  | ug/L |   |          | 06/25/25 18:36 | 1       |
| Chloromethane               | <3.00     |              | 3.00  | 0.610 | ug/L |   |          | 06/25/25 18:36 | 1       |
| cis-1,2-Dichloroethene      | <1.00     |              | 1.00  | 0.210 | ug/L |   |          | 06/25/25 18:36 | 1       |
| cis-1,3-Dichloropropene     | <5.00     |              | 5.00  | 0.250 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Dibromomethane              | <1.00     |              | 1.00  | 0.330 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Dichlorodifluoromethane     | <3.00     |              | 3.00  | 0.250 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Ethylbenzene                | <1.00     |              | 1.00  | 0.310 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Iodomethane                 | <10.0     |              | 10.0  | 7.00  | ug/L |   |          | 06/25/25 18:36 | 1       |
| Methylene chloride          | <5.00     |              | 5.00  | 1.70  | ug/L |   |          | 06/25/25 18:36 | 1       |
| Styrene                     | <1.00     |              | 1.00  | 0.370 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Tetrachloroethene           | <1.00     |              | 1.00  | 0.480 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Toluene                     | <1.00     |              | 1.00  | 0.430 | ug/L |   |          | 06/25/25 18:36 | 1       |
| trans-1,2-Dichloroethene    | <1.00     |              | 1.00  | 0.270 | ug/L |   |          | 06/25/25 18:36 | 1       |
| trans-1,3-Dichloropropene   | <5.00     |              | 5.00  | 0.560 | ug/L |   |          | 06/25/25 18:36 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0     |              | 10.0  | 1.10  | ug/L |   |          | 06/25/25 18:36 | 1       |
| Trichloroethene             | <1.00     |              | 1.00  | 0.430 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Trichlorofluoromethane      | <4.00     |              | 4.00  | 0.380 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Vinyl acetate               | <10.0     |              | 10.0  | 2.50  | ug/L |   |          | 06/25/25 18:36 | 1       |
| Vinyl chloride              | <1.00     |              | 1.00  | 0.180 | ug/L |   |          | 06/25/25 18:36 | 1       |
| Xylenes, Total              | <3.00     |              | 3.00  | 0.400 | ug/L |   |          | 06/25/25 18:36 | 1       |

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-309488-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-458762/5

Matrix: Water

Analysis Batch: 458762

Client Sample ID: Method Blank

Prep Type: Total/NA

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 103          |              | 76 - 130 |          | 06/25/25 18:36 | 1       |
| Toluene-d8 (Surr)           | 107          |              | 80 - 120 |          | 06/25/25 18:36 | 1       |
| 4-Bromofluorobenzene (Surr) | 101          |              | 80 - 120 |          | 06/25/25 18:36 | 1       |

Lab Sample ID: LCS 310-458762/6

Matrix: Water

Analysis Batch: 458762

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,1,1,2-Tetrachloroethane   | 20.0        | 19.77      |               | ug/L |   | 99   | 70 - 121    |
| 1,1,1-Trichloroethane       | 20.0        | 19.26      |               | ug/L |   | 96   | 69 - 130    |
| 1,1,2,2-Tetrachloroethane   | 20.0        | 22.67      |               | ug/L |   | 113  | 70 - 122    |
| 1,1,2-Trichloroethane       | 20.0        | 21.62      |               | ug/L |   | 108  | 75 - 121    |
| 1,1-Dichloroethane          | 20.0        | 18.88      |               | ug/L |   | 94   | 69 - 127    |
| 1,1-Dichloroethene          | 20.0        | 19.51      |               | ug/L |   | 98   | 64 - 134    |
| 1,2,3-Trichloropropane      | 20.0        | 22.04      |               | ug/L |   | 110  | 70 - 122    |
| 1,2-Dibromo-3-chloropropane | 20.0        | 20.60      |               | ug/L |   | 103  | 62 - 132    |
| 1,2-Dibromoethane (EDB)     | 20.0        | 21.70      |               | ug/L |   | 108  | 74 - 122    |
| 1,2-Dichlorobenzene         | 20.0        | 21.00      |               | ug/L |   | 105  | 74 - 120    |
| 1,2-Dichloroethane          | 20.0        | 20.96      |               | ug/L |   | 105  | 68 - 125    |
| 1,2-Dichloropropane         | 20.0        | 19.43      |               | ug/L |   | 97   | 72 - 128    |
| 1,4-Dichlorobenzene         | 20.0        | 20.70      |               | ug/L |   | 103  | 72 - 120    |
| 2-Butanone (MEK)            | 40.0        | 43.09      |               | ug/L |   | 108  | 60 - 134    |
| 2-Hexanone                  | 40.0        | 49.55      |               | ug/L |   | 124  | 62 - 139    |
| 4-Methyl-2-pentanone (MIBK) | 40.0        | 50.20      |               | ug/L |   | 126  | 62 - 136    |
| Acetone                     | 40.0        | 42.97      |               | ug/L |   | 107  | 59 - 136    |
| Acrylonitrile               | 200         | 214.3      |               | ug/L |   | 107  | 50 - 150    |
| Benzene                     | 20.0        | 19.10      |               | ug/L |   | 96   | 71 - 125    |
| Bromochloromethane          | 20.0        | 19.90      |               | ug/L |   | 99   | 69 - 131    |
| Bromodichloromethane        | 20.0        | 18.24      |               | ug/L |   | 91   | 70 - 122    |
| Bromoform                   | 20.0        | 19.18      |               | ug/L |   | 96   | 62 - 122    |
| Carbon disulfide            | 20.0        | 18.15      |               | ug/L |   | 91   | 58 - 137    |
| Carbon tetrachloride        | 20.0        | 19.00      |               | ug/L |   | 95   | 63 - 136    |
| Chlorobenzene               | 20.0        | 19.87      |               | ug/L |   | 99   | 74 - 120    |
| Chlorodibromomethane        | 20.0        | 20.34      |               | ug/L |   | 102  | 69 - 121    |
| Chloroform                  | 20.0        | 18.75      |               | ug/L |   | 94   | 72 - 122    |
| cis-1,2-Dichloroethene      | 20.0        | 17.99      |               | ug/L |   | 90   | 72 - 123    |
| cis-1,3-Dichloropropene     | 20.0        | 21.89      |               | ug/L |   | 109  | 72 - 123    |
| Dibromomethane              | 20.0        | 19.70      |               | ug/L |   | 99   | 72 - 122    |
| Ethylbenzene                | 20.0        | 20.15      |               | ug/L |   | 101  | 75 - 120    |
| Iodomethane                 | 20.0        | 22.37      |               | ug/L |   | 112  | 18 - 150    |
| Methylene chloride          | 20.0        | 17.66      |               | ug/L |   | 88   | 72 - 128    |
| Styrene                     | 20.0        | 20.48      |               | ug/L |   | 102  | 74 - 122    |
| Tetrachloroethene           | 20.0        | 20.03      |               | ug/L |   | 100  | 70 - 128    |
| Toluene                     | 20.0        | 20.52      |               | ug/L |   | 103  | 74 - 120    |
| trans-1,2-Dichloroethene    | 20.0        | 19.48      |               | ug/L |   | 97   | 67 - 127    |
| trans-1,3-Dichloropropene   | 20.0        | 19.18      |               | ug/L |   | 96   | 67 - 123    |
| trans-1,4-Dichloro-2-butene | 20.0        | 22.52      |               | ug/L |   | 113  | 50 - 150    |

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-309488-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-458762/6

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458762

| Analyte         | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------|-------------|------------|---------------|------|---|------|-------------|
| Trichloroethene | 20.0        | 18.06      |               | ug/L |   | 90   | 70 - 128    |
| Vinyl acetate   | 40.0        | 54.16      |               | ug/L |   | 135  | 50 - 150    |
| Xylenes, Total  | 40.0        | 39.63      |               | ug/L |   | 99   | 74 - 121    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| Dibromofluoromethane (Surr) | 97            |               | 76 - 130 |
| Toluene-d8 (Surr)           | 107           |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 98            |               | 80 - 120 |

Lab Sample ID: LCS 310-458762/7

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458762

| Analyte                 | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------------------|-------------|------------|---------------|------|---|------|-------------|
| Bromomethane            | 20.0        | 16.58      |               | ug/L |   | 83   | 33 - 138    |
| Chloroethane            | 20.0        | 18.09      |               | ug/L |   | 90   | 59 - 139    |
| Chloromethane           | 20.0        | 20.01      |               | ug/L |   | 100  | 52 - 146    |
| Dichlorodifluoromethane | 20.0        | 23.14      |               | ug/L |   | 116  | 45 - 150    |
| Trichlorofluoromethane  | 20.0        | 17.55      |               | ug/L |   | 88   | 55 - 150    |
| Vinyl chloride          | 20.0        | 19.12      |               | ug/L |   | 96   | 60 - 142    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| Dibromofluoromethane (Surr) | 102           |               | 76 - 130 |
| Toluene-d8 (Surr)           | 105           |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 99            |               | 80 - 120 |

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-459059/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 459651

Prep Batch: 459059

| Analyte  | MB Result | MB Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|--------------|----------|----------|------|---|----------------|----------------|---------|
| Arsenic  | <0.00200  |              | 0.00200  | 0.000530 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Barium   | <0.00200  |              | 0.00200  | 0.000660 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Cadmium  | <0.000200 |              | 0.000200 | 0.000100 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Chromium | <0.00500  |              | 0.00500  | 0.00180  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Cobalt   | <0.000500 |              | 0.000500 | 0.000170 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Copper   | <0.00500  |              | 0.00500  | 0.00320  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Lead     | <0.000500 |              | 0.000500 | 0.000330 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Nickel   | <0.00500  |              | 0.00500  | 0.00230  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Selenium | <0.00500  |              | 0.00500  | 0.00140  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Silver   | <0.00100  |              | 0.00100  | 0.000500 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Vanadium | 0.001718  | J            | 0.00500  | 0.00170  | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |
| Zinc     | <0.0200   |              | 0.0200   | 0.0130   | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-459059/1-A  
Matrix: Water  
Analysis Batch: 459730

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 459059

| Analyte   | MB Result | MB Qualifier | RL      | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|---------|----------|------|---|----------------|----------------|---------|
| Antimony  | <0.00200  |              | 0.00200 | 0.00100  | mg/L |   | 06/30/25 09:00 | 07/07/25 15:04 | 1       |
| Beryllium | <0.00100  |              | 0.00100 | 0.000330 | mg/L |   | 06/30/25 09:00 | 07/07/25 15:04 | 1       |
| Thallium  | <0.00100  |              | 0.00100 | 0.000570 | mg/L |   | 06/30/25 09:00 | 07/07/25 15:04 | 1       |

Lab Sample ID: LCS 310-459059/2-A  
Matrix: Water  
Analysis Batch: 459651

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 459059

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|------|---|------|-------------|
| Arsenic  | 0.200       | 0.1975     |               | mg/L |   | 99   | 80 - 120    |
| Barium   | 0.100       | 0.09421    |               | mg/L |   | 94   | 80 - 120    |
| Cadmium  | 0.100       | 0.09194    |               | mg/L |   | 92   | 80 - 120    |
| Chromium | 0.100       | 0.09160    |               | mg/L |   | 92   | 80 - 120    |
| Cobalt   | 0.100       | 0.09104    |               | mg/L |   | 91   | 80 - 120    |
| Copper   | 0.200       | 0.1844     |               | mg/L |   | 92   | 80 - 120    |
| Lead     | 0.200       | 0.1870     |               | mg/L |   | 94   | 80 - 120    |
| Nickel   | 0.200       | 0.1794     |               | mg/L |   | 90   | 80 - 120    |
| Selenium | 0.400       | 0.3434     |               | mg/L |   | 86   | 80 - 120    |
| Silver   | 0.100       | 0.1033     |               | mg/L |   | 103  | 80 - 120    |
| Vanadium | 0.100       | 0.09258    |               | mg/L |   | 93   | 80 - 120    |
| Zinc     | 0.200       | 0.1798     |               | mg/L |   | 90   | 80 - 120    |

Lab Sample ID: LCS 310-459059/2-A  
Matrix: Water  
Analysis Batch: 459730

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 459059

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------|-------------|------------|---------------|------|---|------|-------------|
| Antimony  | 0.200       | 0.2037     |               | mg/L |   | 102  | 80 - 120    |
| Beryllium | 0.100       | 0.08873    |               | mg/L |   | 89   | 80 - 120    |
| Thallium  | 0.100       | 0.08553    |               | mg/L |   | 86   | 80 - 120    |

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-823625/1-A  
Matrix: Water  
Analysis Batch: 823629

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 823625

| Analyte | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Sulfide | <1.00     |              | 1.00 | 0.231 | mg/L |   | 06/26/25 18:00 | 06/26/25 23:31 | 1       |

Lab Sample ID: LCS 500-823625/2-A  
Matrix: Water  
Analysis Batch: 823629

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 823625

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Sulfide | 3.97        | 3.430      |               | mg/L |   | 86   | 80 - 120    |

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-309488-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-458699/1

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458699

| Analyte                | MB<br>Result | MB<br>Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------------|-----------------|------|------|------|---|----------|----------------|---------|
| Total Suspended Solids | <5.00        |                 | 5.00 | 3.50 | mg/L |   |          | 06/25/25 09:11 | 1       |

Lab Sample ID: LCS 310-458699/2

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 458699

| Analyte                | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|------------------------|----------------|---------------|------------------|------|---|------|----------------|
| Total Suspended Solids | 100            | 103.0         |                  | mg/L |   | 103  | 82 - 117       |

# QC Association Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## GC/MS VOA

### Analysis Batch: 458762

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|------------------|--------------------|-----------|-------------|--------|------------|
| 310-309488-2     | MW-5               | Total/NA  | Groundwater | 8260D  |            |
| 310-309488-3     | MW-6               | Total/NA  | Groundwater | 8260D  |            |
| 310-309488-4     | MW-D               | Total/NA  | Groundwater | 8260D  |            |
| 310-309488-5     | Trip Blank         | Total/NA  | Trip Blank  | 8260D  |            |
| MB 310-458762/5  | Method Blank       | Total/NA  | Water       | 8260D  |            |
| LCS 310-458762/6 | Lab Control Sample | Total/NA  | Water       | 8260D  |            |
| LCS 310-458762/7 | Lab Control Sample | Total/NA  | Water       | 8260D  |            |

## Metals

### Prep Batch: 459059

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-309488-2       | MW-5               | Total/NA  | Groundwater | 3005A  |            |
| 310-309488-3       | MW-6               | Total/NA  | Groundwater | 3005A  |            |
| 310-309488-4       | MW-D               | Total/NA  | Groundwater | 3005A  |            |
| MB 310-459059/1-A  | Method Blank       | Total/NA  | Water       | 3005A  |            |
| LCS 310-459059/2-A | Lab Control Sample | Total/NA  | Water       | 3005A  |            |

### Analysis Batch: 459651

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-309488-2       | MW-5               | Total/NA  | Groundwater | 6020B  | 459059     |
| 310-309488-3       | MW-6               | Total/NA  | Groundwater | 6020B  | 459059     |
| 310-309488-4       | MW-D               | Total/NA  | Groundwater | 6020B  | 459059     |
| MB 310-459059/1-A  | Method Blank       | Total/NA  | Water       | 6020B  | 459059     |
| LCS 310-459059/2-A | Lab Control Sample | Total/NA  | Water       | 6020B  | 459059     |

### Analysis Batch: 459730

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-309488-2       | MW-5               | Total/NA  | Groundwater | 6020B  | 459059     |
| 310-309488-3       | MW-6               | Total/NA  | Groundwater | 6020B  | 459059     |
| 310-309488-4       | MW-D               | Total/NA  | Groundwater | 6020B  | 459059     |
| MB 310-459059/1-A  | Method Blank       | Total/NA  | Water       | 6020B  | 459059     |
| LCS 310-459059/2-A | Lab Control Sample | Total/NA  | Water       | 6020B  | 459059     |

## General Chemistry

### Analysis Batch: 458699

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix      | Method    | Prep Batch |
|------------------|--------------------|-----------|-------------|-----------|------------|
| 310-309488-2     | MW-5               | Total/NA  | Groundwater | I-3765-85 |            |
| 310-309488-3     | MW-6               | Total/NA  | Groundwater | I-3765-85 |            |
| 310-309488-4     | MW-D               | Total/NA  | Groundwater | I-3765-85 |            |
| MB 310-458699/1  | Method Blank       | Total/NA  | Water       | I-3765-85 |            |
| LCS 310-458699/2 | Lab Control Sample | Total/NA  | Water       | I-3765-85 |            |

### Prep Batch: 823625

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-309488-3       | MW-6               | Total/NA  | Groundwater | 9030B  |            |
| MB 500-823625/1-A  | Method Blank       | Total/NA  | Water       | 9030B  |            |
| LCS 500-823625/2-A | Lab Control Sample | Total/NA  | Water       | 9030B  |            |

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## General Chemistry

Analysis Batch: 823629

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-309488-3       | MW-6               | Total/NA  | Groundwater | 9034   | 823625     |
| MB 500-823625/1-A  | Method Blank       | Total/NA  | Water       | 9034   | 823625     |
| LCS 500-823625/2-A | Lab Control Sample | Total/NA  | Water       | 9034   | 823625     |

# Lab Chronicle

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Client Sample ID: MW-5

Date Collected: 06/19/25 15:02

Date Received: 06/24/25 16:00

## Lab Sample ID: 310-309488-2

Matrix: Groundwater

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458762       | FE5V    | EET CF | 06/25/25 20:31       |
| Total/NA  | Prep       | 3005A        |     |                 | 459059       | WK2X    | EET CF | 06/30/25 09:00       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459651       | ZRI4    | EET CF | 07/03/25 18:54       |
| Total/NA  | Prep       | 3005A        |     |                 | 459059       | WK2X    | EET CF | 06/30/25 09:00       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459730       | NFT2    | EET CF | 07/07/25 15:24       |
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 458699       | E6KR    | EET CF | 06/25/25 09:11       |

## Client Sample ID: MW-6

Date Collected: 06/19/25 13:44

Date Received: 06/24/25 16:00

## Lab Sample ID: 310-309488-3

Matrix: Groundwater

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed                         |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------------------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458762       | FE5V    | EET CF  | 06/25/25 20:54                               |
| Total/NA  | Prep       | 3005A        |     |                 | 459059       | WK2X    | EET CF  | 06/30/25 09:00                               |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459651       | ZRI4    | EET CF  | 07/03/25 18:58                               |
| Total/NA  | Prep       | 3005A        |     |                 | 459059       | WK2X    | EET CF  | 06/30/25 09:00                               |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459730       | NFT2    | EET CF  | 07/07/25 15:27                               |
| Total/NA  | Prep       | 9030B        |     |                 | 823625       | CLB     | EET CHI | 06/26/25 18:15 - 06/26/25 18:22 <sup>1</sup> |
| Total/NA  | Analysis   | 9034         |     | 1               | 823629       | CLB     | EET CHI | 06/26/25 23:37 - 06/26/25 23:40 <sup>1</sup> |
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 458699       | E6KR    | EET CF  | 06/25/25 09:11                               |

## Client Sample ID: MW-D

Date Collected: 06/19/25 15:32

Date Received: 06/24/25 16:00

## Lab Sample ID: 310-309488-4

Matrix: Groundwater

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458762       | FE5V    | EET CF | 06/25/25 21:16       |
| Total/NA  | Prep       | 3005A        |     |                 | 459059       | WK2X    | EET CF | 06/30/25 09:00       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459651       | ZRI4    | EET CF | 07/03/25 19:02       |
| Total/NA  | Prep       | 3005A        |     |                 | 459059       | WK2X    | EET CF | 06/30/25 09:00       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459730       | NFT2    | EET CF | 07/07/25 15:29       |
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 458699       | E6KR    | EET CF | 06/25/25 09:11       |

## Client Sample ID: Trip Blank

Date Collected: 06/19/25 00:00

Date Received: 06/24/25 16:00

## Lab Sample ID: 310-309488-5

Matrix: Trip Blank

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458762       | FE5V    | EET CF | 06/25/25 20:08       |

<sup>1</sup> This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

Eurofins Cedar Falls



Accreditation/Certification Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Laboratory: Eurofins Cedar Falls

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Iowa      | State   | 007                   | 07-10-25        |

Laboratory: Eurofins Chicago

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Iowa      | State   | 082                   | 05-01-26        |

## Method Summary

Client: SCS Engineers

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309488-1

SDG: Woodbury County Sanitary Landfill (HMSP)

| Method    | Method Description                                 | Protocol | Laboratory |
|-----------|----------------------------------------------------|----------|------------|
| 8260D     | Volatile Organic Compounds by GC/MS                | SW846    | EET CF     |
| 6020B     | Metals (ICP/MS)                                    | SW846    | EET CF     |
| 9034      | Sulfide, Acid soluble and Insoluble (Titrimetric)  | SW846    | EET CHI    |
| I-3765-85 | Residue, Non-filterable (TSS)                      | USGS     | EET CF     |
| 3005A     | Preparation, Total Metals                          | SW846    | EET CF     |
| 5030B     | Purge and Trap                                     | SW846    | EET CF     |
| 9030B     | Sulfide, Distillation (Acid Soluble and Insoluble) | SW846    | EET CHI    |

### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200



Environment Testing  
America



Cooler/Sample Receipt and Temperature Chain of Custody

|                                                                                                                                                                                                                                                                                                                                                                  |                           |                                  |                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------|-----------------------|
| Client Information                                                                                                                                                                                                                                                                                                                                               |                           |                                  |                       |
| Client <u>ScS</u>                                                                                                                                                                                                                                                                                                                                                |                           |                                  |                       |
| City/State                                                                                                                                                                                                                                                                                                                                                       | CITY <u>W. Des Moines</u> | STATE <u>IA</u>                  | Project               |
| Receipt Information                                                                                                                                                                                                                                                                                                                                              |                           |                                  |                       |
| Date/Time Received.                                                                                                                                                                                                                                                                                                                                              | DATE <u>6-24-25</u>       | TIME <u>1600</u>                 | Received By <u>PH</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other _____ |                           |                                  |                       |
| Condition of Cooler/Containers                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                       |
| Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID _____                                                                                                                                                                                                                                        |                           |                                  |                       |
| Multiple Coolers? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler # _____ of _____                                                                                                                                                                                                                                            |                           |                                  |                       |
| Cooler Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                  |                           |                                  |                       |
| Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                  |                           |                                  |                       |
| Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Which VOA samples are in cooler? <u>↓</u><br><u>A11</u>                                                                                                                                                                                                          |                           |                                  |                       |
| Temperature Record                                                                                                                                                                                                                                                                                                                                               |                           |                                  |                       |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE                                                                                                                                                                      |                           |                                  |                       |
| Thermometer ID: <u>AH</u>                                                                                                                                                                                                                                                                                                                                        |                           | Correction Factor (°C): <u>0</u> |                       |
| • Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                                   |                           |                                  |                       |
| Uncorrected Temp (°C): <u>-0.2</u>                                                                                                                                                                                                                                                                                                                               |                           | Corrected Temp (°C): <u>-0.2</u> |                       |
| • Sample Container Temperature                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                       |
| Container(s) used:                                                                                                                                                                                                                                                                                                                                               | CONTAINER 1               | CONTAINER 2                      |                       |
| Uncorrected Temp (°C):                                                                                                                                                                                                                                                                                                                                           |                           |                                  |                       |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                             |                           |                                  |                       |
| Exceptions Noted                                                                                                                                                                                                                                                                                                                                                 |                           |                                  |                       |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                        |                           |                                  |                       |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                           |                           |                                  |                       |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                      |                           |                                  |                       |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login.                                                                                                                                                                                                                                                                                           |                           |                                  |                       |
| Additional Comments<br><u>Didn't Receive MW-2</u>                                                                                                                                                                                                                                                                                                                |                           |                                  |                       |

Document CED-P-SAM-FRM45521  
Revision 26  
Date: 27 Jan 2022

Eurofins Cedar Falls

General temperature criteria is 0 to 6°C  
Bacteria temperature criteria is 0 to 10°C

**Eurofins TestAmerica, Cedar Falls**  
3019 Venture Way  
Cedar Falls, IA 50613-6907  
phone 319 277 2401 fax 319 277 2425

TestAmerica Des Moines SC  
214

## Chain of Custody Record



TestAmerica Laboratories, Inc. db/a

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

| Client Contact                                                                                                                                                                                       |  | Project Manager: Ben Madison<br>Email: bmadison@scsengineers.com<br>Cell: 515-776-9255                                                                                                                                                             |  | Site Contact: Ben Madison<br>Lab Contact: S. Miller |  | Date:                        |  | Carrier: |  | COC No: 1 of 1 |  |                     |  |            |  |                                                                                  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------|--|------------------------------|--|----------|--|----------------|--|---------------------|--|------------|--|----------------------------------------------------------------------------------|--|
| SCS Engineers<br>1690 All-State Court, Suite 100<br>West Des Moines, IA 50265<br>515-631-6160                                                                                                        |  | Analysis Turnaround Time<br><input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS<br>Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day |  | Filtered Sample (Y/N)                               |  | Perform MS / MSD (Y/N)       |  | TSS      |  | Appendix II    |  | Natural Attenuation |  | Trip Blank |  | Sampler<br>For Lab Use Only:<br>Walk-in Client:<br>Lab Sampling<br>Job / SDG No. |  |
| Sample Identification                                                                                                                                                                                |  | Sample Date                                                                                                                                                                                                                                        |  | Sample Time                                         |  | Sample Type (C=Comp, G=Grab) |  | Matrix   |  | # of Cont.     |  |                     |  |            |  |                                                                                  |  |
| MW-2                                                                                                                                                                                                 |  | 6-19                                                                                                                                                                                                                                               |  | 16:53                                               |  | G                            |  | GW       |  |                |  | X                   |  |            |  |                                                                                  |  |
| MW-3                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                    |  |                                                     |  | G                            |  | GW       |  |                |  | X                   |  |            |  |                                                                                  |  |
| MW-5                                                                                                                                                                                                 |  | 6-19                                                                                                                                                                                                                                               |  | 15:02                                               |  | G                            |  | GW       |  |                |  | X                   |  |            |  |                                                                                  |  |
| MW-6                                                                                                                                                                                                 |  | 6-19                                                                                                                                                                                                                                               |  | 13:44                                               |  | G                            |  | GW       |  |                |  | X                   |  |            |  |                                                                                  |  |
| MW-8 Delivered 6-19                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                    |  |                                                     |  | G                            |  | GW       |  |                |  | X                   |  |            |  |                                                                                  |  |
| PZ-2B                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                    |  |                                                     |  | G                            |  | GW       |  |                |  | X                   |  |            |  |                                                                                  |  |
| MW-D                                                                                                                                                                                                 |  | 6-19                                                                                                                                                                                                                                               |  | 15:32                                               |  | G                            |  | GW       |  |                |  | X                   |  |            |  |                                                                                  |  |
| Trip Blank                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                    |  |                                                     |  |                              |  |          |  |                |  |                     |  | X          |  | Include trip blanks in every sample container                                    |  |
| Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other                                                                                                                              |  |                                                                                                                                                                                                                                                    |  |                                                     |  |                              |  |          |  |                |  |                     |  |            |  |                                                                                  |  |
| Possible Hazard Identification:<br>Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. |  |                                                                                                                                                                                                                                                    |  |                                                     |  |                              |  |          |  |                |  |                     |  |            |  |                                                                                  |  |
| Special Instructions/QC Requirements & Comments: Natural Attenuation Parameters, Dissolved Methane, Iron, Nitrate, Manganese, And Sulfate                                                            |  |                                                                                                                                                                                                                                                    |  |                                                     |  |                              |  |          |  |                |  |                     |  |            |  |                                                                                  |  |

| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No |  | Custody Seal No |  | Received by:               |  | Date/Time                |  |
|--------------------------------------------------------------------------------|--|-----------------|--|----------------------------|--|--------------------------|--|
| Relinquished by: Garrett Hobbs                                                 |  | SCS             |  | 6-20 16:39                 |  | 6-20 16:39               |  |
| Relinquished by:                                                               |  | Company:        |  | Received by:               |  | Date/Time:               |  |
| Relinquished by:                                                               |  | Company:        |  | Received in Laboratory by: |  | Date/Time: 6-24-15 16:00 |  |



3019 Venture Way  
Cedar Falls, IA 50613  
Phone 319-277-2401 Fax 319-277-2425



- 1
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- 12
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- 15

 $1.8 \rightarrow 2.4$

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-309488-1

SDG Number: Woodbury County Sanitary Landfill (HMSP)

**Login Number: 309488**

**List Number: 1**

**Creator: Homolar, Dana J**

**List Source: Eurofins Cedar Falls**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | N/A    |         |
| The cooler's custody seal, if present, is intact.                                        | N/A    |         |
| Sample custody seals, if present, are 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 is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   |         |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | 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   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-309488-1

SDG Number: Woodbury County Sanitary Landfill (HMSP)

**Login Number: 309488**

**List Number: 2**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

**List Creation: 06/26/25 03:29 PM**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | True   |         |
| The cooler's custody seal, if present, is intact.                                        | True   |         |
| Sample custody seals, if present, are intact.                                            | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.           | True   |         |
| Samples were received on ice.                                                            | True   |         |
| Cooler Temperature is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   | 2.4     |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | 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   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | True   |         |

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ben Madson  
SCS Engineers  
1690 All State Court  
Suite 100  
West Des Moines, Iowa 50265

Generated 7/7/2025 11:29:08 AM

## JOB DESCRIPTION

1st 2025 Semi-Annual Groundwater Sampling  
Woodbury County Landfill (Supplemental)  
2024 Semi-Annual Supplemental

## JOB NUMBER

310-309489-1



# Eurofins Cedar Falls

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



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7/7/2025 11:29:08 AM

Authorized for release by  
Samuel Miller, Project Management Assistant I  
[Samuel.Miller@et.eurofinsus.com](mailto:Samuel.Miller@et.eurofinsus.com)  
(319)595-2008

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# Case Narrative

Client: SCS Engineers  
Project: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309489-1

**Job ID: 310-309489-1**

**Eurofins Cedar Falls**

## **Job Narrative 310-309489-1**

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 6/24/2025 4:00 PM. 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 1.9°C.

### **GC/MS VOA**

Method 8260D: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-12 (310-309489-3).

Method 8260D: Surrogate recovery for the following sample was outside the upper control limit: MW-12 (310-309489-3). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

### **Metals**

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

Eurofins Cedar Falls

## Sample Summary

Client: SCS Engineers

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309489-1

SDG: Woodbury County Landfill (Supplemental)

| Lab Sample ID | Client Sample ID | Matrix      | Collected      | Received       |
|---------------|------------------|-------------|----------------|----------------|
| 310-309489-1  | MW-9             | Groundwater | 06/20/25 11:00 | 06/24/25 16:00 |
| 310-309489-2  | MW-11            | Groundwater | 06/20/25 10:07 | 06/24/25 16:00 |
| 310-309489-3  | MW-12            | Groundwater | 06/20/25 09:19 | 06/24/25 16:00 |
| 310-309489-4  | MW-14            | Groundwater | 06/20/25 11:40 | 06/24/25 16:00 |
| 310-309489-5  | Trip Blank       | Trip Blank  | 06/20/25 00:00 | 06/24/25 16:00 |

## Detection Summary

Client: SCS Engineers

Job ID: 310-309489-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Landfill (Supplemental)

### Client Sample ID: MW-9

Lab Sample ID: 310-309489-1

| Analyte           | Result | Qualifier | RL   | MDL   | Unit | Dil Fac | D | Method | Prep Type |
|-------------------|--------|-----------|------|-------|------|---------|---|--------|-----------|
| Trichloroethene   | 6.55   |           | 1.00 | 0.430 | ug/L | 1       |   | 8260D  | Total/NA  |
| Tetrachloroethene | 0.976  | J         | 1.00 | 0.480 | ug/L | 1       |   | 8260D  | Total/NA  |

### Client Sample ID: MW-11

Lab Sample ID: 310-309489-2

No Detections.

### Client Sample ID: MW-12

Lab Sample ID: 310-309489-3

No Detections.

### Client Sample ID: MW-14

Lab Sample ID: 310-309489-4

| Analyte | Result  | Qualifier | RL       | MDL      | Unit | Dil Fac | D | Method | Prep Type |
|---------|---------|-----------|----------|----------|------|---------|---|--------|-----------|
| Cobalt  | 0.00184 |           | 0.000500 | 0.000170 | mg/L | 1       |   | 6020B  | Total/NA  |

### Client Sample ID: Trip Blank

Lab Sample ID: 310-309489-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

## Client Sample Results

Client: SCS Engineers

Job ID: 310-309489-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Landfill (Supplemental)

Client Sample ID: MW-9

Lab Sample ID: 310-309489-1

Date Collected: 06/20/25 11:00

Matrix: Groundwater

Date Received: 06/24/25 16:00

### Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | 6.55      |           | 1.00     | 0.430 | ug/L |   |          | 06/26/25 22:17 | 1       |
| Tetrachloroethene           | 0.976     | J         | 1.00     | 0.480 | ug/L |   |          | 06/26/25 22:17 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 107       |           | 80 - 120 |       |      |   |          | 06/26/25 22:17 | 1       |
| Dibromofluoromethane (Surr) | 103       |           | 76 - 130 |       |      |   |          | 06/26/25 22:17 | 1       |
| Toluene-d8 (Surr)           | 95        |           | 80 - 120 |       |      |   |          | 06/26/25 22:17 | 1       |

## Client Sample Results

Client: SCS Engineers

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309489-1

SDG: Woodbury County Landfill (Supplemental)

**Client Sample ID: MW-11**

**Lab Sample ID: 310-309489-2**

**Date Collected: 06/20/25 10:07**

**Matrix: Groundwater**

**Date Received: 06/24/25 16:00**

### Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00     |           | 1.00     | 0.430 | ug/L |   |          | 06/26/25 22:39 | 1       |
| Tetrachloroethene           | <1.00     |           | 1.00     | 0.480 | ug/L |   |          | 06/26/25 22:39 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 102       |           | 80 - 120 |       |      |   |          | 06/26/25 22:39 | 1       |
| Dibromofluoromethane (Surr) | 101       |           | 76 - 130 |       |      |   |          | 06/26/25 22:39 | 1       |
| Toluene-d8 (Surr)           | 95        |           | 80 - 120 |       |      |   |          | 06/26/25 22:39 | 1       |

## Client Sample Results

Client: SCS Engineers

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309489-1

SDG: Woodbury County Landfill (Supplemental)

**Client Sample ID: MW-12**

**Lab Sample ID: 310-309489-3**

**Date Collected: 06/20/25 09:19**

**Matrix: Groundwater**

**Date Received: 06/24/25 16:00**

### Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00     |           | 1.00     | 0.430 | ug/L |   |          | 06/26/25 23:01 | 1       |
| Tetrachloroethene           | <1.00     |           | 1.00     | 0.480 | ug/L |   |          | 06/26/25 23:01 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 139       | S1+       | 80 - 120 |       |      |   |          | 06/26/25 23:01 | 1       |
| Dibromofluoromethane (Surr) | 84        |           | 76 - 130 |       |      |   |          | 06/26/25 23:01 | 1       |
| Toluene-d8 (Surr)           | 106       |           | 80 - 120 |       |      |   |          | 06/26/25 23:01 | 1       |



## Client Sample Results

Client: SCS Engineers

Job ID: 310-309489-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Landfill (Supplemental)

**Client Sample ID: MW-14**

**Lab Sample ID: 310-309489-4**

Date Collected: 06/20/25 11:40

Matrix: Groundwater

Date Received: 06/24/25 16:00

### Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00     |           | 1.00     | 0.430 | ug/L |   |          | 06/26/25 23:23 | 1       |
| Tetrachloroethene           | <1.00     |           | 1.00     | 0.480 | ug/L |   |          | 06/26/25 23:23 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 104       |           | 80 - 120 |       |      |   |          | 06/26/25 23:23 | 1       |
| Dibromofluoromethane (Surr) | 101       |           | 76 - 130 |       |      |   |          | 06/26/25 23:23 | 1       |
| Toluene-d8 (Surr)           | 93        |           | 80 - 120 |       |      |   |          | 06/26/25 23:23 | 1       |

### Method: SW846 6020B - Metals (ICP/MS)

| Analyte | Result  | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|---------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Cobalt  | 0.00184 |           | 0.000500 | 0.000170 | mg/L |   | 06/30/25 09:00 | 07/03/25 19:06 | 1       |

## Client Sample Results

Client: SCS Engineers

Job ID: 310-309489-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Landfill (Supplemental)

**Client Sample ID: Trip Blank**

**Lab Sample ID: 310-309489-5**

**Date Collected: 06/20/25 00:00**

**Matrix: Trip Blank**

**Date Received: 06/24/25 16:00**

### Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00     |           | 1.00     | 0.430 | ug/L |   |          | 06/26/25 17:28 | 1       |
| Tetrachloroethene           | <1.00     |           | 1.00     | 0.480 | ug/L |   |          | 06/26/25 17:28 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 104       |           | 80 - 120 |       |      |   |          | 06/26/25 17:28 | 1       |
| Dibromofluoromethane (Surr) | 104       |           | 76 - 130 |       |      |   |          | 06/26/25 17:28 | 1       |
| Toluene-d8 (Surr)           | 92        |           | 80 - 120 |       |      |   |          | 06/26/25 17:28 | 1       |

## Definitions/Glossary

Client: SCS Engineers

Job ID: 310-309489-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Landfill (Supplemental)

### Qualifiers

#### GC/MS VOA

| 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. |
| S1+       | Surrogate recovery exceeds control limits, high biased.                                                        |

### 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                                                                                       |

## Surrogate Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309489-1  
SDG: Woodbury County Landfill (Supplemental)

### Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Groundwater

Prep Type: Total/NA

| Lab Sample ID                      | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                  |                 |
|------------------------------------|------------------|------------------------------------------------|------------------|-----------------|
|                                    |                  | BFB<br>(80-120)                                | DBFM<br>(76-130) | TOL<br>(80-120) |
| 310-309489-1                       | MW-9             | 107                                            | 103              | 95              |
| 310-309489-2                       | MW-11            | 102                                            | 101              | 95              |
| 310-309489-3                       | MW-12            | 139 S1+                                        | 84               | 106             |
| 310-309489-4                       | MW-14            | 104                                            | 101              | 93              |
| <b>Surrogate Legend</b>            |                  |                                                |                  |                 |
| BFB = 4-Bromofluorobenzene (Surr)  |                  |                                                |                  |                 |
| DBFM = Dibromofluoromethane (Surr) |                  |                                                |                  |                 |
| TOL = Toluene-d8 (Surr)            |                  |                                                |                  |                 |

### Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Trip Blank

Prep Type: Total/NA

| Lab Sample ID                      | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                  |                 |
|------------------------------------|------------------|------------------------------------------------|------------------|-----------------|
|                                    |                  | BFB<br>(80-120)                                | DBFM<br>(76-130) | TOL<br>(80-120) |
| 310-309489-5                       | Trip Blank       | 104                                            | 104              | 92              |
| <b>Surrogate Legend</b>            |                  |                                                |                  |                 |
| BFB = 4-Bromofluorobenzene (Surr)  |                  |                                                |                  |                 |
| DBFM = Dibromofluoromethane (Surr) |                  |                                                |                  |                 |
| TOL = Toluene-d8 (Surr)            |                  |                                                |                  |                 |

### Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID                      | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                  |                 |
|------------------------------------|--------------------|------------------------------------------------|------------------|-----------------|
|                                    |                    | BFB<br>(80-120)                                | DBFM<br>(76-130) | TOL<br>(80-120) |
| LCS 310-458897/6                   | Lab Control Sample | 101                                            | 99               | 100             |
| MB 310-458897/5                    | Method Blank       | 107                                            | 101              | 95              |
| <b>Surrogate Legend</b>            |                    |                                                |                  |                 |
| BFB = 4-Bromofluorobenzene (Surr)  |                    |                                                |                  |                 |
| DBFM = Dibromofluoromethane (Surr) |                    |                                                |                  |                 |
| TOL = Toluene-d8 (Surr)            |                    |                                                |                  |                 |

# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309489-1  
SDG: Woodbury County Landfill (Supplemental)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-458897/5

Matrix: Water

Analysis Batch: 458897

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result    | MB Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00        |              | 1.00     | 0.430 | ug/L |   |          | 06/26/25 16:21 | 1       |
| Tetrachloroethene           | <1.00        |              | 1.00     | 0.480 | ug/L |   |          | 06/26/25 16:21 | 1       |
| Surrogate                   | MB %Recovery | MB Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 107          |              | 80 - 120 |       |      |   |          | 06/26/25 16:21 | 1       |
| Dibromofluoromethane (Surr) | 101          |              | 76 - 130 |       |      |   |          | 06/26/25 16:21 | 1       |
| Toluene-d8 (Surr)           | 95           |              | 80 - 120 |       |      |   |          | 06/26/25 16:21 | 1       |

Lab Sample ID: LCS 310-458897/6

Matrix: Water

Analysis Batch: 458897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added   | LCS Result    | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|---------------|---------------|---------------|------|---|------|-------------|
| Trichloroethene             | 20.0          | 20.61         |               | ug/L |   | 103  | 70 - 128    |
| Tetrachloroethene           | 20.0          | 23.57         |               | ug/L |   | 118  | 70 - 128    |
| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits        |      |   |      |             |
| 4-Bromofluorobenzene (Surr) | 101           |               | 80 - 120      |      |   |      |             |
| Dibromofluoromethane (Surr) | 99            |               | 76 - 130      |      |   |      |             |
| Toluene-d8 (Surr)           | 100           |               | 80 - 120      |      |   |      |             |

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-459059/1-A

Matrix: Water

Analysis Batch: 459651

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 459059

| Analyte | MB Result | MB Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|----------|----------|------|---|----------------|----------------|---------|
| Cobalt  | <0.000500 |              | 0.000500 | 0.000170 | mg/L |   | 06/30/25 09:00 | 07/03/25 18:01 | 1       |

Lab Sample ID: LCS 310-459059/2-A

Matrix: Water

Analysis Batch: 459651

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 459059

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Cobalt  | 0.100       | 0.09104    |               | mg/L |   | 91   | 80 - 120    |

## QC Association Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309489-1  
SDG: Woodbury County Landfill (Supplemental)

### GC/MS VOA

#### Analysis Batch: 458897

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|------------------|--------------------|-----------|-------------|--------|------------|
| 310-309489-1     | MW-9               | Total/NA  | Groundwater | 8260D  |            |
| 310-309489-2     | MW-11              | Total/NA  | Groundwater | 8260D  |            |
| 310-309489-3     | MW-12              | Total/NA  | Groundwater | 8260D  |            |
| 310-309489-4     | MW-14              | Total/NA  | Groundwater | 8260D  |            |
| 310-309489-5     | Trip Blank         | Total/NA  | Trip Blank  | 8260D  |            |
| MB 310-458897/5  | Method Blank       | Total/NA  | Water       | 8260D  |            |
| LCS 310-458897/6 | Lab Control Sample | Total/NA  | Water       | 8260D  |            |

### Metals

#### Prep Batch: 459059

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-309489-4       | MW-14              | Total/NA  | Groundwater | 3005A  |            |
| MB 310-459059/1-A  | Method Blank       | Total/NA  | Water       | 3005A  |            |
| LCS 310-459059/2-A | Lab Control Sample | Total/NA  | Water       | 3005A  |            |

#### Analysis Batch: 459651

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-309489-4       | MW-14              | Total/NA  | Groundwater | 6020B  | 459059     |
| MB 310-459059/1-A  | Method Blank       | Total/NA  | Water       | 6020B  | 459059     |
| LCS 310-459059/2-A | Lab Control Sample | Total/NA  | Water       | 6020B  | 459059     |

# Lab Chronicle

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-309489-1  
SDG: Woodbury County Landfill (Supplemental)

## Client Sample ID: MW-9

Date Collected: 06/20/25 11:00

Date Received: 06/24/25 16:00

## Lab Sample ID: 310-309489-1

Matrix: Groundwater

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458897       | FE5V    | EET CF | 06/26/25 22:17       |

## Client Sample ID: MW-11

Date Collected: 06/20/25 10:07

Date Received: 06/24/25 16:00

## Lab Sample ID: 310-309489-2

Matrix: Groundwater

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458897       | FE5V    | EET CF | 06/26/25 22:39       |

## Client Sample ID: MW-12

Date Collected: 06/20/25 09:19

Date Received: 06/24/25 16:00

## Lab Sample ID: 310-309489-3

Matrix: Groundwater

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458897       | FE5V    | EET CF | 06/26/25 23:01       |

## Client Sample ID: MW-14

Date Collected: 06/20/25 11:40

Date Received: 06/24/25 16:00

## Lab Sample ID: 310-309489-4

Matrix: Groundwater

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458897       | FE5V    | EET CF | 06/26/25 23:23       |
| Total/NA  | Prep       | 3005A        |     |                 | 459059       | WK2X    | EET CF | 06/30/25 09:00       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 459651       | ZRI4    | EET CF | 07/03/25 19:06       |

## Client Sample ID: Trip Blank

Date Collected: 06/20/25 00:00

Date Received: 06/24/25 16:00

## Lab Sample ID: 310-309489-5

Matrix: Trip Blank

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 458897       | FE5V    | EET CF | 06/26/25 17:28       |

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: SCS Engineers

Job ID: 310-309489-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Landfill (Supplemental)

Laboratory: Eurofins Cedar Falls

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Iowa      | State   | 007                   | 12-01-25        |

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



## Method Summary

Client: SCS Engineers

Job ID: 310-309489-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Landfill (Supplemental)

| Method | Method Description                  | Protocol | Laboratory |
|--------|-------------------------------------|----------|------------|
| 8260D  | Volatile Organic Compounds by GC/MS | SW846    | EET CF     |
| 6020B  | Metals (ICP/MS)                     | SW846    | EET CF     |
| 3005A  | Preparation, Total Metals           | SW846    | EET CF     |
| 5030B  | Purge and Trap                      | SW846    | EET CF     |

### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Environment Testing  
America



310-309489 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------|-----------------------|
| <b>Client Information</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                  |                       |
| Client <u>SCS</u>                                                                                                                                                                                                                                                                                                                                                 |                           |                                  |                       |
| City/State                                                                                                                                                                                                                                                                                                                                                        | CITY <u>W. Des Moines</u> | STATE <u>IA</u>                  | Project:              |
| <b>Receipt Information</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                  |                       |
| Date/Time Received.                                                                                                                                                                                                                                                                                                                                               | DATE <u>6.24.25</u>       | TIME <u>1600</u>                 | Received By <u>PH</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ |                           |                                  |                       |
| <b>Condition of Cooler/Containers</b>                                                                                                                                                                                                                                                                                                                             |                           |                                  |                       |
| Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID _____                                                                                                                                                                                                                                         |                           |                                  |                       |
| Multiple Coolers? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler # _____ of _____                                                                                                                                                                                                                                             |                           |                                  |                       |
| Cooler Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                   |                           |                                  |                       |
| Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                   |                           |                                  |                       |
| Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Which VOA samples are in cooler? <u>↓</u><br><u>All</u>                                                                                                                                                                                                           |                           |                                  |                       |
| <b>Temperature Record</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                  |                       |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE                                                                                                                                                                       |                           |                                  |                       |
| Thermometer ID. <u>AA</u>                                                                                                                                                                                                                                                                                                                                         |                           | Correction Factor (°C): <u>0</u> |                       |
| • Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                                    |                           |                                  |                       |
| Uncorrected Temp (°C) <u>1.9</u>                                                                                                                                                                                                                                                                                                                                  |                           | Corrected Temp (°C): <u>1.9</u>  |                       |
| • Sample Container Temperature                                                                                                                                                                                                                                                                                                                                    |                           |                                  |                       |
| Container(s) used:                                                                                                                                                                                                                                                                                                                                                | CONTAINER 1               | CONTAINER 2                      |                       |
| Uncorrected Temp (°C):                                                                                                                                                                                                                                                                                                                                            |                           |                                  |                       |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                              |                           |                                  |                       |
| <b>Exceptions Noted</b>                                                                                                                                                                                                                                                                                                                                           |                           |                                  |                       |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                               |                           |                                  |                       |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                  |                           |                                  |                       |
| NOTE If yes, contact PM before proceeding If no, proceed with login                                                                                                                                                                                                                                                                                               |                           |                                  |                       |
| <b>Additional Comments</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                  |                       |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                       |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                       |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                       |

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Revision 26  
Date 27 Jan 2022

Eurofins Cedar Falls

General temperature criteria is 0 to 6°C  
Bacteria temperature criteria is 0 to 10°C

[illegible]

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-309489-1

SDG Number: Woodbury County Landfill (Supplemental)

**Login Number: 309489**

**List Source: Eurofins Cedar Falls**

**List Number: 1**

**Creator: Homolar, Dana J**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | N/A    |         |
| The cooler's custody seal, if present, is intact.                                        | N/A    |         |
| Sample custody seals, if present, are 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 is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   |         |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | 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   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Sean Marczewski  
SCS Engineers  
1690 All State Court  
Suite 100  
West Des Moines, Iowa 50265

Generated 8/4/2025 3:49:15 PM

## JOB DESCRIPTION

1st 2025 Semi-Annual Groundwater Sampling  
Woodbury County Sanitary Landfill (HMSP)

## JOB NUMBER

310-310779-1

# Eurofins Cedar Falls

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



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Authorized for release by  
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# Case Narrative

Client: SCS Engineers  
Project: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1

**Job ID: 310-310779-1**

**Eurofins Cedar Falls**

## Job Narrative 310-310779-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The sample was received on 7/10/2025 4:15 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

### GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-460395 recovered outside of the control limits for Bromomethane (-24.1%D). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated sample is impacted: (CCV 310-460395/4). &>.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-460395 recovered outside of the control limits for 3-Chloro-1-propene (-20.4%D) and Carbon disulfide (-21.2%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-460395/3).

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

### GC/MS Semi VOA

Method 8270E: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-460340. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8270E: The continuing calibration verification (CCV) associated with batch 310-461510 recovered above the upper control limit for 4-Aminobiphenyl, 4-Bromophenyl phenyl ether, 1,3-Dinitrobenzene, 2,6-Dinitrotoluene, 1,4-Naphthoquinone, 2-Nitrophenol and 2,4,6-Tribromophenol (Surr). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-461510/4).

Method 8270E: The continuing calibration verification (CCV) associated with batch 310-461510 recovered above the upper control limit for 4-Aminobiphenyl(20.9%D), Chlorobenzilate(40.9%D), Dinoseb(23.5%D), Disulfoton(23.2%D), 1,4-Naphthoquinone(27.4%D), N-Nitrosodiethylamine(20.6%D), N-Nitrosodi-n-butylamine(26.3%D), N-Nitrosopyrrolidine(28.6%D), o,o',o"-Triethylphosphorothioate(20.6%D), p-Dimethylamino azobenzene(26.6%D) and Safrole(22.5%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-461510/4).

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

### GC Semi VOA

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

### Herbicides

Method 8151A: The laboratory control sample (LCS) for <672141> recovered outside control limits for the following analytes: 2,4-D, DCAA, Silvex (2,4,5-TP) and 2,4,5-T. The associated sample(s) was re-prepared and/or re-analyzed outside holding time.

Method 8151A: The DCAA surrogate recovery for the Method Blank (MB) associated with preparation batch 410-672141 and

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## Case Narrative

Client: SCS Engineers  
Project: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1

### Job ID: 310-310779-1 (Continued)

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analytical batch 410-672400 was outside the lower control limits. The associated samples were re-prepared outside holding time and MB is within control limits.; therefore, the data have been reported.

Method 8151A: Surrogate recovery for the following sample was outside control limits: PZ-2B (310-310779-1). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results.

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

#### **PCBs**

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

#### **Pesticides**

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

#### **Metals**

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

#### **General Chemistry**

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

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Sample Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 310-310779-1  | PZ-2B            | Water  | 07/09/25 13:02 | 07/10/25 16:15 |

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

## Detection Summary

Client: SCS Engineers

Job ID: 310-310779-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: PZ-2B

Lab Sample ID: 310-310779-1

| Analyte                 | Result   | Qualifier | RL       | MDL | Unit | Dil Fac | D | Method    | Prep Type |
|-------------------------|----------|-----------|----------|-----|------|---------|---|-----------|-----------|
| 1,1-Dichloroethane      | 2.80     |           | 1.00     |     | ug/L | 1       |   | 8260D     | Total/NA  |
| cis-1,2-Dichloroethene  | 1.29     |           | 1.00     |     | ug/L | 1       |   | 8260D     | Total/NA  |
| Dichlorodifluoromethane | 3.93     |           | 3.00     |     | ug/L | 1       |   | 8260D     | Total/NA  |
| Tetrachloroethene       | 2.44     |           | 1.00     |     | ug/L | 1       |   | 8260D     | Total/NA  |
| Trichloroethene         | 4.03     |           | 1.00     |     | ug/L | 1       |   | 8260D     | Total/NA  |
| Arsenic                 | 0.00591  |           | 0.00200  |     | mg/L | 1       |   | 6020B     | Total/NA  |
| Barium                  | 0.526    |           | 0.00200  |     | mg/L | 1       |   | 6020B     | Total/NA  |
| Cobalt                  | 0.000654 |           | 0.000500 |     | mg/L | 1       |   | 6020B     | Total/NA  |
| Total Suspended Solids  | 2.9      |           | 1.9      |     | mg/L | 1       |   | I-3765-85 | Total/NA  |

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: PZ-2B

Lab Sample ID: 310-310779-1

Date Collected: 07/09/25 13:02

Matrix: Water

Date Received: 07/10/25 16:15

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-----|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,1-Dichloroethane          | 2.80   |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,1-Dichloropropene         | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,2,4-Trichlorobenzene      | <5.00  |           | 5.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,2-Dibromo-3-Chloropropane | <5.00  |           | 5.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,3-Dichlorobenzene         | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,3-Dichloropropane         | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 2,2-Dichloropropane         | <4.00  |           | 4.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Acetone                     | <10.0  |           | 10.0  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Acrolein                    | <10.0  |           | 10.0  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Allyl chloride              | <2.00  |           | 2.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Benzene                     | <0.500 |           | 0.500 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Bromoform                   | <5.00  |           | 5.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Bromomethane                | <4.00  |           | 4.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Chloroethane                | <4.00  |           | 4.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Chloroform                  | <3.00  |           | 3.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Chloromethane               | <3.00  |           | 3.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Chloroprene                 | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| cis-1,2-Dichloroethene      | 1.29   |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Dichlorodifluoromethane     | 3.93   |           | 3.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Ethyl methacrylate          | <2.00  |           | 2.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Methacrylonitrile           | <10.0  |           | 10.0  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Methyl methacrylate         | <2.00  |           | 2.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Methylene Chloride          | <5.00  |           | 5.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Naphthalene                 | <5.00  |           | 5.00  |     | ug/L |   |          | 07/15/25 01:34 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: PZ-2B

Lab Sample ID: 310-310779-1

Date Collected: 07/09/25 13:02

Matrix: Water

Date Received: 07/10/25 16:15

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                     | Result      | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-------------|-----------|------|-----|------|---|----------|----------------|---------|
| Propionitrile               | <10.0       |           | 10.0 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Styrene                     | <1.00       |           | 1.00 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| <b>Tetrachloroethene</b>    | <b>2.44</b> |           | 1.00 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Toluene                     | <1.00       |           | 1.00 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| trans-1,2-Dichloroethene    | <1.00       |           | 1.00 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| trans-1,3-Dichloropropene   | <5.00       |           | 5.00 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0       |           | 10.0 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| <b>Trichloroethene</b>      | <b>4.03</b> |           | 1.00 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Trichlorofluoromethane      | <4.00       |           | 4.00 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Vinyl acetate               | <10.0       |           | 10.0 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Vinyl chloride              | <1.00       |           | 1.00 |     | ug/L |   |          | 07/15/25 01:34 | 1       |
| Xylenes, Total              | <3.00       |           | 3.00 |     | ug/L |   |          | 07/15/25 01:34 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 109       |           | 76 - 130 |          | 07/15/25 01:34 | 1       |
| Toluene-d8 (Surr)           | 98        |           | 80 - 120 |          | 07/15/25 01:34 | 1       |
| 4-Bromofluorobenzene (Surr) | 103       |           | 80 - 120 |          | 07/15/25 01:34 | 1       |

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

| Analyte                      | Result | Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------|--------|-----------|------|-----|------|---|----------------|----------------|---------|
| Acenaphthene                 | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Acenaphthylene               | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Acetophenone                 | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2-Acetylaminofluorene        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 4-Aminobiphenyl              | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Anthracene                   | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Benzo(a)anthracene           | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Benzo(a)pyrene               | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Benzo(b)fluoranthene         | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Benzo(g,h,i)perylene         | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Benzo(k)fluoranthene         | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Benzyl alcohol               | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Bis(2-chloroethoxy)methane   | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Bis(2-chloroethyl)ether      | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| bis(2-chloroisopropyl) ether | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Bis(2-ethylhexyl) phthalate  | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 4-Bromophenyl phenyl ether   | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Butyl benzyl phthalate       | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 4-Chloroaniline              | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Chlorobenzilate              | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 4-Chloro-3-methylphenol      | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2-Chloronaphthalene          | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2-Chlorophenol               | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 4-Chlorophenyl phenyl ether  | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Chrysene                     | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Diallate                     | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Dibenz(a,h)anthracene        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Dibenzofuran                 | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 3,3'-Dichlorobenzidine       | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2,4-Dichlorophenol           | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: PZ-2B

Lab Sample ID: 310-310779-1

Date Collected: 07/09/25 13:02

Matrix: Water

Date Received: 07/10/25 16:15

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte                                   | Result | Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------------------|--------|-----------|------|-----|------|---|----------------|----------------|---------|
| 2,6-Dichlorophenol                        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Diethyl phthalate                         | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Dimethoate                                | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 7,12-Dimethylbenz(a)anthracene            | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 3,3'-Dimethylbenzidine                    | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 2,4-Dimethylphenol                        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Dimethyl phthalate                        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Di-n-butyl phthalate                      | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 1,3-Dinitrobenzene                        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 4,6-Dinitro-2-methylphenol                | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2,4-Dinitrophenol                         | <19.6  |           | 19.6 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2,4-Dinitrotoluene                        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2,6-Dinitrotoluene                        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Di-n-octyl phthalate                      | <19.6  |           | 19.6 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Dinoseb                                   | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Diphenylamine                             | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Disulfoton                                | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Ethyl methanesulfonate                    | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Ethyl parathion                           | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Famphur                                   | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Fluoranthene                              | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Fluorene                                  | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Hexachlorobenzene                         | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Hexachlorobutadiene                       | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Hexachlorocyclopentadiene                 | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Hexachloroethane                          | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Hexachloropropene                         | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Indeno(1,2,3-cd)pyrene                    | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Isodrin                                   | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Isophorone                                | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Isosafrole                                | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Kepone                                    | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 08/01/25 16:37 | 1       |
| Methapyrilene                             | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 3-Methylcholanthrene                      | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Methyl methanesulfonate                   | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 2-Methylnaphthalene                       | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Methyl parathion                          | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 2-Methylphenol                            | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 4-Methylphenol (and/or<br>3-Methylphenol) | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 1,4-Naphthoquinone                        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 1-Naphthylamine                           | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 2-Naphthylamine                           | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 2-Nitroaniline                            | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 3-Nitroaniline                            | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 4-Nitroaniline                            | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Nitrobenzene                              | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 5-Nitro-o-toluidine                       | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 2-Nitrophenol                             | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 4-Nitrophenol                             | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: PZ-2B

Lab Sample ID: 310-310779-1

Date Collected: 07/09/25 13:02

Matrix: Water

Date Received: 07/10/25 16:15

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte                          | Result | Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|--------|-----------|------|-----|------|---|----------------|----------------|---------|
| N-Nitrosodiethylamine            | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| N-Nitrosodimethylamine           | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| N-Nitrosodi-n-butylamine         | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| N-Nitrosodi-n-propylamine        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| N-Nitrosodiphenylamine           | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| N-Nitrosomethylethylamine        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| N-Nitrosopiperidine              | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| N-Nitrosopyrrolidine             | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| o,o',o"-Triethylphosphorothioate | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| o-Toluidine                      | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| p-Dimethylamino azobenzene       | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Pentachlorobenzene               | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Pentachloronitrobenzene          | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Pentachlorophenol                | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Phenacetin                       | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Phenanthrene                     | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Phenol                           | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 1,4-Phenylenediamine             | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Phorate                          | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Pronamide                        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| Pyrene                           | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Safrole                          | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 1,2,4,5-Tetrachlorobenzene       | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2,3,4,6-Tetrachlorophenol        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Thionazin                        | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |
| 2,4,5-Trichlorophenol            | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2,4,6-Trichlorophenol            | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 1,3,5-Trinitrobenzene            | <9.80  |           | 9.80 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 12:19 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl (Surr)     | 75        |           | 33 - 126 | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2-Fluorophenol (Surr)       | 49        |           | 21 - 110 | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Nitrobenzene-d5 (Surr)      | 75        |           | 39 - 140 | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Phenol-d5 (Surr)            | 39        |           | 21 - 110 | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| Terphenyl-d14 (Surr)        | 93        |           | 13 - 150 | 07/14/25 08:07 | 07/16/25 19:27 | 1       |
| 2,4,6-Tribromophenol (Surr) | 52        |           | 20 - 144 | 07/14/25 08:07 | 07/16/25 19:27 | 1       |

## Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

| Analyte      | Result | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Acetonitrile | <10.0  |           | 10.0 |     | mg/L |   |          | 07/16/25 17:05 | 1       |
| Isobutanol   | <10.0  | *-        | 10.0 |     | mg/L |   |          | 07/16/25 17:05 | 1       |

## Method: SW846 8081B - Organochlorine Pesticides (GC)

| Analyte   | Result  | Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|---------|-----------|--------|-----|------|---|----------------|----------------|---------|
| 4,4'-DDD  | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| 4,4'-DDE  | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| 4,4'-DDT  | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Aldrin    | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| alpha-BHC | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| beta-BHC  | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: PZ-2B

Lab Sample ID: 310-310779-1

Date Collected: 07/09/25 13:02

Matrix: Water

Date Received: 07/10/25 16:15

## Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte               | Result  | Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|---------|-----------|--------|-----|------|---|----------------|----------------|---------|
| Chlordane (technical) | <1.80   |           | 1.80   |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| delta-BHC             | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Dieldrin              | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Endosulfan I          | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Endosulfan II         | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Endosulfan sulfate    | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Endrin                | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Endrin aldehyde       | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| gamma-BHC (Lindane)   | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Heptachlor            | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Heptachlor epoxide    | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Methoxychlor          | <0.0902 |           | 0.0902 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Toxaphene             | <1.80   |           | 1.80   |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |

| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 68        |           | 10 - 150 | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Tetrachloro-m-xylene (Surr)   | 72        |           | 17 - 150 | 07/14/25 13:48 | 07/17/25 20:13 | 1       |

## Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte  | Result | Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------------|----------------|---------|
| PCB-1016 | <1.80  |           | 1.80 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| PCB-1221 | <1.80  |           | 1.80 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| PCB-1232 | <1.80  |           | 1.80 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| PCB-1242 | <1.80  |           | 1.80 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| PCB-1248 | <1.80  |           | 1.80 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| PCB-1254 | <1.80  |           | 1.80 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| PCB-1260 | <1.80  |           | 1.80 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| PCB-1268 | <1.80  |           | 1.80 |     | ug/L |   | 07/14/25 13:48 | 07/17/25 20:13 | 1       |

| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 68        |           | 10 - 150 | 07/14/25 13:48 | 07/17/25 20:13 | 1       |
| Tetrachloro-m-xylene (Surr)   | 72        |           | 17 - 150 | 07/14/25 13:48 | 07/17/25 20:13 | 1       |

## Method: SW846 8151A - Herbicides (GC)

| Analyte           | Result  | Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------|---------|-----------|--------|-----|------|---|----------------|----------------|---------|
| 2,4-D             | <0.600  | *-        | 0.600  |     | ug/L |   | 07/16/25 14:52 | 07/17/25 08:49 | 1       |
| Silvex (2,4,5-TP) | <0.0500 | *-        | 0.0500 |     | ug/L |   | 07/16/25 14:52 | 07/17/25 08:49 | 1       |
| 2,4,5-T           | <0.150  | *-        | 0.150  |     | ug/L |   | 07/16/25 14:52 | 07/17/25 08:49 | 1       |

| Surrogate | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------------|----------------|---------|
| DCAA      | 23        | S1-       | 34 - 142 | 07/16/25 14:52 | 07/17/25 08:49 | 1       |
| DCAA      | 19        | S1-       | 34 - 142 | 07/16/25 14:52 | 07/17/25 08:49 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte   | Result    | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
| Antimony  | <0.00200  |           | 0.00200  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Arsenic   | 0.00591   |           | 0.00200  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Barium    | 0.526     |           | 0.00200  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Beryllium | <0.00100  |           | 0.00100  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Cadmium   | <0.000200 |           | 0.000200 |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Chromium  | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Client Sample ID: PZ-2B

Lab Sample ID: 310-310779-1

Date Collected: 07/09/25 13:02

Matrix: Water

Date Received: 07/10/25 16:15

## Method: SW846 6020B - Metals (ICP/MS) (Continued)

| Analyte  | Result    | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
| Cobalt   | 0.000654  |           | 0.000500 |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Copper   | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Lead     | <0.000500 |           | 0.000500 |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Nickel   | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Selenium | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Silver   | <0.00100  |           | 0.00100  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Thallium | <0.00100  |           | 0.00100  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Tin      | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Vanadium | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |
| Zinc     | <0.0200   |           | 0.0200   |     | mg/L |   | 07/16/25 07:40 | 07/17/25 21:33 | 1       |

## Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result    | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.000200 |           | 0.000200 |     | mg/L |   | 07/17/25 11:02 | 07/18/25 10:26 | 1       |

## General Chemistry

| Analyte                                 | Result  | Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------------------------|---------|-----------|--------|-----|------|---|----------------|----------------|---------|
| Cyanide, Total (SW846 9012B)            | <0.0100 |           | 0.0100 |     | mg/L |   | 07/14/25 11:10 | 07/16/25 13:16 | 1       |
| Sulfide (SW846 9034)                    | <2.00   |           | 2.00   |     | mg/L |   |                | 07/16/25 09:09 | 1       |
| Total Suspended Solids (USGS I-3765-85) | 2.9     |           | 1.9    |     | mg/L |   |                | 07/16/25 14:55 | 1       |

## Definitions/Glossary

Client: SCS Engineers

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1

SDG: Woodbury County Sanitary Landfill (HMSP)

### Qualifiers

#### GC Semi VOA

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| *-        | LCS and/or LCSD is outside acceptance limits, low biased.                                                      |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| S1-       | Surrogate recovery exceeds control limits, low biased.                                                         |

#### General Chemistry

| 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                                                                                       |

## Surrogate Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

### Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

|                                    |                    | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |
|------------------------------------|--------------------|------------------------------------------------|-----------------|-----------------|
| Lab Sample ID                      | Client Sample ID   | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |
| 310-310779-1                       | PZ-2B              | 109                                            | 98              | 103             |
| LCS 310-460395/7                   | Lab Control Sample | 100                                            | 103             | 102             |
| LCS 310-460395/8                   | Lab Control Sample | 110                                            | 97              | 103             |
| MB 310-460395/6                    | Method Blank       | 108                                            | 98              | 99              |
| <b>Surrogate Legend</b>            |                    |                                                |                 |                 |
| DBFM = Dibromofluoromethane (Surr) |                    |                                                |                 |                 |
| TOL = Toluene-d8 (Surr)            |                    |                                                |                 |                 |
| BFB = 4-Bromofluorobenzene (Surr)  |                    |                                                |                 |                 |

### Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

|                                   |                        | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                 |                  |                 |
|-----------------------------------|------------------------|------------------------------------------------|-----------------|-----------------|-----------------|------------------|-----------------|
| Lab Sample ID                     | Client Sample ID       | FBP<br>(33-126)                                | 2FP<br>(21-110) | NBZ<br>(39-140) | PHL<br>(21-110) | TPHL<br>(13-150) | TBP<br>(20-144) |
| 310-310779-1                      | PZ-2B                  | 75                                             | 49              | 75              | 39              | 93               | 52              |
| LCS 310-460340/2-A                | Lab Control Sample     | 63                                             | 48              | 63              | 36              | 78               | 60              |
| LCSD 310-460340/3-A               | Lab Control Sample Dup | 72                                             | 58              | 73              | 44              | 89               | 66              |
| MB 310-460340/1-A                 | Method Blank           | 71                                             | 56              | 77              | 43              | 91               | 61              |
| <b>Surrogate Legend</b>           |                        |                                                |                 |                 |                 |                  |                 |
| FBP = 2-Fluorobiphenyl (Surr)     |                        |                                                |                 |                 |                 |                  |                 |
| 2FP = 2-Fluorophenol (Surr)       |                        |                                                |                 |                 |                 |                  |                 |
| NBZ = Nitrobenzene-d5 (Surr)      |                        |                                                |                 |                 |                 |                  |                 |
| PHL = Phenol-d5 (Surr)            |                        |                                                |                 |                 |                 |                  |                 |
| TPHL = Terphenyl-d14 (Surr)       |                        |                                                |                 |                 |                 |                  |                 |
| TBP = 2,4,6-Tribromophenol (Surr) |                        |                                                |                 |                 |                 |                  |                 |

### Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

|                                     |                    | Percent Surrogate Recovery (Acceptance Limits) |                  |
|-------------------------------------|--------------------|------------------------------------------------|------------------|
| Lab Sample ID                       | Client Sample ID   | DCB1<br>(10-150)                               | TCX1<br>(17-150) |
| 310-310779-1                        | PZ-2B              | 68                                             | 72               |
| LB 310-460106/1-D                   | Method Blank       | 61                                             | 58               |
| LCS 310-460407/2-A                  | Lab Control Sample | 54                                             | 64               |
| MB 310-460407/1-A                   | Method Blank       | 60                                             | 76               |
| <b>Surrogate Legend</b>             |                    |                                                |                  |
| DCB = DCB Decachlorobiphenyl (Surr) |                    |                                                |                  |
| TCX = Tetrachloro-m-xylene (Surr)   |                    |                                                |                  |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water

Prep Type: Total/NA

|                 |                  | Percent Surrogate Recovery (Acceptance Limits) |                  |
|-----------------|------------------|------------------------------------------------|------------------|
| Lab Sample ID   | Client Sample ID | DCB1<br>(10-150)                               | TCX1<br>(17-150) |
| 310-310779-1    | PZ-2B            | 68                                             | 72               |
| 310-310779-1 MS | PZ-2B            | 75                                             | 86               |

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## Surrogate Summary

Client: SCS Engineers

Job ID: 310-310779-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Water

Prep Type: Total/NA

|                                     |                    | Percent Surrogate Recovery (Acceptance Limits) |                  |
|-------------------------------------|--------------------|------------------------------------------------|------------------|
| Lab Sample ID                       | Client Sample ID   | DCB1<br>(10-150)                               | TCX1<br>(17-150) |
| 310-310779-1 MSD                    | PZ-2B              | 78                                             | 85               |
| LCS 310-460407/26-A                 | Lab Control Sample | 42                                             | 68               |
| MB 310-460407/1-A                   | Method Blank       | 60                                             | 76               |
| <b>Surrogate Legend</b>             |                    |                                                |                  |
| DCB = DCB Decachlorobiphenyl (Surr) |                    |                                                |                  |
| TCX = Tetrachloro-m-xylene (Surr)   |                    |                                                |                  |

### Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

|                         |                    | Percent Surrogate Recovery (Acceptance Limits) |                    |
|-------------------------|--------------------|------------------------------------------------|--------------------|
| Lab Sample ID           | Client Sample ID   | DCPAA1<br>(34-142)                             | DCPAA2<br>(34-142) |
| 310-310779-1            | PZ-2B              | 23 S1-                                         | 19 S1-             |
| LCS 410-672141/2-A      | Lab Control Sample | 25 S1-                                         | 23 S1-             |
| MB 410-672141/1-A       | Method Blank       | 22 S1-                                         | 19 S1-             |
| <b>Surrogate Legend</b> |                    |                                                |                    |
| DCPAA = DCAA            |                    |                                                |                    |

# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-460395/6

Matrix: Water

Analysis Batch: 460395

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL    | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-------|-----|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,1,1-Trichloroethane       | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,1,2-Trichloroethane       | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,1-Dichloroethane          | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,1-Dichloroethene          | <2.00     |              | 2.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,1-Dichloropropene         | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,2,3-Trichloropropane      | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,2,4-Trichlorobenzene      | <5.00     |              | 5.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,2-Dibromo-3-Chloropropane | <5.00     |              | 5.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,2-Dichlorobenzene         | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,2-Dichloroethane          | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,2-Dichloropropane         | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,3-Dichlorobenzene         | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,3-Dichloropropane         | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 1,4-Dichlorobenzene         | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 2,2-Dichloropropane         | <4.00     |              | 4.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 2-Butanone (MEK)            | <10.0     |              | 10.0  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 2-Hexanone                  | <10.0     |              | 10.0  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0     |              | 10.0  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Acetone                     | <10.0     |              | 10.0  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Acrolein                    | <10.0     |              | 10.0  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Acrylonitrile               | <5.00     |              | 5.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Allyl chloride              | <2.00     |              | 2.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Benzene                     | <0.500    |              | 0.500 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Bromochloromethane          | <5.00     |              | 5.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Bromodichloromethane        | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Bromoform                   | <5.00     |              | 5.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Bromomethane                | <4.00     |              | 4.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Carbon disulfide            | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Carbon tetrachloride        | <2.00     |              | 2.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Chlorobenzene               | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Chlorodibromomethane        | <5.00     |              | 5.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Chloroethane                | <4.00     |              | 4.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Chloroform                  | <3.00     |              | 3.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Chloromethane               | <3.00     |              | 3.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Chloroprene                 | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| cis-1,2-Dichloroethene      | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| cis-1,3-Dichloropropene     | <5.00     |              | 5.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Dibromomethane              | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Dichlorodifluoromethane     | <3.00     |              | 3.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Ethyl methacrylate          | <2.00     |              | 2.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Ethylbenzene                | <1.00     |              | 1.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Iodomethane                 | <10.0     |              | 10.0  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Methacrylonitrile           | <10.0     |              | 10.0  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Methyl methacrylate         | <2.00     |              | 2.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Methylene Chloride          | <5.00     |              | 5.00  |     | ug/L |   |          | 07/14/25 22:33 | 1       |

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## QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

### Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-460395/6

Matrix: Water

Analysis Batch: 460395

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB     | MB        | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
|                             | Result | Qualifier |      |     |      |   |          |                |         |
| Naphthalene                 | <5.00  |           | 5.00 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Propionitrile               | <10.0  |           | 10.0 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Styrene                     | <1.00  |           | 1.00 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Toluene                     | <1.00  |           | 1.00 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Trichloroethene             | <1.00  |           | 1.00 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00 |     | ug/L |   |          | 07/14/25 22:33 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00 |     | ug/L |   |          | 07/14/25 22:33 | 1       |

| Surrogate                   | MB        | MB        | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
|                             | %Recovery | Qualifier |          |          |                |         |
| Dibromofluoromethane (Surr) | 108       |           | 76 - 130 |          | 07/14/25 22:33 | 1       |
| Toluene-d8 (Surr)           | 98        |           | 80 - 120 |          | 07/14/25 22:33 | 1       |
| 4-Bromofluorobenzene (Surr) | 99        |           | 80 - 120 |          | 07/14/25 22:33 | 1       |

Lab Sample ID: LCS 310-460395/7

Matrix: Water

Analysis Batch: 460395

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|-------------|
|                             |             |            |               |      |   |      |             |
| 1,1,1,2-Tetrachloroethane   | 20.0        | 19.81      |               | ug/L |   | 99   | 70 - 121    |
| 1,1,1-Trichloroethane       | 20.0        | 20.01      |               | ug/L |   | 100  | 69 - 130    |
| 1,1,2,2-Tetrachloroethane   | 20.0        | 19.82      |               | ug/L |   | 99   | 70 - 122    |
| 1,1,2-Trichloroethane       | 20.0        | 18.57      |               | ug/L |   | 93   | 75 - 121    |
| 1,1-Dichloroethane          | 20.0        | 20.66      |               | ug/L |   | 103  | 69 - 127    |
| 1,1-Dichloroethene          | 20.0        | 20.52      |               | ug/L |   | 103  | 64 - 134    |
| 1,1-Dichloropropene         | 20.0        | 19.37      |               | ug/L |   | 97   | 70 - 133    |
| 1,2,3-Trichloropropene      | 20.0        | 19.87      |               | ug/L |   | 99   | 70 - 122    |
| 1,2,4-Trichlorobenzene      | 20.0        | 19.67      |               | ug/L |   | 98   | 69 - 125    |
| 1,2-Dibromo-3-Chloropropane | 20.0        | 21.36      |               | ug/L |   | 107  | 62 - 132    |
| 1,2-Dibromoethane (EDB)     | 20.0        | 18.71      |               | ug/L |   | 94   | 74 - 122    |
| 1,2-Dichlorobenzene         | 20.0        | 20.08      |               | ug/L |   | 100  | 74 - 120    |
| 1,2-Dichloroethane          | 20.0        | 20.78      |               | ug/L |   | 104  | 68 - 125    |
| 1,2-Dichloropropane         | 20.0        | 19.74      |               | ug/L |   | 99   | 72 - 128    |
| 1,3-Dichlorobenzene         | 20.0        | 19.93      |               | ug/L |   | 100  | 71 - 120    |
| 1,3-Dichloropropane         | 20.0        | 18.59      |               | ug/L |   | 93   | 72 - 125    |
| 1,4-Dichlorobenzene         | 20.0        | 19.85      |               | ug/L |   | 99   | 72 - 120    |
| 2,2-Dichloropropane         | 20.0        | 19.55      |               | ug/L |   | 98   | 51 - 146    |
| 2-Butanone (MEK)            | 40.0        | 40.89      |               | ug/L |   | 102  | 60 - 134    |
| 2-Hexanone                  | 40.0        | 41.01      |               | ug/L |   | 103  | 62 - 139    |
| 4-Methyl-2-pentanone (MIBK) | 40.0        | 38.54      |               | ug/L |   | 96   | 62 - 136    |
| Acetone                     | 40.0        | 42.24      |               | ug/L |   | 106  | 59 - 136    |
| Acrolein                    | 94.8        | 94.12      |               | ug/L |   | 99   | 50 - 150    |
| Acrylonitrile               | 200         | 199.7      |               | ug/L |   | 100  | 50 - 150    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-460395/7

Matrix: Water

Analysis Batch: 460395

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|-------------|
| Allyl chloride              | 20.0        | 18.48      |               | ug/L |   | 92   | 61 - 136    |
| Benzene                     | 20.0        | 19.70      |               | ug/L |   | 99   | 71 - 125    |
| Bromochloromethane          | 20.0        | 20.89      |               | ug/L |   | 104  | 69 - 131    |
| Bromodichloromethane        | 20.0        | 19.34      |               | ug/L |   | 97   | 70 - 122    |
| Bromoform                   | 20.0        | 18.64      |               | ug/L |   | 93   | 62 - 122    |
| Carbon disulfide            | 20.0        | 20.19      |               | ug/L |   | 101  | 58 - 137    |
| Carbon tetrachloride        | 20.0        | 20.23      |               | ug/L |   | 101  | 63 - 136    |
| Chlorobenzene               | 20.0        | 18.91      |               | ug/L |   | 95   | 74 - 120    |
| Chlorodibromomethane        | 20.0        | 17.53      |               | ug/L |   | 88   | 69 - 121    |
| Chloroform                  | 20.0        | 21.14      |               | ug/L |   | 106  | 72 - 122    |
| Chloroprene                 | 20.0        | 20.89      |               | ug/L |   | 104  | 67 - 136    |
| cis-1,2-Dichloroethene      | 20.0        | 19.68      |               | ug/L |   | 98   | 72 - 123    |
| cis-1,3-Dichloropropene     | 20.0        | 17.73      |               | ug/L |   | 89   | 72 - 123    |
| Dibromomethane              | 20.0        | 20.88      |               | ug/L |   | 104  | 72 - 122    |
| Ethyl methacrylate          | 20.0        | 20.09      |               | ug/L |   | 100  | 68 - 128    |
| Ethylbenzene                | 20.0        | 19.45      |               | ug/L |   | 97   | 75 - 120    |
| Iodomethane                 | 20.0        | 11.36      |               | ug/L |   | 57   | 18 - 150    |
| Methacrylonitrile           | 200         | 187.8      |               | ug/L |   | 94   | 67 - 128    |
| Methyl methacrylate         | 40.0        | 40.90      |               | ug/L |   | 102  | 69 - 129    |
| Methylene Chloride          | 20.0        | 20.53      |               | ug/L |   | 103  | 72 - 128    |
| Naphthalene                 | 20.0        | 19.16      |               | ug/L |   | 96   | 69 - 126    |
| Propionitrile               | 200         | 211.7      |               | ug/L |   | 106  | 68 - 131    |
| Styrene                     | 20.0        | 19.81      |               | ug/L |   | 99   | 74 - 122    |
| Tetrachloroethene           | 20.0        | 19.05      |               | ug/L |   | 95   | 70 - 128    |
| Toluene                     | 20.0        | 19.00      |               | ug/L |   | 95   | 74 - 120    |
| trans-1,2-Dichloroethene    | 20.0        | 20.24      |               | ug/L |   | 101  | 67 - 127    |
| trans-1,3-Dichloropropene   | 20.0        | 17.90      |               | ug/L |   | 89   | 67 - 123    |
| trans-1,4-Dichloro-2-butene | 20.0        | 18.68      |               | ug/L |   | 93   | 50 - 150    |
| Trichloroethene             | 20.0        | 18.58      |               | ug/L |   | 93   | 70 - 128    |
| Vinyl acetate               | 40.0        | 38.06      |               | ug/L |   | 95   | 50 - 150    |
| Xylenes, Total              | 40.0        | 38.57      |               | ug/L |   | 96   | 74 - 121    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| Dibromofluoromethane (Surr) | 100           |               | 76 - 130 |
| Toluene-d8 (Surr)           | 103           |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 102           |               | 80 - 120 |

Lab Sample ID: LCS 310-460395/8

Matrix: Water

Analysis Batch: 460395

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                 | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------------------|-------------|------------|---------------|------|---|------|-------------|
| Bromomethane            | 20.0        | 15.43      |               | ug/L |   | 77   | 33 - 138    |
| Chloroethane            | 20.0        | 20.69      |               | ug/L |   | 103  | 59 - 139    |
| Chloromethane           | 20.0        | 21.41      |               | ug/L |   | 107  | 52 - 146    |
| Dichlorodifluoromethane | 20.0        | 20.56      |               | ug/L |   | 103  | 45 - 150    |
| Trichlorofluoromethane  | 20.0        | 21.55      |               | ug/L |   | 108  | 55 - 150    |
| Vinyl chloride          | 20.0        | 20.99      |               | ug/L |   | 105  | 60 - 142    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-460395/8

Matrix: Water

Analysis Batch: 460395

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

|                             | LCS       | LCS       |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| Dibromofluoromethane (Surr) | 110       |           | 76 - 130 |
| Toluene-d8 (Surr)           | 97        |           | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 103       |           | 80 - 120 |

## Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-460340/1-A

Matrix: Water

Analysis Batch: 460629

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 460340

| Analyte                      | MB     | MB        |      |     |      |   |                |                |         |
|------------------------------|--------|-----------|------|-----|------|---|----------------|----------------|---------|
|                              | Result | Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
| Acenaphthene                 | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Acenaphthylene               | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Acetophenone                 | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Anthracene                   | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Benzo(a)anthracene           | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Benzo(a)pyrene               | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Benzo(b)fluoranthene         | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Benzo(g,h,i)perylene         | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Benzo(k)fluoranthene         | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Benzyl alcohol               | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Bis(2-chloroethoxy)methane   | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Bis(2-chloroethyl)ether      | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| bis(2-chloroisopropyl) ether | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Bis(2-ethylhexyl) phthalate  | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 4-Bromophenyl phenyl ether   | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Butyl benzyl phthalate       | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 4-Chloroaniline              | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 4-Chloro-3-methylphenol      | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2-Chloronaphthalene          | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2-Chlorophenol               | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 4-Chlorophenyl phenyl ether  | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Chrysene                     | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Dibenz(a,h)anthracene        | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Dibenzofuran                 | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 3,3'-Dichlorobenzidine       | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2,4-Dichlorophenol           | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2,6-Dichlorophenol           | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Diethyl phthalate            | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2,4-Dimethylphenol           | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Dimethyl phthalate           | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Di-n-butyl phthalate         | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 1,3-Dinitrobenzene           | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 4,6-Dinitro-2-methylphenol   | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2,4-Dinitrophenol            | <20.0  |           | 20.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2,4-Dinitrotoluene           | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2,6-Dinitrotoluene           | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Di-n-octyl phthalate         | <20.0  |           | 20.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Diphenylamine                | <10.0  |           | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-310779-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-460340/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 460629

Prep Batch: 460340

| Analyte                                | MB Result | MB Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------|-----------|--------------|------|-----|------|---|----------------|----------------|---------|
| Fluoranthene                           | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Fluorene                               | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Hexachlorobenzene                      | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Hexachlorobutadiene                    | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Hexachlorocyclopentadiene              | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Hexachloroethane                       | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Indeno(1,2,3-cd)pyrene                 | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Isophorone                             | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2-Methylnaphthalene                    | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2-Methylphenol                         | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 4-Methylphenol (and/or 3-Methylphenol) | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2-Nitroaniline                         | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 3-Nitroaniline                         | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 4-Nitroaniline                         | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Nitrobenzene                           | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2-Nitrophenol                          | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 4-Nitrophenol                          | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| N-Nitrosodimethylamine                 | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| N-Nitrosodi-n-propylamine              | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| N-Nitrosodiphenylamine                 | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Pentachlorophenol                      | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Phenanthrene                           | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Phenol                                 | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Pyrene                                 | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 1,2,4,5-Tetrachlorobenzene             | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2,3,4,6-Tetrachlorophenol              | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2,4,5-Trichlorophenol                  | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2,4,6-Trichlorophenol                  | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/16/25 16:24 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl (Surr)     | 71           |              | 33 - 126 | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2-Fluorophenol (Surr)       | 56           |              | 21 - 110 | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Nitrobenzene-d5 (Surr)      | 77           |              | 39 - 140 | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Phenol-d5 (Surr)            | 43           |              | 21 - 110 | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| Terphenyl-d14 (Surr)        | 91           |              | 13 - 150 | 07/14/25 08:07 | 07/16/25 16:24 | 1       |
| 2,4,6-Tribromophenol (Surr) | 61           |              | 20 - 144 | 07/14/25 08:07 | 07/16/25 16:24 | 1       |

Lab Sample ID: MB 310-460340/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 461510

Prep Batch: 460340

| Analyte               | MB Result | MB Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|-----------|--------------|------|-----|------|---|----------------|----------------|---------|
| Acenaphthene          | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Acenaphthylene        | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Acetophenone          | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2-Acetylaminofluorene | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 4-Aminobiphenyl       | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Anthracene            | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-460340/1-A

Matrix: Water

Analysis Batch: 461510

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 460340

| Analyte                        | MB<br>Result | MB<br>Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------|--------------|-----------------|------|-----|------|---|----------------|----------------|---------|
| Benzo(a)anthracene             | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Benzo(a)pyrene                 | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Benzo(b)fluoranthene           | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Benzo(g,h,i)perylene           | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Benzo(k)fluoranthene           | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Benzyl alcohol                 | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Bis(2-chloroethoxy)methane     | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Bis(2-chloroethyl)ether        | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| bis(2-chloroisopropyl) ether   | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Bis(2-ethylhexyl) phthalate    | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 4-Bromophenyl phenyl ether     | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Butyl benzyl phthalate         | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 4-Chloroaniline                | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Chlorobenzilate                | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 4-Chloro-3-methylphenol        | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2-Chloronaphthalene            | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2-Chlorophenol                 | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 4-Chlorophenyl phenyl ether    | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Chrysene                       | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Diallate                       | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Dibenz(a,h)anthracene          | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Dibenzofuran                   | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 3,3'-Dichlorobenzidine         | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2,4-Dichlorophenol             | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2,6-Dichlorophenol             | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Diethyl phthalate              | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Dimethoate                     | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 7,12-Dimethylbenz(a)anthracene | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 3,3'-Dimethylbenzidine         | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2,4-Dimethylphenol             | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Dimethyl phthalate             | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Di-n-butyl phthalate           | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 1,3-Dinitrobenzene             | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 4,6-Dinitro-2-methylphenol     | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2,4-Dinitrophenol              | <20.0        |                 | 20.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2,4-Dinitrotoluene             | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2,6-Dinitrotoluene             | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Di-n-octyl phthalate           | <20.0        |                 | 20.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Dinoseb                        | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Diphenylamine                  | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Disulfoton                     | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Ethyl methanesulfonate         | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Ethyl parathion                | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Famphur                        | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Fluoranthene                   | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Fluorene                       | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Hexachlorobenzene              | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Hexachlorobutadiene            | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Hexachlorocyclopentadiene      | <10.0        |                 | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Job ID: 310-310779-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-460340/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 461510

Prep Batch: 460340

| Analyte                                | MB Result | MB Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------|-----------|--------------|------|-----|------|---|----------------|----------------|---------|
| Hexachloroethane                       | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Hexachloropropene                      | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Indeno(1,2,3-cd)pyrene                 | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Isodrin                                | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Isophorone                             | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Isosafrole                             | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Methapyrilene                          | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 3-Methylcholanthrene                   | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Methyl methanesulfonate                | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2-Methylnaphthalene                    | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Methyl parathion                       | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2-Methylphenol                         | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 4-Methylphenol (and/or 3-Methylphenol) | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 1,4-Naphthoquinone                     | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 1-Naphthylamine                        | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2-Naphthylamine                        | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2-Nitroaniline                         | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 3-Nitroaniline                         | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 4-Nitroaniline                         | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Nitrobenzene                           | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 5-Nitro-o-toluidine                    | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2-Nitrophenol                          | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 4-Nitrophenol                          | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| N-Nitrosodiethylamine                  | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| N-Nitrosodimethylamine                 | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| N-Nitrosodi-n-butylamine               | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| N-Nitrosodi-n-propylamine              | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| N-Nitrosodiphenylamine                 | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| N-Nitrosomethylethylamine              | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| N-Nitrosopiperidine                    | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| N-Nitrosopyrrolidine                   | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| o,o',o"-Triethylphosphorothioate       | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| o-Toluidine                            | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| p-Dimethylamino azobenzene             | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Pentachlorobenzene                     | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Pentachloronitrobenzene                | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Pentachlorophenol                      | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Phenacetin                             | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Phenanthrene                           | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Phenol                                 | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 1,4-Phenylenediamine                   | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Phorate                                | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Pronamide                              | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Pyrene                                 | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Safrole                                | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 1,2,4,5-Tetrachlorobenzene             | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2,3,4,6-Tetrachlorophenol              | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| Thionazin                              | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Job ID: 310-310779-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-460340/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 461510

Prep Batch: 460340

| Analyte               | MB Result | MB Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|-----------|--------------|------|-----|------|---|----------------|----------------|---------|
| 2,4,5-Trichlorophenol | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 2,4,6-Trichlorophenol | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |
| 1,3,5-Trinitrobenzene | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 07/24/25 11:52 | 1       |

Lab Sample ID: MB 310-460340/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 462357

Prep Batch: 460340

| Analyte | MB Result | MB Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|------|-----|------|---|----------------|----------------|---------|
| Kepone  | <10.0     |              | 10.0 |     | ug/L |   | 07/14/25 08:07 | 08/01/25 16:10 | 1       |

Lab Sample ID: LCS 310-460340/2-A

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 460629

Prep Batch: 460340

| Analyte                      | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|------------------------------|-------------|------------|---------------|------|---|------|-------------|
| Acenaphthene                 | 100         | 56.02      |               | ug/L |   | 56   | 38 - 118    |
| Acenaphthylene               | 100         | 53.23      |               | ug/L |   | 53   | 39 - 115    |
| Acetophenone                 | 100         | 53.60      |               | ug/L |   | 54   | 47 - 118    |
| Anthracene                   | 100         | 61.04      |               | ug/L |   | 61   | 49 - 127    |
| Benzo(a)anthracene           | 100         | 60.34      |               | ug/L |   | 60   | 49 - 126    |
| Benzo(a)pyrene               | 100         | 57.40      |               | ug/L |   | 57   | 44 - 133    |
| Benzo(b)fluoranthene         | 100         | 56.64      |               | ug/L |   | 57   | 44 - 136    |
| Benzo(g,h,i)perylene         | 100         | 52.88      |               | ug/L |   | 53   | 42 - 135    |
| Benzo(k)fluoranthene         | 100         | 54.40      |               | ug/L |   | 54   | 49 - 134    |
| Benzyl alcohol               | 100         | 52.37      |               | ug/L |   | 52   | 46 - 123    |
| Bis(2-chloroethoxy)methane   | 100         | 52.16      |               | ug/L |   | 52   | 44 - 126    |
| Bis(2-chloroethyl)ether      | 100         | 47.48      |               | ug/L |   | 47   | 41 - 116    |
| bis(2-chloroisopropyl) ether | 100         | 43.77      |               | ug/L |   | 44   | 36 - 115    |
| Bis(2-ethylhexyl) phthalate  | 100         | 67.38      |               | ug/L |   | 67   | 46 - 138    |
| 4-Bromophenyl phenyl ether   | 100         | 60.54      |               | ug/L |   | 61   | 41 - 131    |
| Butyl benzyl phthalate       | 100         | 66.99      |               | ug/L |   | 67   | 47 - 133    |
| 4-Chloroaniline              | 100         | 52.71      |               | ug/L |   | 53   | 13 - 143    |
| 4-Chloro-3-methylphenol      | 100         | 56.06      |               | ug/L |   | 56   | 51 - 132    |
| 2-Chloronaphthalene          | 100         | 53.35      |               | ug/L |   | 53   | 33 - 112    |
| 2-Chlorophenol               | 100         | 50.55      |               | ug/L |   | 51   | 43 - 119    |
| 4-Chlorophenyl phenyl ether  | 100         | 53.36      |               | ug/L |   | 53   | 44 - 118    |
| Chrysene                     | 100         | 58.58      |               | ug/L |   | 59   | 50 - 128    |
| Dibenz(a,h)anthracene        | 100         | 58.43      |               | ug/L |   | 58   | 36 - 146    |
| Dibenzofuran                 | 100         | 53.55      |               | ug/L |   | 54   | 44 - 114    |
| 2,4-Dichlorophenol           | 100         | 59.61      |               | ug/L |   | 60   | 44 - 131    |
| 2,6-Dichlorophenol           | 100         | 56.82      |               | ug/L |   | 57   | 41 - 131    |
| Diethyl phthalate            | 100         | 56.42      |               | ug/L |   | 56   | 43 - 135    |
| 2,4-Dimethylphenol           | 100         | 57.95      |               | ug/L |   | 58   | 30 - 128    |
| Dimethyl phthalate           | 100         | 58.72      |               | ug/L |   | 59   | 46 - 129    |
| Di-n-butyl phthalate         | 100         | 61.54      |               | ug/L |   | 62   | 49 - 138    |
| 1,3-Dinitrobenzene           | 100         | 59.18      |               | ug/L |   | 59   | 36 - 147    |
| 4,6-Dinitro-2-methylphenol   | 200         | 75.97      |               | ug/L |   | 38   | 22 - 150    |
| 2,4-Dinitrophenol            | 200         | 42.91      |               | ug/L |   | 21   | 10 - 150    |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-460340/2-A

Matrix: Water

Analysis Batch: 460629

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 460340

| Analyte                                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------------------------|-------------|------------|---------------|------|---|------|-------------|
| 2,4-Dinitrotoluene                     | 100         | 54.89      |               | ug/L |   | 55   | 48 - 136    |
| 2,6-Dinitrotoluene                     | 100         | 59.50      |               | ug/L |   | 59   | 49 - 135    |
| Di-n-octyl phthalate                   | 100         | 62.66      |               | ug/L |   | 63   | 33 - 148    |
| Diphenylamine                          | 85.0        | 55.78      |               | ug/L |   | 66   | 43 - 132    |
| Fluoranthene                           | 100         | 56.46      |               | ug/L |   | 56   | 49 - 132    |
| Fluorene                               | 100         | 54.45      |               | ug/L |   | 54   | 46 - 118    |
| Hexachlorobenzene                      | 100         | 61.30      |               | ug/L |   | 61   | 42 - 134    |
| Hexachlorobutadiene                    | 100         | 42.35      |               | ug/L |   | 42   | 29 - 110    |
| Hexachlorocyclopentadiene              | 100         | 38.48      |               | ug/L |   | 38   | 10 - 110    |
| Hexachloroethane                       | 100         | 36.21      |               | ug/L |   | 36   | 25 - 110    |
| Indeno(1,2,3-cd)pyrene                 | 100         | 63.88      |               | ug/L |   | 64   | 36 - 149    |
| Isophorone                             | 100         | 55.33      |               | ug/L |   | 55   | 46 - 126    |
| 2-Methylnaphthalene                    | 100         | 47.94      |               | ug/L |   | 48   | 35 - 110    |
| 2-Methylphenol                         | 100         | 48.39      |               | ug/L |   | 48   | 47 - 114    |
| 4-Methylphenol (and/or 3-Methylphenol) | 100         | 49.08      |               | ug/L |   | 49   | 45 - 114    |
| 2-Nitroaniline                         | 100         | 52.19      |               | ug/L |   | 52   | 48 - 135    |
| 3-Nitroaniline                         | 100         | 56.24      |               | ug/L |   | 56   | 38 - 142    |
| 4-Nitroaniline                         | 100         | 38.27      |               | ug/L |   | 38   | 33 - 141    |
| Nitrobenzene                           | 100         | 55.29      |               | ug/L |   | 55   | 42 - 123    |
| 2-Nitrophenol                          | 100         | 56.93      |               | ug/L |   | 57   | 36 - 144    |
| 4-Nitrophenol                          | 200         | 58.77      |               | ug/L |   | 29   | 22 - 110    |
| N-Nitrosodimethylamine                 | 100         | 40.28      |               | ug/L |   | 40   | 37 - 110    |
| N-Nitrosodi-n-propylamine              | 100         | 52.21      |               | ug/L |   | 52   | 44 - 124    |
| N-Nitrosodiphenylamine                 | 100         | 65.49      |               | ug/L |   | 65   | 43 - 132    |
| Pentachlorophenol                      | 200         | 62.95      |               | ug/L |   | 31   | 28 - 142    |
| Phenanthrene                           | 100         | 60.06      |               | ug/L |   | 60   | 48 - 126    |
| Phenol                                 | 100         | 32.16      |               | ug/L |   | 32   | 29 - 110    |
| Pyrene                                 | 100         | 64.69      |               | ug/L |   | 65   | 45 - 134    |
| 1,2,4,5-Tetrachlorobenzene             | 100         | 44.88      |               | ug/L |   | 45   | 35 - 110    |
| 2,3,4,6-Tetrachlorophenol              | 100         | 48.84      |               | ug/L |   | 49   | 32 - 142    |
| 2,4,5-Trichlorophenol                  | 100         | 57.09      |               | ug/L |   | 57   | 39 - 136    |
| 2,4,6-Trichlorophenol                  | 100         | 58.27      |               | ug/L |   | 58   | 35 - 141    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 2-Fluorobiphenyl (Surr)     | 63            |               | 33 - 126 |
| 2-Fluorophenol (Surr)       | 48            |               | 21 - 110 |
| Nitrobenzene-d5 (Surr)      | 63            |               | 39 - 140 |
| Phenol-d5 (Surr)            | 36            |               | 21 - 110 |
| Terphenyl-d14 (Surr)        | 78            |               | 13 - 150 |
| 2,4,6-Tribromophenol (Surr) | 60            |               | 20 - 144 |

Lab Sample ID: LCSD 310-460340/3-A

Matrix: Water

Analysis Batch: 460629

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 460340

| Analyte        | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | Limit |
|----------------|-------------|-------------|----------------|------|---|------|-------------|-----|-------|
| Acenaphthene   | 100         | 65.72       |                | ug/L |   | 66   | 38 - 118    | 16  | 35    |
| Acenaphthylene | 100         | 64.14       |                | ug/L |   | 64   | 39 - 115    | 19  | 35    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-460340/3-A

Matrix: Water

Analysis Batch: 460629

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 460340

| Analyte                                   | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit | D | %Rec | %Rec     |    | RPD | Limit |
|-------------------------------------------|----------------|----------------|-------------------|------|---|------|----------|----|-----|-------|
|                                           |                |                |                   |      |   |      | Limits   |    |     |       |
| Acetophenone                              | 100            | 62.45          |                   | ug/L |   | 62   | 47 - 118 | 15 | 35  |       |
| Anthracene                                | 100            | 72.39          |                   | ug/L |   | 72   | 49 - 127 | 17 | 35  |       |
| Benzo(a)anthracene                        | 100            | 71.12          |                   | ug/L |   | 71   | 49 - 126 | 16 | 35  |       |
| Benzo(a)pyrene                            | 100            | 76.72          |                   | ug/L |   | 77   | 44 - 133 | 29 | 35  |       |
| Benzo(b)fluoranthene                      | 100            | 80.87          |                   | ug/L |   | 81   | 44 - 136 | 35 | 35  |       |
| Benzo(g,h,i)perylene                      | 100            | 71.34          |                   | ug/L |   | 71   | 42 - 135 | 30 | 35  |       |
| Benzo(k)fluoranthene                      | 100            | 74.00          |                   | ug/L |   | 74   | 49 - 134 | 31 | 35  |       |
| Benzyl alcohol                            | 100            | 62.64          |                   | ug/L |   | 63   | 46 - 123 | 18 | 35  |       |
| Bis(2-chloroethoxy)methane                | 100            | 62.34          |                   | ug/L |   | 62   | 44 - 126 | 18 | 35  |       |
| Bis(2-chloroethyl)ether                   | 100            | 56.54          |                   | ug/L |   | 57   | 41 - 116 | 17 | 35  |       |
| bis(2-chloroisopropyl) ether              | 100            | 50.85          |                   | ug/L |   | 51   | 36 - 115 | 15 | 35  |       |
| Bis(2-ethylhexyl) phthalate               | 100            | 79.30          |                   | ug/L |   | 79   | 46 - 138 | 16 | 35  |       |
| 4-Bromophenyl phenyl ether                | 100            | 72.15          |                   | ug/L |   | 72   | 41 - 131 | 17 | 35  |       |
| Butyl benzyl phthalate                    | 100            | 79.64          |                   | ug/L |   | 80   | 47 - 133 | 17 | 35  |       |
| 4-Chloroaniline                           | 100            | 62.45          |                   | ug/L |   | 62   | 13 - 143 | 17 | 35  |       |
| 4-Chloro-3-methylphenol                   | 100            | 63.82          |                   | ug/L |   | 64   | 51 - 132 | 13 | 35  |       |
| 2-Chloronaphthalene                       | 100            | 68.08          |                   | ug/L |   | 68   | 33 - 112 | 24 | 35  |       |
| 2-Chlorophenol                            | 100            | 59.79          |                   | ug/L |   | 60   | 43 - 119 | 17 | 35  |       |
| 4-Chlorophenyl phenyl ether               | 100            | 63.50          |                   | ug/L |   | 64   | 44 - 118 | 17 | 35  |       |
| Chrysene                                  | 100            | 72.13          |                   | ug/L |   | 72   | 50 - 128 | 21 | 35  |       |
| Dibenz(a,h)anthracene                     | 100            | 76.15          |                   | ug/L |   | 76   | 36 - 146 | 26 | 35  |       |
| Dibenzofuran                              | 100            | 62.86          |                   | ug/L |   | 63   | 44 - 114 | 16 | 35  |       |
| 2,4-Dichlorophenol                        | 100            | 68.86          |                   | ug/L |   | 69   | 44 - 131 | 14 | 35  |       |
| 2,6-Dichlorophenol                        | 100            | 67.19          |                   | ug/L |   | 67   | 41 - 131 | 17 | 35  |       |
| Diethyl phthalate                         | 100            | 63.20          |                   | ug/L |   | 63   | 43 - 135 | 11 | 35  |       |
| 2,4-Dimethylphenol                        | 100            | 67.10          |                   | ug/L |   | 67   | 30 - 128 | 15 | 35  |       |
| Dimethyl phthalate                        | 100            | 67.60          |                   | ug/L |   | 68   | 46 - 129 | 14 | 35  |       |
| Di-n-butyl phthalate                      | 100            | 74.11          |                   | ug/L |   | 74   | 49 - 138 | 19 | 35  |       |
| 1,3-Dinitrobenzene                        | 100            | 70.01          |                   | ug/L |   | 70   | 36 - 147 | 17 | 35  |       |
| 4,6-Dinitro-2-methylphenol                | 200            | 90.26          |                   | ug/L |   | 45   | 22 - 150 | 17 | 35  |       |
| 2,4-Dinitrophenol                         | 200            | 48.40          |                   | ug/L |   | 24   | 10 - 150 | 12 | 35  |       |
| 2,4-Dinitrotoluene                        | 100            | 62.43          |                   | ug/L |   | 62   | 48 - 136 | 13 | 35  |       |
| 2,6-Dinitrotoluene                        | 100            | 69.77          |                   | ug/L |   | 70   | 49 - 135 | 16 | 35  |       |
| Di-n-octyl phthalate                      | 100            | 81.21          |                   | ug/L |   | 81   | 33 - 148 | 26 | 35  |       |
| Diphenylamine                             | 85.0           | 67.47          |                   | ug/L |   | 79   | 43 - 132 | 19 | 35  |       |
| Fluoranthene                              | 100            | 64.95          |                   | ug/L |   | 65   | 49 - 132 | 14 | 35  |       |
| Fluorene                                  | 100            | 63.20          |                   | ug/L |   | 63   | 46 - 118 | 15 | 35  |       |
| Hexachlorobenzene                         | 100            | 71.85          |                   | ug/L |   | 72   | 42 - 134 | 16 | 35  |       |
| Hexachlorobutadiene                       | 100            | 55.06          |                   | ug/L |   | 55   | 29 - 110 | 26 | 35  |       |
| Hexachlorocyclopentadiene                 | 100            | 51.14          |                   | ug/L |   | 51   | 10 - 110 | 28 | 35  |       |
| Hexachloroethane                          | 100            | 45.25          |                   | ug/L |   | 45   | 25 - 110 | 22 | 35  |       |
| Indeno(1,2,3-cd)pyrene                    | 100            | 82.51          |                   | ug/L |   | 83   | 36 - 149 | 25 | 35  |       |
| Isophorone                                | 100            | 64.37          |                   | ug/L |   | 64   | 46 - 126 | 15 | 35  |       |
| 2-Methylnaphthalene                       | 100            | 57.73          |                   | ug/L |   | 58   | 35 - 110 | 19 | 35  |       |
| 2-Methylphenol                            | 100            | 57.54          |                   | ug/L |   | 58   | 47 - 114 | 17 | 35  |       |
| 4-Methylphenol (and/or<br>3-Methylphenol) | 100            | 60.38          |                   | ug/L |   | 60   | 45 - 114 | 21 | 35  |       |
| 2-Nitroaniline                            | 100            | 63.91          |                   | ug/L |   | 64   | 48 - 135 | 20 | 35  |       |
| 3-Nitroaniline                            | 100            | 64.24          |                   | ug/L |   | 64   | 38 - 142 | 13 | 35  |       |

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## QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

### Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-460340/3-A

Matrix: Water

Analysis Batch: 460629

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 460340

| Analyte                    | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit | D | %Rec | %Rec     |  | RPD | Limit |
|----------------------------|----------------|----------------|-------------------|------|---|------|----------|--|-----|-------|
|                            |                |                |                   |      |   |      | Limits   |  |     |       |
| 4-Nitroaniline             | 100            | 54.17          |                   | ug/L |   | 54   | 33 - 141 |  | 34  | 35    |
| Nitrobenzene               | 100            | 65.19          |                   | ug/L |   | 65   | 42 - 123 |  | 16  | 35    |
| 2-Nitrophenol              | 100            | 68.55          |                   | ug/L |   | 69   | 36 - 144 |  | 19  | 35    |
| 4-Nitrophenol              | 200            | 69.06          |                   | ug/L |   | 35   | 22 - 110 |  | 16  | 35    |
| N-Nitrosodimethylamine     | 100            | 46.74          |                   | ug/L |   | 47   | 37 - 110 |  | 15  | 35    |
| N-Nitrosodi-n-propylamine  | 100            | 60.46          |                   | ug/L |   | 60   | 44 - 124 |  | 15  | 35    |
| N-Nitrosodiphenylamine     | 100            | 79.22          |                   | ug/L |   | 79   | 43 - 132 |  | 19  | 35    |
| Pentachlorophenol          | 200            | 79.62          |                   | ug/L |   | 40   | 28 - 142 |  | 23  | 35    |
| Phenanthrene               | 100            | 70.10          |                   | ug/L |   | 70   | 48 - 126 |  | 15  | 35    |
| Phenol                     | 100            | 39.33          |                   | ug/L |   | 39   | 29 - 110 |  | 20  | 35    |
| Pyrene                     | 100            | 77.47          |                   | ug/L |   | 77   | 45 - 134 |  | 18  | 35    |
| 1,2,4,5-Tetrachlorobenzene | 100            | 54.12          |                   | ug/L |   | 54   | 35 - 110 |  | 19  | 35    |
| 2,3,4,6-Tetrachlorophenol  | 100            | 55.72          |                   | ug/L |   | 56   | 32 - 142 |  | 13  | 35    |
| 2,4,5-Trichlorophenol      | 100            | 64.28          |                   | ug/L |   | 64   | 39 - 136 |  | 12  | 35    |
| 2,4,6-Trichlorophenol      | 100            | 68.55          |                   | ug/L |   | 69   | 35 - 141 |  | 16  | 35    |

| Surrogate                   | LCSD      |           | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| 2-Fluorobiphenyl (Surr)     | 72        |           | 33 - 126 |
| 2-Fluorophenol (Surr)       | 58        |           | 21 - 110 |
| Nitrobenzene-d5 (Surr)      | 73        |           | 39 - 140 |
| Phenol-d5 (Surr)            | 44        |           | 21 - 110 |
| Terphenyl-d14 (Surr)        | 89        |           | 13 - 150 |
| 2,4,6-Tribromophenol (Surr) | 66        |           | 20 - 144 |

### Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 310-460647/12

Matrix: Water

Analysis Batch: 460647

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte      | MB     |           | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
|              | Result | Qualifier |      |     |      |   |          |                |         |
| Acetonitrile | <10.0  |           | 10.0 |     | mg/L |   |          | 07/16/25 13:22 | 1       |
| Isobutanol   | <10.0  |           | 10.0 |     | mg/L |   |          | 07/16/25 13:22 | 1       |

Lab Sample ID: LCS 310-460647/14

Matrix: Water

Analysis Batch: 460647

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte      | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec     |  |
|--------------|----------------|---------------|------------------|------|---|------|----------|--|
|              |                |               |                  |      |   |      | Limits   |  |
| Acetonitrile | 99.1           | 100.6         |                  | mg/L |   | 101  | 67 - 131 |  |
| Isobutanol   | 95.5           | 97.73         |                  | mg/L |   | 102  | 80 - 120 |  |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LB 310-460106/1-D

Matrix: Water

Analysis Batch: 460637

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 460407

| Analyte               | LB<br>Result | LB<br>Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|--------------|-----------------|--------|-----|------|---|----------------|----------------|---------|
| 4,4'-DDD              | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| 4,4'-DDE              | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| 4,4'-DDT              | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Aldrin                | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| alpha-BHC             | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| beta-BHC              | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Chlordane (technical) | <1.88        |                 | 1.88   |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| delta-BHC             | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Dieldrin              | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Endosulfan I          | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Endosulfan II         | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Endosulfan sulfate    | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Endrin                | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Endrin aldehyde       | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| gamma-BHC (Lindane)   | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Heptachlor            | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Heptachlor epoxide    | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Methoxychlor          | <0.0941      |                 | 0.0941 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Toxaphene             | <1.88        |                 | 1.88   |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:51 | 1       |

| Surrogate                     | LB<br>%Recovery | LB<br>Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------------|-----------------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 61              |                 | 10 - 150 | 07/14/25 13:42 | 07/16/25 17:51 | 1       |
| Tetrachloro-m-xylene (Surr)   | 58              |                 | 17 - 150 | 07/14/25 13:42 | 07/16/25 17:51 | 1       |

Lab Sample ID: MB 310-460407/1-A

Matrix: Water

Analysis Batch: 460637

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 460407

| Analyte               | MB<br>Result | MB<br>Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|--------------|-----------------|--------|-----|------|---|----------------|----------------|---------|
| 4,4'-DDD              | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| 4,4'-DDE              | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| 4,4'-DDT              | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Aldrin                | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| alpha-BHC             | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| beta-BHC              | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Chlordane (technical) | <1.95        |                 | 1.95   |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| delta-BHC             | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Dieldrin              | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Endosulfan I          | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Endosulfan II         | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Endosulfan sulfate    | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Endrin                | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Endrin aldehyde       | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| gamma-BHC (Lindane)   | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Heptachlor            | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Heptachlor epoxide    | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Methoxychlor          | <0.0975      |                 | 0.0975 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| Toxaphene             | <1.95        |                 | 1.95   |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 310-460407/1-A

Matrix: Water

Analysis Batch: 460637

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 460407

|                               | MB        | MB        |          |                |                |
|-------------------------------|-----------|-----------|----------|----------------|----------------|
| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       |
| DCB Decachlorobiphenyl (Surr) | 60        |           | 10 - 150 | 07/14/25 13:42 | 07/16/25 17:25 |
| Tetrachloro-m-xylene (Surr)   | 76        |           | 17 - 150 | 07/14/25 13:42 | 07/16/25 17:25 |

Lab Sample ID: LCS 310-460407/2-A

Matrix: Water

Analysis Batch: 460637

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 460407

| Analyte             | Spike | LCS    | LCS       |      |   |      |          | %Rec |  |
|---------------------|-------|--------|-----------|------|---|------|----------|------|--|
|                     | Added | Result | Qualifier | Unit | D | %Rec | Limits   |      |  |
| 4,4'-DDD            | 2.78  | 2.837  |           | ug/L |   | 102  | 28 - 150 |      |  |
| 4,4'-DDE            | 2.78  | 2.385  |           | ug/L |   | 86   | 10 - 150 |      |  |
| 4,4'-DDT            | 2.78  | 0.8475 |           | ug/L |   | 31   | 10 - 150 |      |  |
| Aldrin              | 2.78  | 1.855  |           | ug/L |   | 67   | 10 - 146 |      |  |
| alpha-BHC           | 2.78  | 2.538  |           | ug/L |   | 91   | 57 - 149 |      |  |
| beta-BHC            | 2.78  | 2.406  |           | ug/L |   | 87   | 53 - 145 |      |  |
| delta-BHC           | 2.78  | 2.387  |           | ug/L |   | 86   | 49 - 148 |      |  |
| Dieldrin            | 2.78  | 2.714  |           | ug/L |   | 98   | 43 - 150 |      |  |
| Endosulfan I        | 2.78  | 1.967  |           | ug/L |   | 71   | 26 - 133 |      |  |
| Endosulfan II       | 2.78  | 2.130  |           | ug/L |   | 77   | 38 - 139 |      |  |
| Endosulfan sulfate  | 2.78  | 2.677  |           | ug/L |   | 96   | 54 - 150 |      |  |
| Endrin              | 2.78  | 2.387  |           | ug/L |   | 86   | 41 - 150 |      |  |
| Endrin aldehyde     | 2.78  | 2.587  |           | ug/L |   | 93   | 42 - 147 |      |  |
| gamma-BHC (Lindane) | 2.78  | 2.422  |           | ug/L |   | 87   | 57 - 150 |      |  |
| Heptachlor          | 2.78  | 1.833  |           | ug/L |   | 66   | 16 - 135 |      |  |
| Heptachlor epoxide  | 2.78  | 2.657  |           | ug/L |   | 96   | 49 - 150 |      |  |
| Methoxychlor        | 2.78  | 1.102  |           | ug/L |   | 40   | 16 - 150 |      |  |

|                               | LCS       | LCS       |          |  |
|-------------------------------|-----------|-----------|----------|--|
| Surrogate                     | %Recovery | Qualifier | Limits   |  |
| DCB Decachlorobiphenyl (Surr) | 54        |           | 10 - 150 |  |
| Tetrachloro-m-xylene (Surr)   | 64        |           | 17 - 150 |  |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 310-460407/1-A

Matrix: Water

Analysis Batch: 460640

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 460407

|          | MB     | MB        |      |     |      |   |                |                |         |
|----------|--------|-----------|------|-----|------|---|----------------|----------------|---------|
| Analyte  | Result | Qualifier | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
| PCB-1016 | <1.95  |           | 1.95 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| PCB-1221 | <1.95  |           | 1.95 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| PCB-1232 | <1.95  |           | 1.95 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| PCB-1242 | <1.95  |           | 1.95 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| PCB-1248 | <1.95  |           | 1.95 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| PCB-1254 | <1.95  |           | 1.95 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| PCB-1260 | <1.95  |           | 1.95 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |
| PCB-1268 | <1.95  |           | 1.95 |     | ug/L |   | 07/14/25 13:42 | 07/16/25 17:25 | 1       |

|                               | MB        | MB        |          |                |                |         |  |  |  |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|--|--|--|
| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |  |  |  |
| DCB Decachlorobiphenyl (Surr) | 60        |           | 10 - 150 | 07/14/25 13:42 | 07/16/25 17:25 | 1       |  |  |  |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 310-460407/1-A

Matrix: Water

Analysis Batch: 460640

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 460407

|                             | MB        | MB        |          |                |                |     |     |  |  |  |
|-----------------------------|-----------|-----------|----------|----------------|----------------|-----|-----|--|--|--|
| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil | Fac |  |  |  |
| Tetrachloro-m-xylene (Surr) | 76        |           | 17 - 150 | 07/14/25 13:42 | 07/16/25 17:25 | 1   |     |  |  |  |

Lab Sample ID: LCS 310-460407/26-A

Matrix: Water

Analysis Batch: 460846

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 460407

|                               |           |           | Spike    | LCS    | LCS       |      |   |      | %Rec     |  |
|-------------------------------|-----------|-----------|----------|--------|-----------|------|---|------|----------|--|
| Analyte                       |           |           | Added    | Result | Qualifier | Unit | D | %Rec | Limits   |  |
| PCB-1016                      |           |           | 27.9     | 22.92  |           | ug/L |   | 82   | 25 - 150 |  |
| PCB-1260                      |           |           | 27.9     | 23.72  |           | ug/L |   | 85   | 14 - 150 |  |
| Surrogate                     | %Recovery | Qualifier | Limits   |        |           |      |   |      |          |  |
| DCB Decachlorobiphenyl (Surr) | 42        |           | 10 - 150 |        |           |      |   |      |          |  |
| Tetrachloro-m-xylene (Surr)   | 68        |           | 17 - 150 |        |           |      |   |      |          |  |

Lab Sample ID: 310-310779-1 MS

Matrix: Water

Analysis Batch: 460846

Client Sample ID: PZ-2B

Prep Type: Total/NA

Prep Batch: 460407

|                               | Sample    | Sample    | Spike    | MS     | MS        |      |   |      | %Rec     |  |
|-------------------------------|-----------|-----------|----------|--------|-----------|------|---|------|----------|--|
| Analyte                       | Result    | Qualifier | Added    | Result | Qualifier | Unit | D | %Rec | Limits   |  |
| PCB-1016                      | <1.80     |           | 25.8     | 24.95  |           | ug/L |   | 97   | 25 - 150 |  |
| PCB-1260                      | <1.80     |           | 25.8     | 25.58  |           | ug/L |   | 99   | 10 - 150 |  |
| Surrogate                     | %Recovery | Qualifier | Limits   |        |           |      |   |      |          |  |
| DCB Decachlorobiphenyl (Surr) | 75        |           | 10 - 150 |        |           |      |   |      |          |  |
| Tetrachloro-m-xylene (Surr)   | 86        |           | 17 - 150 |        |           |      |   |      |          |  |

Lab Sample ID: 310-310779-1 MSD

Matrix: Water

Analysis Batch: 460846

Client Sample ID: PZ-2B

Prep Type: Total/NA

Prep Batch: 460407

|                               | Sample    | Sample    | Spike    | MSD    | MSD       |      |   |      | %Rec     | RPD |       |
|-------------------------------|-----------|-----------|----------|--------|-----------|------|---|------|----------|-----|-------|
| Analyte                       | Result    | Qualifier | Added    | Result | Qualifier | Unit | D | %Rec | Limits   | RPD | Limit |
| PCB-1016                      | <1.80     |           | 25.8     | 25.86  |           | ug/L |   | 100  | 25 - 150 | 4   | 35    |
| PCB-1260                      | <1.80     |           | 25.8     | 25.76  |           | ug/L |   | 100  | 10 - 150 | 1   | 35    |
| Surrogate                     | %Recovery | Qualifier | Limits   |        |           |      |   |      |          |     |       |
| DCB Decachlorobiphenyl (Surr) | 78        |           | 10 - 150 |        |           |      |   |      |          |     |       |
| Tetrachloro-m-xylene (Surr)   | 85        |           | 17 - 150 |        |           |      |   |      |          |     |       |

## Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 410-672141/1-A

Matrix: Water

Analysis Batch: 672400

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 672141

|                   | MB      | MB        |        |     |      |   |                |                |     |     |
|-------------------|---------|-----------|--------|-----|------|---|----------------|----------------|-----|-----|
| Analyte           | Result  | Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil | Fac |
| 2,4-D             | <0.600  |           | 0.600  |     | ug/L |   | 07/16/25 14:52 | 07/17/25 06:27 | 1   |     |
| Silvex (2,4,5-TP) | <0.0500 |           | 0.0500 |     | ug/L |   | 07/16/25 14:52 | 07/17/25 06:27 | 1   |     |
| 2,4,5-T           | <0.150  |           | 0.150  |     | ug/L |   | 07/16/25 14:52 | 07/17/25 06:27 | 1   |     |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 8151A - Herbicides (GC) (Continued)

| Surrogate | MB MB     |           | Limits   |  |  | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|--|--|----------------|----------------|---------|
|           | %Recovery | Qualifier |          |  |  |                |                |         |
| DCAA      | 22        | S1-       | 34 - 142 |  |  | 07/16/25 14:52 | 07/17/25 06:27 | 1       |
| DCAA      | 19        | S1-       | 34 - 142 |  |  | 07/16/25 14:52 | 07/17/25 06:27 | 1       |

|                                   |  |  |  |                                      |  |  |  |
|-----------------------------------|--|--|--|--------------------------------------|--|--|--|
| Lab Sample ID: LCS 410-672141/2-A |  |  |  | Client Sample ID: Lab Control Sample |  |  |  |
| Matrix: Water                     |  |  |  | Prep Type: Total/NA                  |  |  |  |
| Analysis Batch: 672400            |  |  |  | Prep Batch: 672141                   |  |  |  |

| Analyte           | Spike Added | LCS LCS |           | Unit | D | %Rec | %Rec Limits |
|-------------------|-------------|---------|-----------|------|---|------|-------------|
|                   |             | Result  | Qualifier |      |   |      |             |
| 2,4-D             | 2.00        | 0.4524  | J *-      | ug/L |   | 23   | 53 - 159    |
| Silvex (2,4,5-TP) | 4.01        | 0.8171  | *-        | ug/L |   | 20   | 62 - 170    |
| 2,4,5-T           | 0.400       | 0.08804 | J *-      | ug/L |   | 22   | 57 - 171    |

| Surrogate | LCS LCS   |           | Limits   |
|-----------|-----------|-----------|----------|
|           | %Recovery | Qualifier |          |
| DCAA      | 25        | S1-       | 34 - 142 |
| DCAA      | 23        | S1-       | 34 - 142 |

## Method: 6020B - Metals (ICP/MS)

|                                  |  |  |  |                                |  |  |  |
|----------------------------------|--|--|--|--------------------------------|--|--|--|
| Lab Sample ID: MB 310-460582/1-A |  |  |  | Client Sample ID: Method Blank |  |  |  |
| Matrix: Water                    |  |  |  | Prep Type: Total/NA            |  |  |  |
| Analysis Batch: 460920           |  |  |  | Prep Batch: 460582             |  |  |  |

| Analyte   | MB MB     |           | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
|           | Result    | Qualifier |          |     |      |   |                |                |         |
| Antimony  | <0.00200  |           | 0.00200  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Arsenic   | <0.00200  |           | 0.00200  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Barium    | <0.00200  |           | 0.00200  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Beryllium | <0.00100  |           | 0.00100  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Cadmium   | <0.000200 |           | 0.000200 |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Chromium  | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Cobalt    | <0.000500 |           | 0.000500 |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Copper    | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Lead      | <0.000500 |           | 0.000500 |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Nickel    | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Selenium  | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Silver    | <0.00100  |           | 0.00100  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Thallium  | <0.00100  |           | 0.00100  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Tin       | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Vanadium  | <0.00500  |           | 0.00500  |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |
| Zinc      | <0.0200   |           | 0.0200   |     | mg/L |   | 07/16/25 07:40 | 07/17/25 20:21 | 1       |

|                                   |  |  |  |                                      |  |  |  |
|-----------------------------------|--|--|--|--------------------------------------|--|--|--|
| Lab Sample ID: LCS 310-460582/2-A |  |  |  | Client Sample ID: Lab Control Sample |  |  |  |
| Matrix: Water                     |  |  |  | Prep Type: Total/NA                  |  |  |  |
| Analysis Batch: 460920            |  |  |  | Prep Batch: 460582                   |  |  |  |

| Analyte   | Spike Added | LCS LCS |           | Unit | D | %Rec | %Rec Limits |
|-----------|-------------|---------|-----------|------|---|------|-------------|
|           |             | Result  | Qualifier |      |   |      |             |
| Antimony  | 0.200       | 0.2032  |           | mg/L |   | 102  | 80 - 120    |
| Arsenic   | 0.200       | 0.1897  |           | mg/L |   | 95   | 80 - 120    |
| Barium    | 0.100       | 0.09808 |           | mg/L |   | 98   | 80 - 120    |
| Beryllium | 0.100       | 0.08890 |           | mg/L |   | 89   | 80 - 120    |
| Cadmium   | 0.100       | 0.09537 |           | mg/L |   | 95   | 80 - 120    |
| Chromium  | 0.100       | 0.09507 |           | mg/L |   | 95   | 80 - 120    |
| Cobalt    | 0.100       | 0.09475 |           | mg/L |   | 95   | 80 - 120    |

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## QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

### Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-460582/2-A

Matrix: Water

Analysis Batch: 460920

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 460582

| Analyte  | Spike |         | LCS       |  | Unit | D | %Rec | %Rec     |  |
|----------|-------|---------|-----------|--|------|---|------|----------|--|
|          | Added | Result  | Qualifier |  |      |   |      | Limits   |  |
| Copper   | 0.200 | 0.1991  |           |  | mg/L |   | 100  | 80 - 120 |  |
| Lead     | 0.200 | 0.1925  |           |  | mg/L |   | 96   | 80 - 120 |  |
| Nickel   | 0.200 | 0.1954  |           |  | mg/L |   | 98   | 80 - 120 |  |
| Selenium | 0.400 | 0.3462  |           |  | mg/L |   | 87   | 80 - 120 |  |
| Silver   | 0.100 | 0.1071  |           |  | mg/L |   | 107  | 80 - 120 |  |
| Thallium | 0.100 | 0.08781 |           |  | mg/L |   | 88   | 80 - 120 |  |
| Tin      | 0.200 | 0.1916  |           |  | mg/L |   | 96   | 80 - 120 |  |
| Vanadium | 0.100 | 0.09445 |           |  | mg/L |   | 94   | 80 - 120 |  |
| Zinc     | 0.200 | 0.1937  |           |  | mg/L |   | 97   | 80 - 120 |  |

### Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-460697/1-A

Matrix: Water

Analysis Batch: 460969

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 460697

| Analyte | MB        |           | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
|         | Result    | Qualifier |          |     |      |   |                |                |         |
| Mercury | <0.000200 |           | 0.000200 |     | mg/L |   | 07/17/25 11:02 | 07/18/25 10:22 | 1       |

Lab Sample ID: LCS 310-460697/2-A

Matrix: Water

Analysis Batch: 460969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 460697

| Analyte | Spike   |          | LCS       |  | Unit | D | %Rec | %Rec     |  |
|---------|---------|----------|-----------|--|------|---|------|----------|--|
|         | Added   | Result   | Qualifier |  |      |   |      | Limits   |  |
| Mercury | 0.00167 | 0.001624 |           |  | mg/L |   | 97   | 80 - 120 |  |

Lab Sample ID: 310-310779-1 MS

Matrix: Water

Analysis Batch: 460969

Client Sample ID: PZ-2B

Prep Type: Total/NA

Prep Batch: 460697

| Analyte | Sample    |           | Spike   | MS       |           | Unit | D | %Rec | %Rec     |  |
|---------|-----------|-----------|---------|----------|-----------|------|---|------|----------|--|
|         | Result    | Qualifier |         | Result   | Qualifier |      |   |      | Limits   |  |
| Mercury | <0.000200 |           | 0.00167 | 0.001625 |           | mg/L |   | 98   | 80 - 120 |  |

Lab Sample ID: 310-310779-1 MSD

Matrix: Water

Analysis Batch: 460969

Client Sample ID: PZ-2B

Prep Type: Total/NA

Prep Batch: 460697

| Analyte | Sample    |           | Spike   | MSD      |           | Unit | D | %Rec | %Rec     |  | RPD | Limit |
|---------|-----------|-----------|---------|----------|-----------|------|---|------|----------|--|-----|-------|
|         | Result    | Qualifier |         | Result   | Qualifier |      |   |      | Limits   |  |     |       |
| Mercury | <0.000200 |           | 0.00167 | 0.001634 |           | mg/L |   | 98   | 80 - 120 |  | 1   | 20    |

### Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 310-460379/1-A

Matrix: Water

Analysis Batch: 460719

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 460379

| Analyte        | MB      |           | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------|---------|-----------|--------|-----|------|---|----------------|----------------|---------|
|                | Result  | Qualifier |        |     |      |   |                |                |         |
| Cyanide, Total | <0.0100 |           | 0.0100 |     | mg/L |   | 07/14/25 11:10 | 07/16/25 13:07 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

## Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: LCS 310-460379/2-A  
Matrix: Water  
Analysis Batch: 460719

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 460379

| Analyte        | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------|-------------|------------|---------------|------|---|------|-------------|
| Cyanide, Total | 0.200       | 0.1980     |               | mg/L |   | 99   | 90 - 110    |

## Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 410-671940/1  
Matrix: Water  
Analysis Batch: 671940

Client Sample ID: Method Blank  
Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|------|-----|------|---|----------|----------------|---------|
| Sulfide | <2.00     |              | 2.00 |     | mg/L |   |          | 07/16/25 09:09 | 1       |

Lab Sample ID: LCS 410-671940/2  
Matrix: Water  
Analysis Batch: 671940

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Sulfide | 20.1        | 18.21      |               | mg/L |   | 91   | 77 - 110    |

Lab Sample ID: LCSD 410-671940/3  
Matrix: Water  
Analysis Batch: 671940

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

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| Sulfide | 20.1        | 17.43       |                | mg/L |   | 87   | 77 - 110    | 4   | 10        |

Lab Sample ID: MRL 410-671940/4  
Matrix: Water  
Analysis Batch: 671940

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

| Analyte | Spike Added | MRL Result | MRL Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Sulfide | 2.01        | 1.882      | J             | mg/L |   | 94   |             |

Lab Sample ID: 310-310779-1 DU  
Matrix: Water  
Analysis Batch: 671940

Client Sample ID: PZ-2B  
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| Sulfide | <2.00         |                  | <2.00     |              | mg/L |   | NC  | 10        |

## Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-460711/1  
Matrix: Water  
Analysis Batch: 460711

Client Sample ID: Method Blank  
Prep Type: Total/NA

| Analyte                | MB Result | MB Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|-----------|--------------|-----|-----|------|---|----------|----------------|---------|
| Total Suspended Solids | <5.0      |              | 5.0 |     | mg/L |   |          | 07/16/25 14:55 | 1       |

QC Sample Results

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

|                                 |             |            |               |                                      |   |      |             |
|---------------------------------|-------------|------------|---------------|--------------------------------------|---|------|-------------|
| Lab Sample ID: LCS 310-460711/2 |             |            |               | Client Sample ID: Lab Control Sample |   |      |             |
| Matrix: Water                   |             |            |               | Prep Type: Total/NA                  |   |      |             |
| Analysis Batch: 460711          |             |            |               |                                      |   |      |             |
| Analyte                         | Spike Added | LCS Result | LCS Qualifier | Unit                                 | D | %Rec | %Rec Limits |
| Total Suspended Solids          | 100         | 103.0      |               | mg/L                                 |   | 103  | 82 - 117    |

## QC Association Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

### GC/MS VOA

#### Analysis Batch: 460395

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1     | PZ-2B              | Total/NA  | Water  | 8260D  |            |
| MB 310-460395/6  | Method Blank       | Total/NA  | Water  | 8260D  |            |
| LCS 310-460395/7 | Lab Control Sample | Total/NA  | Water  | 8260D  |            |
| LCS 310-460395/8 | Lab Control Sample | Total/NA  | Water  | 8260D  |            |

### GC/MS Semi VOA

#### Prep Batch: 460340

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 310-310779-1        | PZ-2B                  | Total/NA  | Water  | 3510C  |            |
| MB 310-460340/1-A   | Method Blank           | Total/NA  | Water  | 3510C  |            |
| LCS 310-460340/2-A  | Lab Control Sample     | Total/NA  | Water  | 3510C  |            |
| LCSD 310-460340/3-A | Lab Control Sample Dup | Total/NA  | Water  | 3510C  |            |

#### Analysis Batch: 460629

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 310-310779-1        | PZ-2B                  | Total/NA  | Water  | 8270E  | 460340     |
| MB 310-460340/1-A   | Method Blank           | Total/NA  | Water  | 8270E  | 460340     |
| LCS 310-460340/2-A  | Lab Control Sample     | Total/NA  | Water  | 8270E  | 460340     |
| LCSD 310-460340/3-A | Lab Control Sample Dup | Total/NA  | Water  | 8270E  | 460340     |

#### Analysis Batch: 461510

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| 310-310779-1      | PZ-2B            | Total/NA  | Water  | 8270E  | 460340     |
| MB 310-460340/1-A | Method Blank     | Total/NA  | Water  | 8270E  | 460340     |

#### Analysis Batch: 462357

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| 310-310779-1      | PZ-2B            | Total/NA  | Water  | 8270E  | 460340     |
| MB 310-460340/1-A | Method Blank     | Total/NA  | Water  | 8270E  | 460340     |

### GC Semi VOA

#### Leach Batch: 460106

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| LB 310-460106/1-D | Method Blank     | Total/NA  | Water  | 1311   |            |

#### Prep Batch: 460407

| Lab Sample ID       | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1        | PZ-2B              | Total/NA  | Water  | 3511   |            |
| LB 310-460106/1-D   | Method Blank       | Total/NA  | Water  | 3511   | 460106     |
| MB 310-460407/1-A   | Method Blank       | Total/NA  | Water  | 3511   |            |
| LCS 310-460407/26-A | Lab Control Sample | Total/NA  | Water  | 3511   |            |
| LCS 310-460407/2-A  | Lab Control Sample | Total/NA  | Water  | 3511   |            |
| 310-310779-1 MS     | PZ-2B              | Total/NA  | Water  | 3511   |            |
| 310-310779-1 MSD    | PZ-2B              | Total/NA  | Water  | 3511   |            |

#### Analysis Batch: 460637

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| LB 310-460106/1-D  | Method Blank       | Total/NA  | Water  | 8081B  | 460407     |
| MB 310-460407/1-A  | Method Blank       | Total/NA  | Water  | 8081B  | 460407     |
| LCS 310-460407/2-A | Lab Control Sample | Total/NA  | Water  | 8081B  | 460407     |

Eurofins Cedar Falls

## QC Association Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

### GC Semi VOA

#### Analysis Batch: 460640

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| MB 310-460407/1-A | Method Blank     | Total/NA  | Water  | 8082A  | 460407     |

#### Analysis Batch: 460647

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1      | PZ-2B              | Total/NA  | Water  | 8015C  |            |
| MB 310-460647/12  | Method Blank       | Total/NA  | Water  | 8015C  |            |
| LCS 310-460647/14 | Lab Control Sample | Total/NA  | Water  | 8015C  |            |

#### Analysis Batch: 460845

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 310-310779-1  | PZ-2B            | Total/NA  | Water  | 8081B  | 460407     |

#### Analysis Batch: 460846

| Lab Sample ID       | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1        | PZ-2B              | Total/NA  | Water  | 8082A  | 460407     |
| LCS 310-460407/26-A | Lab Control Sample | Total/NA  | Water  | 8082A  | 460407     |
| 310-310779-1 MS     | PZ-2B              | Total/NA  | Water  | 8082A  | 460407     |
| 310-310779-1 MSD    | PZ-2B              | Total/NA  | Water  | 8082A  | 460407     |

#### Prep Batch: 672141

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1       | PZ-2B              | Total/NA  | Water  | 8151A  |            |
| MB 410-672141/1-A  | Method Blank       | Total/NA  | Water  | 8151A  |            |
| LCS 410-672141/2-A | Lab Control Sample | Total/NA  | Water  | 8151A  |            |

#### Analysis Batch: 672400

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1       | PZ-2B              | Total/NA  | Water  | 8151A  | 672141     |
| MB 410-672141/1-A  | Method Blank       | Total/NA  | Water  | 8151A  | 672141     |
| LCS 410-672141/2-A | Lab Control Sample | Total/NA  | Water  | 8151A  | 672141     |

### Metals

#### Prep Batch: 460582

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1       | PZ-2B              | Total/NA  | Water  | 3005A  |            |
| MB 310-460582/1-A  | Method Blank       | Total/NA  | Water  | 3005A  |            |
| LCS 310-460582/2-A | Lab Control Sample | Total/NA  | Water  | 3005A  |            |

#### Prep Batch: 460697

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1       | PZ-2B              | Total/NA  | Water  | 7470A  |            |
| MB 310-460697/1-A  | Method Blank       | Total/NA  | Water  | 7470A  |            |
| LCS 310-460697/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  |            |
| 310-310779-1 MS    | PZ-2B              | Total/NA  | Water  | 7470A  |            |
| 310-310779-1 MSD   | PZ-2B              | Total/NA  | Water  | 7470A  |            |

#### Analysis Batch: 460920

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| 310-310779-1      | PZ-2B            | Total/NA  | Water  | 6020B  | 460582     |
| MB 310-460582/1-A | Method Blank     | Total/NA  | Water  | 6020B  | 460582     |

Eurofins Cedar Falls



## QC Association Summary

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

### Metals (Continued)

#### Analysis Batch: 460920 (Continued)

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| LCS 310-460582/2-A | Lab Control Sample | Total/NA  | Water  | 6020B  | 460582     |

#### Analysis Batch: 460969

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1       | PZ-2B              | Total/NA  | Water  | 7470A  | 460697     |
| MB 310-460697/1-A  | Method Blank       | Total/NA  | Water  | 7470A  | 460697     |
| LCS 310-460697/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  | 460697     |
| 310-310779-1 MS    | PZ-2B              | Total/NA  | Water  | 7470A  | 460697     |
| 310-310779-1 MSD   | PZ-2B              | Total/NA  | Water  | 7470A  | 460697     |

### General Chemistry

#### Prep Batch: 460379

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1       | PZ-2B              | Total/NA  | Water  | 9012B  |            |
| MB 310-460379/1-A  | Method Blank       | Total/NA  | Water  | 9012B  |            |
| LCS 310-460379/2-A | Lab Control Sample | Total/NA  | Water  | 9012B  |            |

#### Analysis Batch: 460711

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method    | Prep Batch |
|------------------|--------------------|-----------|--------|-----------|------------|
| 310-310779-1     | PZ-2B              | Total/NA  | Water  | I-3765-85 |            |
| MB 310-460711/1  | Method Blank       | Total/NA  | Water  | I-3765-85 |            |
| LCS 310-460711/2 | Lab Control Sample | Total/NA  | Water  | I-3765-85 |            |

#### Analysis Batch: 460719

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 310-310779-1       | PZ-2B              | Total/NA  | Water  | 9012B  | 460379     |
| MB 310-460379/1-A  | Method Blank       | Total/NA  | Water  | 9012B  | 460379     |
| LCS 310-460379/2-A | Lab Control Sample | Total/NA  | Water  | 9012B  | 460379     |

#### Analysis Batch: 671940

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 310-310779-1      | PZ-2B                  | Total/NA  | Water  | 9034   |            |
| MB 410-671940/1   | Method Blank           | Total/NA  | Water  | 9034   |            |
| LCS 410-671940/2  | Lab Control Sample     | Total/NA  | Water  | 9034   |            |
| LCSD 410-671940/3 | Lab Control Sample Dup | Total/NA  | Water  | 9034   |            |
| MRL 410-671940/4  | Lab Control Sample     | Total/NA  | Water  | 9034   |            |
| 310-310779-1 DU   | PZ-2B                  | Total/NA  | Water  | 9034   |            |

# Lab Chronicle

Client: SCS Engineers  
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-310779-1  
SDG: Woodbury County Sanitary Landfill (HMSP)

**Client Sample ID: PZ-2B**

**Lab Sample ID: 310-310779-1**

**Date Collected: 07/09/25 13:02**

**Matrix: Water**

**Date Received: 07/10/25 16:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 460395       | WSE8    | EET CF | 07/15/25 01:34       |
| Total/NA  | Prep       | 3510C        |     |                 | 460340       | J5BR    | EET CF | 07/14/25 08:07       |
| Total/NA  | Analysis   | 8270E        |     | 1               | 461510       | V7YZ    | EET CF | 07/24/25 12:19       |
| Total/NA  | Prep       | 3510C        |     |                 | 460340       | J5BR    | EET CF | 07/14/25 08:07       |
| Total/NA  | Analysis   | 8270E        |     | 1               | 462357       | V7YZ    | EET CF | 08/01/25 16:37       |
| Total/NA  | Prep       | 3510C        |     |                 | 460340       | J5BR    | EET CF | 07/14/25 08:07       |
| Total/NA  | Analysis   | 8270E        |     | 1               | 460629       | V7YZ    | EET CF | 07/16/25 19:27       |
| Total/NA  | Analysis   | 8015C        |     | 1               | 460647       | BW2O    | EET CF | 07/16/25 17:05       |
| Total/NA  | Prep       | 3511         |     |                 | 460407       | BW2O    | EET CF | 07/14/25 13:48       |
| Total/NA  | Analysis   | 8081B        |     | 1               | 460845       | BW2O    | EET CF | 07/17/25 20:13       |
| Total/NA  | Prep       | 3511         |     |                 | 460407       | BW2O    | EET CF | 07/14/25 13:48       |
| Total/NA  | Analysis   | 8082A        |     | 1               | 460846       | BW2O    | EET CF | 07/17/25 20:13       |
| Total/NA  | Prep       | 8151A        |     |                 | 672141       | QJZ6    | ELLE   | 07/16/25 14:52       |
| Total/NA  | Analysis   | 8151A        |     | 1               | 672400       | UAMZ    | ELLE   | 07/17/25 08:49       |
| Total/NA  | Prep       | 3005A        |     |                 | 460582       | QTZ5    | EET CF | 07/16/25 07:40       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 460920       | NFT2    | EET CF | 07/17/25 21:33       |
| Total/NA  | Prep       | 7470A        |     |                 | 460697       | F5MW    | EET CF | 07/17/25 11:02       |
| Total/NA  | Analysis   | 7470A        |     | 1               | 460969       | F5MW    | EET CF | 07/18/25 10:26       |
| Total/NA  | Prep       | 9012B        |     |                 | 460379       | ENB7    | EET CF | 07/14/25 11:10       |
| Total/NA  | Analysis   | 9012B        |     | 1               | 460719       | WZC8    | EET CF | 07/16/25 13:16       |
| Total/NA  | Analysis   | 9034         |     | 1               | 671940       | USE1    | ELLE   | 07/16/25 09:09       |
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 460711       | E6KR    | EET CF | 07/16/25 14:55       |

## Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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

## Accreditation/Certification Summary

Client: SCS Engineers

Job ID: 310-310779-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

### Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Iowa      | State   | 007                   | 12-01-25        |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte                |
|-----------------|-------------|--------|------------------------|
| 8082A           | 3511        | Water  | PCB-1268               |
| 8260D           |             | Water  | 1,2,4-Trichlorobenzene |
| 8260D           |             | Water  | Allyl chloride         |
| 8260D           |             | Water  | Ethyl methacrylate     |

### Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Iowa      | State   | 361                   | 03-01-26        |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|---------|
| 9034            |             | Water  | Sulfide |

## Method Summary

Client: SCS Engineers

Job ID: 310-310779-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Woodbury County Sanitary Landfill (HMSP)

| Method    | Method Description                                             | Protocol | Laboratory |
|-----------|----------------------------------------------------------------|----------|------------|
| 8260D     | Volatile Organic Compounds by GC/MS                            | SW846    | EET CF     |
| 8270E     | Semivolatile Organic Compounds (GC/MS)                         | SW846    | EET CF     |
| 8015C     | Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) | SW846    | EET CF     |
| 8081B     | Organochlorine Pesticides (GC)                                 | SW846    | EET CF     |
| 8082A     | Polychlorinated Biphenyls (PCBs) by Gas Chromatography         | SW846    | EET CF     |
| 8151A     | Herbicides (GC)                                                | SW846    | ELLE       |
| 6020B     | Metals (ICP/MS)                                                | SW846    | EET CF     |
| 7470A     | Mercury (CVAA)                                                 | SW846    | EET CF     |
| 9012B     | Cyanide, Total and/or Amenable                                 | SW846    | EET CF     |
| 9034      | Sulfide, Acid Soluble and Insoluble (Titrimetric)              | SW846    | ELLE       |
| I-3765-85 | Residue, Non-filterable (TSS)                                  | USGS     | EET CF     |
| 3005A     | Preparation, Total Metals                                      | SW846    | EET CF     |
| 3510C     | Liquid-Liquid Extraction (Separatory Funnel)                   | SW846    | EET CF     |
| 3511      | Microextraction of Organic Compounds                           | SW846    | EET CF     |
| 5030B     | Purge and Trap                                                 | SW846    | EET CF     |
| 7470A     | Preparation, Mercury                                           | SW846    | EET CF     |
| 8151A     | Extraction (Herbicides)                                        | SW846    | ELLE       |
| 9012B     | Cyanide, Total and/or Amenable, Distillation                   | SW846    | EET CF     |

### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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

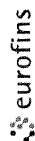


### Cooler/Sample Receipt and Temperature Log Form

|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                                                     |                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Client Information</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                                                     |                                                                                               |
| Client: <u>SCS</u>                                                                                                                                                                                                                                                                                                                                                |                           |                                                                     |                                                                                               |
| City/State                                                                                                                                                                                                                                                                                                                                                        | CITY <u>W. Des Moines</u> | STATE <u>IA</u>                                                     | Project                                                                                       |
| <b>Receipt Information</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                                                     |                                                                                               |
| Date/Time Received.                                                                                                                                                                                                                                                                                                                                               | DATE <u>7-10-25</u>       | TIME <u>1615</u>                                                    | Received By: <u>PH</u>                                                                        |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ |                           |                                                                     |                                                                                               |
| <b>Condition of Cooler/Containers</b>                                                                                                                                                                                                                                                                                                                             |                           |                                                                     |                                                                                               |
| Sample(s) received in Cooler?                                                                                                                                                                                                                                                                                                                                     |                           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID.                                                                            |
| Multiple Coolers?                                                                                                                                                                                                                                                                                                                                                 |                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Cooler # _____ of _____                                                               |
| Cooler Custody Seals Present?                                                                                                                                                                                                                                                                                                                                     |                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Sample Custody Seals Present?                                                                                                                                                                                                                                                                                                                                     |                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trip Blank Present?                                                                                                                                                                                                                                                                                                                                               |                           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓                                                    |
| <u>All</u>                                                                                                                                                                                                                                                                                                                                                        |                           |                                                                     |                                                                                               |
| <b>Temperature Record</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                                                     |                                                                                               |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other _____ <input type="checkbox"/> NONE                                                                                                                                                                        |                           |                                                                     |                                                                                               |
| Thermometer ID: <u>AH</u>                                                                                                                                                                                                                                                                                                                                         |                           | Correction Factor (°C): <u>a</u>                                    |                                                                                               |
| • <b>Temp Blank Temperature</b> – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                             |                           |                                                                     |                                                                                               |
| Uncorrected Temp (°C): <u>1.3</u>                                                                                                                                                                                                                                                                                                                                 |                           | Corrected Temp (°C): <u>1.3</u>                                     |                                                                                               |
| • <b>Sample Container Temperature</b>                                                                                                                                                                                                                                                                                                                             |                           |                                                                     |                                                                                               |
| Container(s) used:                                                                                                                                                                                                                                                                                                                                                | CONTAINER 1               |                                                                     | CONTAINER 2                                                                                   |
| Uncorrected Temp (°C):                                                                                                                                                                                                                                                                                                                                            |                           |                                                                     |                                                                                               |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                              |                           |                                                                     |                                                                                               |
| <b>Exceptions Noted</b>                                                                                                                                                                                                                                                                                                                                           |                           |                                                                     |                                                                                               |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                               |                           |                                                                     |                                                                                               |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                  |                           |                                                                     |                                                                                               |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login                                                                                                                                                                                                                                                                                             |                           |                                                                     |                                                                                               |
| <b>Additional Comments</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                                                     |                                                                                               |
| <u>Samples Received Don't match COC.</u><br><u>Please get correct COC</u><br><u>Received MW-28/MW-16</u>                                                                                                                                                                                                                                                          |                           |                                                                     |                                                                                               |

|                                                                                                                                                                                                                                                                                                                                                                                        |                 |                                                                                                                                                                                                                                                                |                                    |                                            |             |                                                                                                  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------|-------------|--------------------------------------------------------------------------------------------------|--|
| Client Contact                                                                                                                                                                                                                                                                                                                                                                         |                 | Project Manager: Ben Madison<br>Email: bmadson@sscengineers.com<br>Cell: 515-776-9255                                                                                                                                                                          |                                    | Site Contact: Ben Madison<br>Date Carrier: |             | COC No<br>1 of 2 COCs                                                                            |  |
| SCS Engineers                                                                                                                                                                                                                                                                                                                                                                          |                 | Analysis Turnaround Time<br><input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS<br>Other:<br><input type="checkbox"/> 2 weeks<br><input type="checkbox"/> 1 week<br><input type="checkbox"/> 2 days<br><input type="checkbox"/> 1 day |                                    |                                            |             | Sampler<br>For Lab Use Only<br>Walk-in Client:<br>Lab Sampling                                   |  |
| 1690 All-State Court, Suite 100<br>West Des Moines, IA 50265<br>515-631-6160                                                                                                                                                                                                                                                                                                           |                 |                                                                                                                                                                                                                                                                |                                    |                                            |             | Job / SDG No.                                                                                    |  |
| Project Name 1st 2025 Semi-Annual Groundwater Sampling<br>Site: Woodbury County Sanitary Landfill (HMSP)<br>P O # 27223172 25                                                                                                                                                                                                                                                          |                 |                                                                                                                                                                                                                                                                |                                    |                                            |             |                                                                                                  |  |
| Sample Identification                                                                                                                                                                                                                                                                                                                                                                  |                 | Sample Date                                                                                                                                                                                                                                                    | Sample Type<br>(C=Comp,<br>G=Grab) | Matrix                                     | # of Cont.  | Sample Specific Notes.                                                                           |  |
| <del>MWW-2</del>                                                                                                                                                                                                                                                                                                                                                                       |                 | <del></del>                                                                                                                                                                                                                                                    | <del>G</del>                       | <del>GW</del>                              | <del></del> | <del>Natural Attenuation Parameters Dissolved Methane Iron, Nitrate Manganese, And Sulfate</del> |  |
| <del>MWW-3</del>                                                                                                                                                                                                                                                                                                                                                                       |                 | <del></del>                                                                                                                                                                                                                                                    | <del>G</del>                       | <del>GW</del>                              | <del></del> |                                                                                                  |  |
| <del>MWW-4</del>                                                                                                                                                                                                                                                                                                                                                                       |                 | <del></del>                                                                                                                                                                                                                                                    | <del>G</del>                       | <del>GW</del>                              | <del></del> |                                                                                                  |  |
| <del>MWW-5</del>                                                                                                                                                                                                                                                                                                                                                                       |                 | <del></del>                                                                                                                                                                                                                                                    | <del>G</del>                       | <del>GW</del>                              | <del></del> |                                                                                                  |  |
| <del>PZ-2B</del>                                                                                                                                                                                                                                                                                                                                                                       |                 | <del></del>                                                                                                                                                                                                                                                    | <del>G</del>                       | <del>GW</del>                              | <del></del> |                                                                                                  |  |
| <del>MWW-6</del>                                                                                                                                                                                                                                                                                                                                                                       |                 | <del></del>                                                                                                                                                                                                                                                    | <del>G</del>                       | <del>GW</del>                              | <del></del> |                                                                                                  |  |
| Trip Blank                                                                                                                                                                                                                                                                                                                                                                             |                 |                                                                                                                                                                                                                                                                |                                    |                                            |             | Include trip blanks in every cooler containing VOC sample containers.                            |  |
| Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other                                                                                                                                                                                                                                                                                                                  |                 | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)                                                                                                                                                                           |                                    |                                            |             |                                                                                                  |  |
| Possible Hazard Identification<br>Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample<br><input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown |                 |                                                                                                                                                                                                                                                                |                                    |                                            |             |                                                                                                  |  |
| Special Instructions/QC Requirements & Comments Natural Attenuation Paramaters Dissolved Methane Iron Nitrate, Manganese And Sulfate                                                                                                                                                                                                                                                   |                 |                                                                                                                                                                                                                                                                |                                    |                                            |             |                                                                                                  |  |
| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                         | Custody Seal No |                                                                                                                                                                                                                                                                |                                    |                                            |             |                                                                                                  |  |
| Relinquished by <del>SJS</del> Garrett Harris                                                                                                                                                                                                                                                                                                                                          | Company SCS     | Date/Time 7-18-25                                                                                                                                                                                                                                              | Received by                        | Company                                    | Date/Time   |                                                                                                  |  |
| Relinquished by                                                                                                                                                                                                                                                                                                                                                                        | Company         | Date/Time                                                                                                                                                                                                                                                      | Received by                        | Company                                    | Date/Time   |                                                                                                  |  |
| Relinquished by                                                                                                                                                                                                                                                                                                                                                                        | Company         | Date/Time                                                                                                                                                                                                                                                      | Received in Laboratory by          | Company                                    | Date/Time   |                                                                                                  |  |

## Chain of Custody Record



TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

| Regulatory Program:<br><input type="checkbox"/> DW <input type="checkbox"/> NPDES <input type="checkbox"/> RCRA <input type="checkbox"/> Other                                                      |                                  |                                                        |            |                   |                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------|------------|-------------------|-----------------------------------------------------------------------|
| Project Manager: Ben Madson<br>Email: bmadson@scsengineers.com<br>Cell 515-776-9255                                                                                                                 |                                  |                                                        |            |                   |                                                                       |
| Client Contact                                                                                                                                                                                      |                                  | Site Contact: Ben Madson<br>Lab Contact: Samuel Miller |            | Date.             | COC No                                                                |
| SCS Engineers<br>1690 All-State Court Suite 100<br>West Des Moines, IA 50265<br>515-631-6160                                                                                                        |                                  |                                                        |            | Carrier:          | 2 of 2 COCs                                                           |
| Analysis Turnaround Time                                                                                                                                                                            |                                  | Sampler                                                |            |                   |                                                                       |
| <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS                                                                                                                        |                                  | For Lab Use Only                                       |            |                   |                                                                       |
| Other: <input type="checkbox"/> 2 weeks<br><input type="checkbox"/> 1 week<br><input type="checkbox"/> 2 days<br><input type="checkbox"/> 1 day                                                     |                                  | Walk-in Client:<br>Lab Sampling                        |            |                   |                                                                       |
| Job / SDG No                                                                                                                                                                                        |                                  |                                                        |            |                   |                                                                       |
| Sample Identification                                                                                                                                                                               |                                  | Sample Specific Notes.                                 |            |                   |                                                                       |
| Sample Date                                                                                                                                                                                         | Sample Type<br>(C=Comp., G=Grab) | Matrix                                                 | # of Cont. | Trip Blank        |                                                                       |
| MW-9                                                                                                                                                                                                | G                                | GW                                                     |            |                   | No Sample                                                             |
| MW-11                                                                                                                                                                                               | G                                | GW                                                     |            |                   | No Sample                                                             |
| MW-12                                                                                                                                                                                               | G                                | GW                                                     |            |                   | No Sample                                                             |
| MW-14                                                                                                                                                                                               | G                                | GW                                                     |            |                   | No Sample                                                             |
| PZ-2A                                                                                                                                                                                               | G                                | GW                                                     |            |                   | No Sample                                                             |
|                                                                                                                                                                                                     |                                  |                                                        |            | X                 | Include trip blanks in every cooler containing VOC sample containers. |
| Preservation Used: 1= Ice, 2= HCl; 3= H <sub>2</sub> SO <sub>4</sub> ; 4=HNO <sub>3</sub> ; 5=NaOH; 6= Other                                                                                        |                                  |                                                        |            |                   |                                                                       |
| Possible Hazard Identification<br>Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. |                                  |                                                        |            |                   |                                                                       |
| Special Instructions/QC Requirements & Comments                                                                                                                                                     |                                  |                                                        |            |                   |                                                                       |
| Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                       |                                  | Cooler Temp (°C) Obs'd _____                           |            | Therm ID No _____ |                                                                       |
| Relinquished by _____                                                                                                                                                                               |                                  | Received by _____ Company _____                        |            | Date/Time _____   |                                                                       |
| Relinquished by _____                                                                                                                                                                               |                                  | Received by _____ Company _____                        |            | Date/Time _____   |                                                                       |
| Relinquished by _____                                                                                                                                                                               |                                  | Received in Laboratory by _____ Company _____          |            | Date/Time _____   |                                                                       |



## Eurofins Cedar Falls

3019 Venture Way  
Cedar Falls, IA 50613  
Phone: 319-277-2401 Fax: 319-277-2425

## Chain of Custody Record



eurofins

Environment Testing

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      |                                                                                                                                      |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------|--|-------------------------------------|--|----------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------|--|----------------------------------------------|--|---------------------|--|-----------------------------------|--|-----------------------------------|--|
| <b>Client Information (Sub Contract Lab)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Sampler:<br>N/A                                                                                                                             |  | Lab PM:<br>Miller, Samuel                                                 |  | Carrier Tracking No(s):<br>N/A      |  | COC No:<br>310-84869.1                                   |                                      |                                                                                                                                      |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Client Contact:<br>Shipping/Receiving                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | Phone:<br>N/A                                                                                                                               |  | E-Mail:<br>Samuel.Miller@et.eurofinsus.com                                |  | State of Origin:<br>Iowa            |  | Page:<br>Page 1 of 1                                     |                                      |                                                                                                                                      |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Company:<br>Eurofins Lancaster Laboratories Environm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                             |  | Accreditations Required (See note):<br>State - Iowa; State Program - Iowa |  |                                     |  | Job #:<br>310-310779-1                                   |                                      |                                                                                                                                      |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Address:<br>2425 New Holland Pike,<br>City:<br>Lancaster<br>State, Zip:<br>PA, 17601<br>Phone:<br>717-656-2300(Tel)<br>Email:<br>N/A<br>Project Name:<br>1st 2025 Semi-Annual Groundwater Sampling<br>Site:<br>310-SCS Woodbury Co SL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | Due Date Requested:<br>7/23/2025<br>TAT Requested (days):<br>N/A<br>PO #:<br>N/A<br>WO #:<br>N/A<br>Project #:<br>31007691<br>SSOW#:<br>N/A |  | <b>Analysis Requested</b>                                                 |  |                                     |  |                                                          | Preservation Codes:<br>Other:<br>N/A |                                                                                                                                      |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| <b>Sample Identification - Client ID (Lab ID)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | <b>Sample Date</b>                                                                                                                          |  | <b>Sample Time</b>                                                        |  | <b>Sample Type (C=Comp, G=grab)</b> |  | <b>Matrix (W=water, S=solid, O=oil, T=tissue, A=air)</b> |                                      | <b>Field Filtered Sample (Yes or No)</b>                                                                                             |  | <b>Perform MS/MSD (Yes or No)</b> |  | <b>8151A/8151A-AP Appendix II Herbicides</b> |  | <b>9034 Sulfide</b> |  | <b>Total Number of containers</b> |  | <b>Special Instructions/Note:</b> |  |
| PZ-2B (310-310779-1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | 7/9/25                                                                                                                                      |  | 13:02 Central                                                             |  | G                                   |  | Water                                                    |                                      | X                                                                                                                                    |  | X                                 |  |                                              |  |                     |  | 3                                 |  |                                   |  |
| <p>Note: Since laboratory accreditations are subject to change Eurofins Environment Testing North Central, LLC places the ownership of method, analyte &amp; accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.</p> |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      |                                                                                                                                      |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| <b>Possible Hazard Identification</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      | <b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>                                           |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Unconfirmed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      | <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Deliverable Requested: I, II, III, IV, Other (specify)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      | Primary Deliverable Rank: 2                                                                                                          |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Empty Kit Relinquished by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      | Special Instructions/QC Requirements                                                                                                 |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Relinquished by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      | Date/Time                                                                                                                            |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Relinquished by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      | Date/Time                                                                                                                            |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Relinquished by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      | Date/Time                                                                                                                            |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Custody Seals Intact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      | Custody Seal No                                                                                                                      |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |
| Yes No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                             |  |                                                                           |  |                                     |  |                                                          |                                      | Collector Temperature (°C) and Other Remarks                                                                                         |  |                                   |  |                                              |  |                     |  |                                   |  |                                   |  |



## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-310779-1

SDG Number: Woodbury County Sanitary Landfill (HMSP)

Login Number: 310779

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Miller, Samuel

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | N/A    |         |
| The cooler's custody seal, if present, is intact.                                        | N/A    |         |
| Sample custody seals, if present, are 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 is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   |         |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | 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   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-310779-1

SDG Number: Woodbury County Sanitary Landfill (HMSP)

**Login Number: 310779**

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

**List Number: 2**

**List Creation: 07/12/25 02:56 PM**

**Creator: Foreman, Kai**

| 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 ( $\leq 6^{\circ}\text{C}$ , not frozen). | True   |                                    |
| Cooler Temperature is recorded.                                                                         | True   |                                    |
| WV: Container Temp acceptable, where thermal pres is required ( $\leq 6^{\circ}\text{C}$ , 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?                                                             | False  | Received project as a subcontract. |
| Sample custody seals are intact.                                                                        | N/A    |                                    |
| VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?                   | N/A    |                                    |

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Sean Marczewski  
SCS Engineers  
1690 All State Court  
Suite 100  
West Des Moines, Iowa 50265

Generated 9/18/2025 3:33:33 PM

## JOB DESCRIPTION

Woodbury County Landfill Resamples  
MW-2, MW-8, PZ-2A

## JOB NUMBER

310-314562-1

# Eurofins Cedar Falls

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



Generated  
9/18/2025 3:33:33 PM

Authorized for release by  
Samuel Miller, Project Management Assistant I  
[Samuel.Miller@et.eurofinsus.com](mailto:Samuel.Miller@et.eurofinsus.com)  
(319)595-2008

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# Case Narrative

Client: SCS Engineers  
Project: Woodbury County Landfill Resamples

Job ID: 310-314562-1

**Job ID: 310-314562-1**

**Eurofins Cedar Falls**

## Job Narrative 310-314562-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 8/29/2025 4:30 PM. 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 0.6°C.

### GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-465659 recovered above the upper control limit for Vinyl chloride (29.0%D), Chloroethane (31.9%D), Dichlorodifluoromethane (36.6%D), Chloromethane (30.8%D) and Trichlorofluoromethane (24.6%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-465659/4).

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

### GC/MS Semi VOA

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-465420 and analytical batch 310-466352 recovered outside control limits for the following analytes: Methapyrilene.

Method 8270E: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-465420 and analytical batch 310-466352 recovered outside control limits for the following analytes: Famphur. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 310-466352 recovered above the upper control limit for 2,6-Dichlorophenol(21.3%D), 2,6-Dinitrotoluene(25.9%D), 2-Acetylaminofluorene(68.9%D), 2-Nitrophenol(34.4%D), 3,3'-Dichlorobenzidine(23.8%D), 3,3'-Dimethylbenzidine(24.7%D), 3-Methylcholanthrene(52.7%D), 4-Aminobiphenyl(22.5%D), 4-Bromophenyl phenyl ether(21.0%D), Benzo[a]pyrene(27.6%D), Benzo[g,h,i]perylene(34.3%D), Chlorobenzilate(21.6%D), Chrysene(21.3%D), Dibenz(a,h)anthracene(36.7%D), Di-n-butyl phthalate(21.2%D), Di-n-octyl phthalate(98.1%D), Dinoseb(49.8%D), Ethyl parathion(38.8%), Hexachloropropene(24.8%D), Indeno[1,2,3-cd]pyrene(58.7%D), Methyl parathion(34.8%D), Pentachloronitrobenzene(30.5%D), Pentachlorophenol(32.1%D), Phenacetin(26.0%D), Pronamide(26.7%D) and 2,4,6-Tribromophenol (Surr)(26.4%D). . The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-466352/15).

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-465420 and analytical batch 310-467052 recovered outside control limits for the following analyte(s): 1,4-Phenylenediamine. 1,4-Phenylenediamine have been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

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

### PCBs

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

### Metals

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

Eurofins Cedar Falls

Case Narrative

Client: SCS Engineers  
Project: Woodbury County Landfill Resamples

Job ID: 310-314562-1

Job ID: 310-314562-1 (Continued)

Eurofins Cedar Falls

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- 14
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Sample Summary

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

| Lab Sample ID | Client Sample ID | Matrix       | Collected      | Received       | Sample Origin |
|---------------|------------------|--------------|----------------|----------------|---------------|
| 310-314562-1  | MW-2             | Ground Water | 08/28/25 12:57 | 08/29/25 16:30 | Iowa          |
| 310-314562-2  | MW-8             | Ground Water | 08/28/25 12:14 | 08/29/25 16:30 | Iowa          |
| 310-314562-3  | PZ-2A            | Ground Water | 08/28/25 13:27 | 08/29/25 16:30 | Iowa          |

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



## Detection Summary

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

### Client Sample ID: MW-2

Lab Sample ID: 310-314562-1

No Detections.

### Client Sample ID: MW-8

Lab Sample ID: 310-314562-2

No Detections.

### Client Sample ID: PZ-2A

Lab Sample ID: 310-314562-3

| Analyte          | Result  | Qualifier | RL      | MDL      | Unit | Dil Fac | D | Method | Prep Type |
|------------------|---------|-----------|---------|----------|------|---------|---|--------|-----------|
| Acetone          | 5.46    | J         | 10.0    | 3.10     | ug/L | 1       |   | 8260D  | Total/NA  |
| Carbon disulfide | 0.516   | J         | 1.00    | 0.450    | ug/L | 1       |   | 8260D  | Total/NA  |
| Arsenic          | 0.00369 |           | 0.00200 | 0.000530 | mg/L | 1       |   | 6020B  | Total/NA  |
| Barium           | 0.241   |           | 0.00200 | 0.000660 | mg/L | 1       |   | 6020B  | Total/NA  |

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

Client Sample ID: MW-2

Lab Sample ID: 310-314562-1

Date Collected: 08/28/25 12:57

Matrix: Ground Water

Date Received: 08/29/25 16:30

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

| Analyte                                | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| 1,2,4,5-Tetrachlorobenzene             | <10.0  |           | 10.0 | 0.540 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 1,3,5-Trinitrobenzene                  | <10.0  |           | 10.0 | 2.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 1,3-Dinitrobenzene                     | <10.0  |           | 10.0 | 3.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 1,4-Naphthoquinone                     | <10.0  |           | 10.0 | 3.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 1,4-Phenylenediamine                   | <10.0  | *- *1     | 10.0 | 1.90  | ug/L |   | 09/03/25 07:56 | 09/17/25 23:25 | 1       |
| 1-Naphthylamine                        | <10.0  |           | 10.0 | 2.50  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2,3,4,6-Tetrachlorophenol              | <10.0  |           | 10.0 | 5.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2,4,5-Trichlorophenol                  | <10.0  |           | 10.0 | 5.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2,4,6-Trichlorophenol                  | <10.0  |           | 10.0 | 5.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2,4-Dichlorophenol                     | <10.0  |           | 10.0 | 0.850 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2,4-Dimethylphenol                     | <10.0  |           | 10.0 | 0.580 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2,4-Dinitrophenol                      | <20.0  |           | 20.0 | 13.0  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2,4-Dinitrotoluene                     | <10.0  |           | 10.0 | 6.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2,6-Dichlorophenol                     | <10.0  |           | 10.0 | 0.690 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2,6-Dinitrotoluene                     | <10.0  |           | 10.0 | 0.520 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2-Acetylaminofluorene                  | <10.0  |           | 10.0 | 2.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2-Chloronaphthalene                    | <10.0  |           | 10.0 | 0.640 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2-Chlorophenol                         | <10.0  |           | 10.0 | 0.540 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2-Methylnaphthalene                    | <10.0  |           | 10.0 | 0.590 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2-Methylphenol                         | <10.0  |           | 10.0 | 0.650 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2-Naphthylamine                        | <10.0  |           | 10.0 | 2.10  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2-Nitroaniline                         | <10.0  |           | 10.0 | 5.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2-Nitrophenol                          | <10.0  |           | 10.0 | 6.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 3,3'-Dichlorobenzidine                 | <10.0  |           | 10.0 | 1.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 3,3'-Dimethylbenzidine                 | <10.0  |           | 10.0 | 1.50  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 3-Methylcholanthrene                   | <10.0  |           | 10.0 | 0.320 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 3-Nitroaniline                         | <10.0  |           | 10.0 | 2.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 4,6-Dinitro-2-methylphenol             | <10.0  |           | 10.0 | 6.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 4-Aminobiphenyl                        | <10.0  |           | 10.0 | 2.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 4-Bromophenyl phenyl ether             | <10.0  |           | 10.0 | 0.700 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 4-Chloro-3-methylphenol                | <10.0  |           | 10.0 | 0.840 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 4-Chloroaniline                        | <10.0  |           | 10.0 | 0.620 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 4-Chlorophenyl phenyl ether            | <10.0  |           | 10.0 | 0.690 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 4-Methylphenol (and/or 3-Methylphenol) | <10.0  |           | 10.0 | 0.700 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 4-Nitroaniline                         | <10.0  |           | 10.0 | 1.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 4-Nitrophenol                          | <10.0  |           | 10.0 | 7.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 5-Nitro-o-toluidine                    | <10.0  |           | 10.0 | 2.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 7,12-Dimethylbenz(a)anthracene         | <10.0  |           | 10.0 | 1.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Acenaphthene                           | <10.0  |           | 10.0 | 0.640 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Acenaphthylene                         | <10.0  |           | 10.0 | 0.720 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Acetophenone                           | <10.0  |           | 10.0 | 0.690 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Anthracene                             | <10.0  |           | 10.0 | 0.870 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Benzo[a]anthracene                     | <10.0  |           | 10.0 | 0.850 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Benzo[a]pyrene                         | <10.0  |           | 10.0 | 8.10  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Benzo[b]fluoranthene                   | <10.0  |           | 10.0 | 4.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Benzo[g,h,i]perylene                   | <10.0  |           | 10.0 | 6.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Benzo[k]fluoranthene                   | <10.0  |           | 10.0 | 2.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Benzyl alcohol                         | <10.0  |           | 10.0 | 1.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Bis(2-chloroethoxy)methane             | <10.0  |           | 10.0 | 0.760 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

Client Sample ID: MW-2

Lab Sample ID: 310-314562-1

Date Collected: 08/28/25 12:57

Matrix: Ground Water

Date Received: 08/29/25 16:30

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte                          | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| Bis(2-chloroethyl)ether          | <10.0  |           | 10.0 | 0.820 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| bis (2-chloroisopropyl) ether    | <10.0  |           | 10.0 | 0.540 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Bis(2-ethylhexyl) phthalate      | <10.0  |           | 10.0 | 5.50  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Butyl benzyl phthalate           | <10.0  |           | 10.0 | 5.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Chlorobenzilate                  | <10.0  |           | 10.0 | 3.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Chrysene                         | <10.0  |           | 10.0 | 0.870 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Diallate                         | <10.0  |           | 10.0 | 4.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Dibenz(a,h)anthracene            | <10.0  |           | 10.0 | 3.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Dibenzofuran                     | <10.0  |           | 10.0 | 0.740 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Diethyl phthalate                | <10.0  |           | 10.0 | 1.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Dimethoate                       | <10.0  |           | 10.0 | 3.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Dimethyl phthalate               | <10.0  |           | 10.0 | 1.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Di-n-butyl phthalate             | <10.0  |           | 10.0 | 5.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Di-n-octyl phthalate             | <20.0  |           | 20.0 | 7.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Dinoseb                          | <10.0  |           | 10.0 | 2.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Diphenylamine                    | <10.0  |           | 10.0 | 6.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Disulfoton                       | <10.0  |           | 10.0 | 2.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Ethyl methanesulfonate           | <10.0  |           | 10.0 | 3.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Ethyl parathion                  | <10.0  |           | 10.0 | 2.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Famphur                          | <10.0  | *+        | 10.0 | 3.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Fluoranthene                     | <10.0  |           | 10.0 | 1.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Fluorene                         | <10.0  |           | 10.0 | 0.790 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Hexachlorobenzene                | <10.0  |           | 10.0 | 0.700 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Hexachlorobutadiene              | <10.0  |           | 10.0 | 0.860 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Hexachlorocyclopentadiene        | <10.0  |           | 10.0 | 5.10  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Hexachloroethane                 | <10.0  |           | 10.0 | 0.970 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Hexachloropropene                | <10.0  |           | 10.0 | 2.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Indeno[1,2,3-cd]pyrene           | <10.0  |           | 10.0 | 4.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Isodrin                          | <10.0  |           | 10.0 | 4.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Isophorone                       | <10.0  |           | 10.0 | 0.930 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Isosafrole                       | <10.0  |           | 10.0 | 2.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Kepone                           | <10.0  |           | 10.0 | 1.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Methapyrilene                    | <10.0  | *1        | 10.0 | 0.760 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Methyl methanesulfonate          | <10.0  |           | 10.0 | 3.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Methyl parathion                 | <10.0  |           | 10.0 | 2.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Nitrobenzene                     | <10.0  |           | 10.0 | 0.800 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| N-Nitrosodiethylamine            | <10.0  |           | 10.0 | 3.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| N-Nitrosodimethylamine           | <10.0  |           | 10.0 | 0.720 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| N-Nitrosodi-n-butylamine         | <10.0  |           | 10.0 | 3.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| N-Nitrosodi-n-propylamine        | <10.0  |           | 10.0 | 0.920 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| N-Nitrosodiphenylamine           | <10.0  |           | 10.0 | 0.750 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| N-Nitrosomethylethylamine        | <10.0  |           | 10.0 | 4.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| N-Nitrosopiperidine              | <10.0  |           | 10.0 | 2.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| N-Nitrosopyrrolidine             | <10.0  |           | 10.0 | 3.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| o,o',o"-Triethylphosphorothioate | <10.0  |           | 10.0 | 3.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| o-Toluidine                      | <10.0  |           | 10.0 | 2.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| p-Dimethylamino azobenzene       | <10.0  |           | 10.0 | 2.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Pentachlorobenzene               | <10.0  |           | 10.0 | 2.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Pentachloronitrobenzene          | <10.0  |           | 10.0 | 5.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

Client Sample ID: MW-2

Lab Sample ID: 310-314562-1

Date Collected: 08/28/25 12:57

Matrix: Ground Water

Date Received: 08/29/25 16:30

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte           | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| Pentachlorophenol | <10.0  |           | 10.0 | 9.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Phenacetin        | <10.0  |           | 10.0 | 1.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Phenanthrene      | <10.0  |           | 10.0 | 0.790 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Phenol            | <10.0  |           | 10.0 | 1.10  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Phorate           | <10.0  |           | 10.0 | 3.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Pronamide         | <10.0  |           | 10.0 | 2.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Pyrene            | <10.0  |           | 10.0 | 0.790 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Safrole           | <10.0  |           | 10.0 | 2.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Thionazin         | <10.0  |           | 10.0 | 3.50  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:21 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorophenol (Surr)       | 56        |           | 21 - 110 | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Phenol-d5 (Surr)            | 46        |           | 21 - 110 | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Nitrobenzene-d5 (Surr)      | 75        |           | 39 - 140 | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2-Fluorobiphenyl (Surr)     | 81        |           | 33 - 126 | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| 2,4,6-Tribromophenol (Surr) | 72        |           | 20 - 144 | 09/03/25 07:56 | 09/12/25 04:21 | 1       |
| Terphenyl-d14 (Surr)        | 103       |           | 13 - 150 | 09/03/25 07:56 | 09/12/25 04:21 | 1       |

## Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte  | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| PCB-1016 | <1.89  |           | 1.89 | 0.776 | ug/L |   | 09/09/25 09:04 | 09/09/25 16:53 | 1       |
| PCB-1221 | <1.89  |           | 1.89 | 0.776 | ug/L |   | 09/09/25 09:04 | 09/09/25 16:53 | 1       |
| PCB-1232 | <1.89  |           | 1.89 | 0.776 | ug/L |   | 09/09/25 09:04 | 09/09/25 16:53 | 1       |
| PCB-1242 | <1.89  |           | 1.89 | 0.776 | ug/L |   | 09/09/25 09:04 | 09/09/25 16:53 | 1       |
| PCB-1248 | <1.89  |           | 1.89 | 0.653 | ug/L |   | 09/09/25 09:04 | 09/09/25 16:53 | 1       |
| PCB-1254 | <1.89  |           | 1.89 | 0.653 | ug/L |   | 09/09/25 09:04 | 09/09/25 16:53 | 1       |
| PCB-1260 | <1.89  |           | 1.89 | 0.653 | ug/L |   | 09/09/25 09:04 | 09/09/25 16:53 | 1       |

| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 103       |           | 10 - 150 | 09/09/25 09:04 | 09/09/25 16:53 | 1       |
| Tetrachloro-m-xylene          | 96        |           | 17 - 150 | 09/09/25 09:04 | 09/09/25 16:53 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

Client Sample ID: MW-8

Lab Sample ID: 310-314562-2

Date Collected: 08/28/25 12:14

Matrix: Ground Water

Date Received: 08/29/25 16:30

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

| Analyte                                | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| 1,2,4,5-Tetrachlorobenzene             | <10.2  |           | 10.2 | 0.551 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 1,3,5-Trinitrobenzene                  | <10.2  |           | 10.2 | 2.35  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 1,3-Dinitrobenzene                     | <10.2  |           | 10.2 | 3.27  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 1,4-Naphthoquinone                     | <10.2  |           | 10.2 | 3.67  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 1,4-Phenylenediamine                   | <10.2  | *- *1     | 10.2 | 1.94  | ug/L |   | 09/03/25 07:56 | 09/17/25 23:51 | 1       |
| 1-Naphthylamine                        | <10.2  |           | 10.2 | 2.55  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2,3,4,6-Tetrachlorophenol              | <10.2  |           | 10.2 | 5.41  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2,4,5-Trichlorophenol                  | <10.2  |           | 10.2 | 5.41  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2,4,6-Trichlorophenol                  | <10.2  |           | 10.2 | 5.10  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2,4-Dichlorophenol                     | <10.2  |           | 10.2 | 0.867 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2,4-Dimethylphenol                     | <10.2  |           | 10.2 | 0.592 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2,4-Dinitrophenol                      | <20.4  |           | 20.4 | 13.3  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2,4-Dinitrotoluene                     | <10.2  |           | 10.2 | 6.53  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2,6-Dichlorophenol                     | <10.2  |           | 10.2 | 0.704 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2,6-Dinitrotoluene                     | <10.2  |           | 10.2 | 0.531 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2-Acetylaminofluorene                  | <10.2  |           | 10.2 | 2.76  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2-Chloronaphthalene                    | <10.2  |           | 10.2 | 0.653 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2-Chlorophenol                         | <10.2  |           | 10.2 | 0.551 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2-Methylnaphthalene                    | <10.2  |           | 10.2 | 0.602 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2-Methylphenol                         | <10.2  |           | 10.2 | 0.663 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2-Naphthylamine                        | <10.2  |           | 10.2 | 2.14  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2-Nitroaniline                         | <10.2  |           | 10.2 | 6.02  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2-Nitrophenol                          | <10.2  |           | 10.2 | 6.94  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 3,3'-Dichlorobenzidine                 | <10.2  |           | 10.2 | 1.43  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 3,3'-Dimethylbenzidine                 | <10.2  |           | 10.2 | 1.53  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 3-Methylcholanthrene                   | <10.2  |           | 10.2 | 0.327 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 3-Nitroaniline                         | <10.2  |           | 10.2 | 2.76  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 4,6-Dinitro-2-methylphenol             | <10.2  |           | 10.2 | 7.04  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 4-Aminobiphenyl                        | <10.2  |           | 10.2 | 2.24  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 4-Bromophenyl phenyl ether             | <10.2  |           | 10.2 | 0.714 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 4-Chloro-3-methylphenol                | <10.2  |           | 10.2 | 0.857 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 4-Chloroaniline                        | <10.2  |           | 10.2 | 0.633 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 4-Chlorophenyl phenyl ether            | <10.2  |           | 10.2 | 0.704 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 4-Methylphenol (and/or 3-Methylphenol) | <10.2  |           | 10.2 | 0.714 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 4-Nitroaniline                         | <10.2  |           | 10.2 | 1.33  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 4-Nitrophenol                          | <10.2  |           | 10.2 | 7.76  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 5-Nitro-o-toluidine                    | <10.2  |           | 10.2 | 2.86  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 7,12-Dimethylbenz(a)anthracene         | <10.2  |           | 10.2 | 1.94  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Acenaphthene                           | <10.2  |           | 10.2 | 0.653 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Acenaphthylene                         | <10.2  |           | 10.2 | 0.735 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Acetophenone                           | <10.2  |           | 10.2 | 0.704 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Anthracene                             | <10.2  |           | 10.2 | 0.888 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Benzo[a]anthracene                     | <10.2  |           | 10.2 | 0.867 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Benzo[a]pyrene                         | <10.2  |           | 10.2 | 8.27  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Benzo[b]fluoranthene                   | <10.2  |           | 10.2 | 5.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Benzo[g,h,i]perylene                   | <10.2  |           | 10.2 | 6.43  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Benzo[k]fluoranthene                   | <10.2  |           | 10.2 | 2.24  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Benzyl alcohol                         | <10.2  |           | 10.2 | 1.33  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Bis(2-chloroethoxy)methane             | <10.2  |           | 10.2 | 0.776 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

Client Sample ID: MW-8

Lab Sample ID: 310-314562-2

Date Collected: 08/28/25 12:14

Matrix: Ground Water

Date Received: 08/29/25 16:30

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte                          | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| Bis(2-chloroethyl)ether          | <10.2  |           | 10.2 | 0.837 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| bis (2-chloroisopropyl) ether    | <10.2  |           | 10.2 | 0.551 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Bis(2-ethylhexyl) phthalate      | <10.2  |           | 10.2 | 5.61  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Butyl benzyl phthalate           | <10.2  |           | 10.2 | 5.51  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Chlorobenzilate                  | <10.2  |           | 10.2 | 3.67  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Chrysene                         | <10.2  |           | 10.2 | 0.888 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Diallate                         | <10.2  |           | 10.2 | 4.08  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Dibenz(a,h)anthracene            | <10.2  |           | 10.2 | 3.98  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Dibenzofuran                     | <10.2  |           | 10.2 | 0.755 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Diethyl phthalate                | <10.2  |           | 10.2 | 1.73  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Dimethoate                       | <10.2  |           | 10.2 | 3.67  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Dimethyl phthalate               | <10.2  |           | 10.2 | 1.02  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Di-n-butyl phthalate             | <10.2  |           | 10.2 | 5.71  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Di-n-octyl phthalate             | <20.4  |           | 20.4 | 7.14  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Dinoseb                          | <10.2  |           | 10.2 | 2.45  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Diphenylamine                    | <10.2  |           | 10.2 | 6.12  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Disulfoton                       | <10.2  |           | 10.2 | 2.45  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Ethyl methanesulfonate           | <10.2  |           | 10.2 | 3.67  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Ethyl parathion                  | <10.2  |           | 10.2 | 2.24  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Famphur                          | <10.2  | *+        | 10.2 | 3.88  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Fluoranthene                     | <10.2  |           | 10.2 | 1.73  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Fluorene                         | <10.2  |           | 10.2 | 0.806 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Hexachlorobenzene                | <10.2  |           | 10.2 | 0.714 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Hexachlorobutadiene              | <10.2  |           | 10.2 | 0.878 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Hexachlorocyclopentadiene        | <10.2  |           | 10.2 | 5.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Hexachloroethane                 | <10.2  |           | 10.2 | 0.990 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Hexachloropropene                | <10.2  |           | 10.2 | 2.65  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Indeno[1,2,3-cd]pyrene           | <10.2  |           | 10.2 | 4.29  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Isodrin                          | <10.2  |           | 10.2 | 4.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Isophorone                       | <10.2  |           | 10.2 | 0.949 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Isosafrole                       | <10.2  |           | 10.2 | 2.35  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Kepone                           | <10.2  |           | 10.2 | 1.02  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Methapyrilene                    | <10.2  | *1        | 10.2 | 0.776 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Methyl methanesulfonate          | <10.2  |           | 10.2 | 3.37  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Methyl parathion                 | <10.2  |           | 10.2 | 2.35  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Nitrobenzene                     | <10.2  |           | 10.2 | 0.816 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| N-Nitrosodiethylamine            | <10.2  |           | 10.2 | 3.47  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| N-Nitrosodimethylamine           | <10.2  |           | 10.2 | 0.735 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| N-Nitrosodi-n-butylamine         | <10.2  |           | 10.2 | 3.98  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| N-Nitrosodi-n-propylamine        | <10.2  |           | 10.2 | 0.939 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| N-Nitrosodiphenylamine           | <10.2  |           | 10.2 | 0.765 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| N-Nitrosomethylethylamine        | <10.2  |           | 10.2 | 5.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| N-Nitrosopiperidine              | <10.2  |           | 10.2 | 2.76  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| N-Nitrosopyrrolidine             | <10.2  |           | 10.2 | 3.67  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| o,o',o"-Triethylphosphorothioate | <10.2  |           | 10.2 | 3.27  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| o-Toluidine                      | <10.2  |           | 10.2 | 2.96  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| p-Dimethylamino azobenzene       | <10.2  |           | 10.2 | 2.24  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Pentachlorobenzene               | <10.2  |           | 10.2 | 2.86  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Pentachloronitrobenzene          | <10.2  |           | 10.2 | 5.92  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

**Client Sample ID: MW-8**

**Lab Sample ID: 310-314562-2**

**Date Collected: 08/28/25 12:14**

**Matrix: Ground Water**

**Date Received: 08/29/25 16:30**

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte           | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| Pentachlorophenol | <10.2  |           | 10.2 | 9.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Phenacetin        | <10.2  |           | 10.2 | 1.94  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Phenanthrene      | <10.2  |           | 10.2 | 0.806 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Phenol            | <10.2  |           | 10.2 | 1.12  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Phorate           | <10.2  |           | 10.2 | 3.27  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Pronamide         | <10.2  |           | 10.2 | 2.76  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Pyrene            | <10.2  |           | 10.2 | 0.806 | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Safrole           | <10.2  |           | 10.2 | 2.86  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Thionazin         | <10.2  |           | 10.2 | 3.57  | ug/L |   | 09/03/25 07:56 | 09/12/25 04:47 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorophenol (Surr)       | 61        |           | 21 - 110 | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Phenol-d5 (Surr)            | 52        |           | 21 - 110 | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Nitrobenzene-d5 (Surr)      | 75        |           | 39 - 140 | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2-Fluorobiphenyl (Surr)     | 80        |           | 33 - 126 | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| 2,4,6-Tribromophenol (Surr) | 77        |           | 20 - 144 | 09/03/25 07:56 | 09/12/25 04:47 | 1       |
| Terphenyl-d14 (Surr)        | 106       |           | 13 - 150 | 09/03/25 07:56 | 09/12/25 04:47 | 1       |

## Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte  | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| PCB-1016 | <1.87  |           | 1.87 | 0.765 | ug/L |   | 09/09/25 09:04 | 09/09/25 17:06 | 1       |
| PCB-1221 | <1.87  |           | 1.87 | 0.765 | ug/L |   | 09/09/25 09:04 | 09/09/25 17:06 | 1       |
| PCB-1232 | <1.87  |           | 1.87 | 0.765 | ug/L |   | 09/09/25 09:04 | 09/09/25 17:06 | 1       |
| PCB-1242 | <1.87  |           | 1.87 | 0.765 | ug/L |   | 09/09/25 09:04 | 09/09/25 17:06 | 1       |
| PCB-1248 | <1.87  |           | 1.87 | 0.644 | ug/L |   | 09/09/25 09:04 | 09/09/25 17:06 | 1       |
| PCB-1254 | <1.87  |           | 1.87 | 0.644 | ug/L |   | 09/09/25 09:04 | 09/09/25 17:06 | 1       |
| PCB-1260 | <1.87  |           | 1.87 | 0.644 | ug/L |   | 09/09/25 09:04 | 09/09/25 17:06 | 1       |

| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 92        |           | 10 - 150 | 09/09/25 09:04 | 09/09/25 17:06 | 1       |
| Tetrachloro-m-xylene          | 85        |           | 17 - 150 | 09/09/25 09:04 | 09/09/25 17:06 | 1       |



# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

Client Sample ID: PZ-2A

Lab Sample ID: 310-314562-3

Date Collected: 08/28/25 13:27

Matrix: Ground Water

Date Received: 08/29/25 16:30

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.190 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.470 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,1-Dichloroethane          | <1.00  |           | 1.00  | 0.220 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.560 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.590 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.230 | ug/L |   |          | 09/05/25 07:24 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 09/05/25 07:24 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 2.00  | ug/L |   |          | 09/05/25 07:24 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 2.10  | ug/L |   |          | 09/05/25 07:24 | 1       |
| Acetone                     | 5.46   | J         | 10.0  | 3.10  | ug/L |   |          | 09/05/25 07:24 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 09/05/25 07:24 | 1       |
| Benzene                     | <0.500 |           | 0.500 | 0.220 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 0.540 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 0.780 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 09/05/25 07:24 | 1       |
| Carbon disulfide            | 0.516  | J         | 1.00  | 0.450 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 0.750 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.790 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 09/05/25 07:24 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 09/05/25 07:24 | 1       |
| cis-1,2-Dichloroethene      | <1.00  |           | 1.00  | 0.210 | ug/L |   |          | 09/05/25 07:24 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 0.250 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.310 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 7.00  | ug/L |   |          | 09/05/25 07:24 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 09/05/25 07:24 | 1       |
| Styrene                     | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00  | 0.480 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Toluene                     | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 09/05/25 07:24 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00  | 0.270 | ug/L |   |          | 09/05/25 07:24 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00  | 0.560 | ug/L |   |          | 09/05/25 07:24 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0  | 1.10  | ug/L |   |          | 09/05/25 07:24 | 1       |
| Trichloroethene             | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00  | 0.380 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0  | 2.50  | ug/L |   |          | 09/05/25 07:24 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00  | 0.180 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00  | 0.400 | ug/L |   |          | 09/05/25 07:24 | 1       |
| Dichlorodifluoromethane     | <3.00  |           | 3.00  | 0.250 | ug/L |   |          | 09/05/25 07:24 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

Client Sample ID: PZ-2A

Lab Sample ID: 310-314562-3

Date Collected: 08/28/25 13:27

Matrix: Ground Water

Date Received: 08/29/25 16:30

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 101       |           | 76 - 130 |          | 09/05/25 07:24 | 1       |
| Toluene-d8 (Surr)           | 102       |           | 80 - 120 |          | 09/05/25 07:24 | 1       |
| 4-Bromofluorobenzene (Surr) | 99        |           | 80 - 120 |          | 09/05/25 07:24 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte   | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | <0.00200  |           | 0.00200  | 0.00100  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Arsenic   | 0.00369   |           | 0.00200  | 0.000530 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Barium    | 0.241     |           | 0.00200  | 0.000660 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Beryllium | <0.00100  |           | 0.00100  | 0.000330 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Cadmium   | <0.000200 |           | 0.000200 | 0.000100 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Chromium  | <0.00500  |           | 0.00500  | 0.00180  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Cobalt    | <0.000500 |           | 0.000500 | 0.000170 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Copper    | <0.00500  |           | 0.00500  | 0.00320  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Lead      | <0.000500 |           | 0.000500 | 0.000330 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Nickel    | <0.00500  |           | 0.00500  | 0.00230  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Selenium  | <0.00500  |           | 0.00500  | 0.00140  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Silver    | <0.00100  |           | 0.00100  | 0.000500 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Thallium  | <0.00100  |           | 0.00100  | 0.000570 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Vanadium  | <0.00500  |           | 0.00500  | 0.00170  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |
| Zinc      | <0.0200   |           | 0.0200   | 0.0130   | mg/L |   | 09/08/25 10:00 | 09/10/25 15:58 | 1       |

## Definitions/Glossary

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

### Qualifiers

#### GC/MS VOA

| 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. |

#### GC/MS Semi VOA

| Qualifier | Qualifier Description                                      |
|-----------|------------------------------------------------------------|
| *-        | LCS and/or LCSD is outside acceptance limits, low biased.  |
| *+        | LCS and/or LCSD is outside acceptance limits, high biased. |
| *1        | LCS/LCSD RPD exceeds control limits.                       |
| E         | Result exceeded calibration range.                         |

### 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                                                                                       |

## Surrogate Summary

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

### Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

| Lab Sample ID                      | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |  |  |  |  |
|------------------------------------|------------------|------------------------------------------------|-----------------|-----------------|--|--|--|--|
|                                    |                  | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |  |  |  |  |
| 310-314562-3                       | PZ-2A            | 101                                            | 102             | 99              |  |  |  |  |
| <b>Surrogate Legend</b>            |                  |                                                |                 |                 |  |  |  |  |
| DBFM = Dibromofluoromethane (Surr) |                  |                                                |                 |                 |  |  |  |  |
| TOL = Toluene-d8 (Surr)            |                  |                                                |                 |                 |  |  |  |  |
| BFB = 4-Bromofluorobenzene (Surr)  |                  |                                                |                 |                 |  |  |  |  |

### Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID                      | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |  |  |  |  |
|------------------------------------|--------------------|------------------------------------------------|-----------------|-----------------|--|--|--|--|
|                                    |                    | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |  |  |  |  |
| LCS 310-465659/6                   | Lab Control Sample | 100                                            | 105             | 96              |  |  |  |  |
| LCS 310-465659/7                   | Lab Control Sample | 101                                            | 101             | 99              |  |  |  |  |
| MB 310-465659/5                    | Method Blank       | 102                                            | 102             | 100             |  |  |  |  |
| <b>Surrogate Legend</b>            |                    |                                                |                 |                 |  |  |  |  |
| DBFM = Dibromofluoromethane (Surr) |                    |                                                |                 |                 |  |  |  |  |
| TOL = Toluene-d8 (Surr)            |                    |                                                |                 |                 |  |  |  |  |
| BFB = 4-Bromofluorobenzene (Surr)  |                    |                                                |                 |                 |  |  |  |  |

### Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Ground Water

Prep Type: Total/NA

| Lab Sample ID                     | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                 |                 |                  |  |  |
|-----------------------------------|------------------|------------------------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|--|--|
|                                   |                  | 2FP<br>(21-110)                                | PHL<br>(21-110) | NBZ<br>(39-140) | FBP<br>(33-126) | TBP<br>(20-144) | TPHL<br>(13-150) |  |  |
| 310-314562-1                      | MW-2             | 56                                             | 46              | 75              | 81              | 72              | 103              |  |  |
| 310-314562-2                      | MW-8             | 61                                             | 52              | 75              | 80              | 77              | 106              |  |  |
| <b>Surrogate Legend</b>           |                  |                                                |                 |                 |                 |                 |                  |  |  |
| 2FP = 2-Fluorophenol (Surr)       |                  |                                                |                 |                 |                 |                 |                  |  |  |
| PHL = Phenol-d5 (Surr)            |                  |                                                |                 |                 |                 |                 |                  |  |  |
| NBZ = Nitrobenzene-d5 (Surr)      |                  |                                                |                 |                 |                 |                 |                  |  |  |
| FBP = 2-Fluorobiphenyl (Surr)     |                  |                                                |                 |                 |                 |                 |                  |  |  |
| TBP = 2,4,6-Tribromophenol (Surr) |                  |                                                |                 |                 |                 |                 |                  |  |  |
| TPHL = Terphenyl-d14 (Surr)       |                  |                                                |                 |                 |                 |                 |                  |  |  |

### Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID               | Client Sample ID       | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                 |                 |                  |  |  |
|-----------------------------|------------------------|------------------------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|--|--|
|                             |                        | 2FP<br>(21-110)                                | PHL<br>(21-110) | NBZ<br>(39-140) | FBP<br>(33-126) | TBP<br>(20-144) | TPHL<br>(13-150) |  |  |
| LCS 310-465420/2-A          | Lab Control Sample     | 66                                             | 55              | 81              | 79              | 109             | 109              |  |  |
| LCS 310-465420/2-A          | Lab Control Sample     | 71                                             | 60              | 102             | 79              | 86              | 104              |  |  |
| LCSD 310-465420/3-A         | Lab Control Sample Dup | 59                                             | 50              | 74              | 74              | 100             | 102              |  |  |
| MB 310-465420/1-A           | Method Blank           | 63                                             | 54              | 104             | 78              | 61              | 101              |  |  |
| MB 310-465420/1-A           | Method Blank           | 70                                             | 59              | 83              | 80              | 81              | 105              |  |  |
| <b>Surrogate Legend</b>     |                        |                                                |                 |                 |                 |                 |                  |  |  |
| 2FP = 2-Fluorophenol (Surr) |                        |                                                |                 |                 |                 |                 |                  |  |  |

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## Surrogate Summary

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

PHL = Phenol-d5 (Surr)  
NBZ = Nitrobenzene-d5 (Surr)  
FBP = 2-Fluorobiphenyl (Surr)  
TBP = 2,4,6-Tribromophenol (Surr)  
TPHL = Terphenyl-d14 (Surr)

### Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID       | Client Sample ID       | Percent Surrogate Recovery (Acceptance Limits) |     |     |     |     |      |
|---------------------|------------------------|------------------------------------------------|-----|-----|-----|-----|------|
|                     |                        | 2FP                                            | PHL | NBZ | FBP | TBP | TPHL |
| LCSD 310-465420/3-A | Lab Control Sample Dup |                                                |     |     |     |     |      |

#### Surrogate Legend

2FP = 2-Fluorophenol (Surr)  
PHL = Phenol-d5 (Surr)  
NBZ = Nitrobenzene-d5 (Surr)  
FBP = 2-Fluorobiphenyl (Surr)  
TBP = 2,4,6-Tribromophenol (Surr)  
TPHL = Terphenyl-d14 (Surr)

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Ground Water

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                  |
|---------------|------------------|------------------------------------------------|------------------|
|               |                  | DCB1<br>(10-150)                               | TCX1<br>(17-150) |
| 310-314562-1  | MW-2             | 103                                            | 96               |
| 310-314562-2  | MW-8             | 92                                             | 85               |

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)  
TCX = Tetrachloro-m-xylene

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID       | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                  |
|---------------------|--------------------|------------------------------------------------|------------------|
|                     |                    | DCB1<br>(10-150)                               | TCX1<br>(17-150) |
| LB 310-465673/1-D   | Method Blank       | 61                                             | 82               |
| LCS 310-466058/25-A | Lab Control Sample | 78                                             | 94               |
| MB 310-466058/1-A   | Method Blank       | 80                                             | 102              |

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)  
TCX = Tetrachloro-m-xylene

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-465659/5

Matrix: Water

Analysis Batch: 465659

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00     |              | 1.00  | 0.380 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,1,1-Trichloroethane       | <1.00     |              | 1.00  | 0.190 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00     |              | 1.00  | 0.470 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,1,2-Trichloroethane       | <1.00     |              | 1.00  | 0.450 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,1-Dichloroethane          | <1.00     |              | 1.00  | 0.220 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,1-Dichloroethene          | <2.00     |              | 2.00  | 0.560 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,2,3-Trichloropropane      | <1.00     |              | 1.00  | 0.590 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00     |              | 5.00  | 1.20  | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00     |              | 1.00  | 0.340 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,2-Dichlorobenzene         | <1.00     |              | 1.00  | 0.370 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,2-Dichloroethane          | <1.00     |              | 1.00  | 0.390 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,2-Dichloropropane         | <1.00     |              | 1.00  | 0.270 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 1,4-Dichlorobenzene         | <1.00     |              | 1.00  | 0.230 | ug/L |   |          | 09/05/25 00:45 | 1       |
| 2-Butanone (MEK)            | <10.0     |              | 10.0  | 2.10  | ug/L |   |          | 09/05/25 00:45 | 1       |
| 2-Hexanone                  | <10.0     |              | 10.0  | 2.00  | ug/L |   |          | 09/05/25 00:45 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0     |              | 10.0  | 2.10  | ug/L |   |          | 09/05/25 00:45 | 1       |
| Acetone                     | <10.0     |              | 10.0  | 3.10  | ug/L |   |          | 09/05/25 00:45 | 1       |
| Acrylonitrile               | <5.00     |              | 5.00  | 2.20  | ug/L |   |          | 09/05/25 00:45 | 1       |
| Benzene                     | <0.500    |              | 0.500 | 0.220 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Bromochloromethane          | <5.00     |              | 5.00  | 0.540 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Bromodichloromethane        | <1.00     |              | 1.00  | 0.390 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Bromoform                   | <5.00     |              | 5.00  | 0.780 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Bromomethane                | <4.00     |              | 4.00  | 1.10  | ug/L |   |          | 09/05/25 00:45 | 1       |
| Carbon disulfide            | <1.00     |              | 1.00  | 0.450 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Carbon tetrachloride        | <2.00     |              | 2.00  | 0.650 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Chlorobenzene               | <1.00     |              | 1.00  | 0.400 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Chlorodibromomethane        | <5.00     |              | 5.00  | 0.750 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Chloroethane                | <4.00     |              | 4.00  | 0.790 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Chloroform                  | <3.00     |              | 3.00  | 1.30  | ug/L |   |          | 09/05/25 00:45 | 1       |
| Chloromethane               | <3.00     |              | 3.00  | 0.610 | ug/L |   |          | 09/05/25 00:45 | 1       |
| cis-1,2-Dichloroethene      | <1.00     |              | 1.00  | 0.210 | ug/L |   |          | 09/05/25 00:45 | 1       |
| cis-1,3-Dichloropropene     | <5.00     |              | 5.00  | 0.250 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Dibromomethane              | <1.00     |              | 1.00  | 0.330 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Ethylbenzene                | <1.00     |              | 1.00  | 0.310 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Iodomethane                 | <10.0     |              | 10.0  | 7.00  | ug/L |   |          | 09/05/25 00:45 | 1       |
| Methylene chloride          | <5.00     |              | 5.00  | 1.70  | ug/L |   |          | 09/05/25 00:45 | 1       |
| Styrene                     | <1.00     |              | 1.00  | 0.370 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Tetrachloroethene           | <1.00     |              | 1.00  | 0.480 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Toluene                     | <1.00     |              | 1.00  | 0.430 | ug/L |   |          | 09/05/25 00:45 | 1       |
| trans-1,2-Dichloroethene    | <1.00     |              | 1.00  | 0.270 | ug/L |   |          | 09/05/25 00:45 | 1       |
| trans-1,3-Dichloropropene   | <5.00     |              | 5.00  | 0.560 | ug/L |   |          | 09/05/25 00:45 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0     |              | 10.0  | 1.10  | ug/L |   |          | 09/05/25 00:45 | 1       |
| Trichloroethene             | <1.00     |              | 1.00  | 0.430 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Trichlorofluoromethane      | <4.00     |              | 4.00  | 0.380 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Vinyl acetate               | <10.0     |              | 10.0  | 2.50  | ug/L |   |          | 09/05/25 00:45 | 1       |
| Vinyl chloride              | <1.00     |              | 1.00  | 0.180 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Xylenes, Total              | <3.00     |              | 3.00  | 0.400 | ug/L |   |          | 09/05/25 00:45 | 1       |
| Dichlorodifluoromethane     | <3.00     |              | 3.00  | 0.250 | ug/L |   |          | 09/05/25 00:45 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-465659/5

Matrix: Water

Analysis Batch: 465659

Client Sample ID: Method Blank

Prep Type: Total/NA

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 102          |              | 76 - 130 |          | 09/05/25 00:45 | 1       |
| Toluene-d8 (Surr)           | 102          |              | 80 - 120 |          | 09/05/25 00:45 | 1       |
| 4-Bromofluorobenzene (Surr) | 100          |              | 80 - 120 |          | 09/05/25 00:45 | 1       |

Lab Sample ID: LCS 310-465659/6

Matrix: Water

Analysis Batch: 465659

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,1,1,2-Tetrachloroethane   | 20.0        | 19.39      |               | ug/L |   | 97   | 70 - 121    |
| 1,1,1-Trichloroethane       | 20.0        | 22.21      |               | ug/L |   | 111  | 69 - 130    |
| 1,1,1,2,2-Tetrachloroethane | 20.0        | 21.86      |               | ug/L |   | 109  | 70 - 122    |
| 1,1,2-Trichloroethane       | 20.0        | 20.55      |               | ug/L |   | 103  | 75 - 121    |
| 1,1-Dichloroethane          | 20.0        | 21.59      |               | ug/L |   | 108  | 69 - 127    |
| 1,1-Dichloroethene          | 20.0        | 21.60      |               | ug/L |   | 108  | 64 - 134    |
| 1,2,3-Trichloropropane      | 20.0        | 22.94      |               | ug/L |   | 115  | 70 - 122    |
| 1,2-Dibromo-3-chloropropane | 20.0        | 18.16      |               | ug/L |   | 91   | 62 - 132    |
| 1,2-Dibromoethane (EDB)     | 20.0        | 20.80      |               | ug/L |   | 104  | 74 - 122    |
| 1,2-Dichlorobenzene         | 20.0        | 19.76      |               | ug/L |   | 99   | 74 - 120    |
| 1,2-Dichloroethane          | 20.0        | 22.15      |               | ug/L |   | 111  | 68 - 125    |
| 1,2-Dichloropropane         | 20.0        | 20.13      |               | ug/L |   | 101  | 72 - 128    |
| 1,4-Dichlorobenzene         | 20.0        | 19.52      |               | ug/L |   | 98   | 72 - 120    |
| 2-Butanone (MEK)            | 40.0        | 40.47      |               | ug/L |   | 101  | 60 - 134    |
| 2-Hexanone                  | 40.0        | 43.97      |               | ug/L |   | 110  | 62 - 139    |
| 4-Methyl-2-pentanone (MIBK) | 40.0        | 44.04      |               | ug/L |   | 110  | 62 - 136    |
| Acetone                     | 40.0        | 43.95      |               | ug/L |   | 110  | 59 - 136    |
| Acrylonitrile               | 200         | 211.9      |               | ug/L |   | 106  | 50 - 150    |
| Benzene                     | 20.0        | 21.06      |               | ug/L |   | 105  | 71 - 125    |
| Bromochloromethane          | 20.0        | 19.98      |               | ug/L |   | 100  | 69 - 131    |
| Bromodichloromethane        | 20.0        | 20.86      |               | ug/L |   | 104  | 70 - 122    |
| Bromoform                   | 20.0        | 17.76      |               | ug/L |   | 89   | 62 - 122    |
| Carbon disulfide            | 20.0        | 21.94      |               | ug/L |   | 110  | 58 - 137    |
| Carbon tetrachloride        | 20.0        | 20.63      |               | ug/L |   | 103  | 63 - 136    |
| Chlorobenzene               | 20.0        | 20.84      |               | ug/L |   | 104  | 74 - 120    |
| Chlorodibromomethane        | 20.0        | 17.72      |               | ug/L |   | 89   | 69 - 121    |
| Chloroform                  | 20.0        | 20.83      |               | ug/L |   | 104  | 72 - 122    |
| cis-1,2-Dichloroethene      | 20.0        | 21.33      |               | ug/L |   | 107  | 72 - 123    |
| cis-1,3-Dichloropropene     | 20.0        | 18.57      |               | ug/L |   | 93   | 72 - 123    |
| Dibromomethane              | 20.0        | 21.74      |               | ug/L |   | 109  | 72 - 122    |
| Ethylbenzene                | 20.0        | 21.88      |               | ug/L |   | 109  | 75 - 120    |
| Iodomethane                 | 20.0        | 24.46      |               | ug/L |   | 122  | 18 - 150    |
| Methylene chloride          | 20.0        | 21.39      |               | ug/L |   | 107  | 72 - 128    |
| Styrene                     | 20.0        | 21.49      |               | ug/L |   | 107  | 74 - 122    |
| Tetrachloroethene           | 20.0        | 19.88      |               | ug/L |   | 99   | 70 - 128    |
| Toluene                     | 20.0        | 21.65      |               | ug/L |   | 108  | 74 - 120    |
| trans-1,2-Dichloroethene    | 20.0        | 21.24      |               | ug/L |   | 106  | 67 - 127    |
| trans-1,3-Dichloropropene   | 20.0        | 19.23      |               | ug/L |   | 96   | 67 - 123    |
| trans-1,4-Dichloro-2-butene | 20.0        | 16.00      |               | ug/L |   | 80   | 50 - 150    |

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## QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

### Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-465659/6

Matrix: Water

Analysis Batch: 465659

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte         | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|-----------------|----------------|---------------|------------------|------|---|------|----------------|
|                 |                |               |                  |      |   |      |                |
| Trichloroethene | 20.0           | 20.28         |                  | ug/L |   | 101  | 70 - 128       |
| Vinyl acetate   | 40.0           | 30.93         |                  | ug/L |   | 77   | 50 - 150       |
| Xylenes, Total  | 40.0           | 41.39         |                  | ug/L |   | 103  | 74 - 121       |

| Surrogate                   | %Recovery | LCS<br>Qualifier | Limits   |
|-----------------------------|-----------|------------------|----------|
|                             |           |                  |          |
| Dibromofluoromethane (Surr) | 100       |                  | 76 - 130 |
| Toluene-d8 (Surr)           | 105       |                  | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 96        |                  | 80 - 120 |

Lab Sample ID: LCS 310-465659/7

Matrix: Water

Analysis Batch: 465659

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                 | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|-------------------------|----------------|---------------|------------------|------|---|------|----------------|
|                         |                |               |                  |      |   |      |                |
| Bromomethane            | 20.0           | 18.35         |                  | ug/L |   | 92   | 33 - 138       |
| Chloroethane            | 20.0           | 27.52         |                  | ug/L |   | 138  | 59 - 139       |
| Chloromethane           | 20.0           | 24.60         |                  | ug/L |   | 123  | 52 - 146       |
| Trichlorofluoromethane  | 20.0           | 25.87         |                  | ug/L |   | 129  | 55 - 150       |
| Vinyl chloride          | 20.0           | 25.79         |                  | ug/L |   | 129  | 60 - 142       |
| Dichlorodifluoromethane | 20.0           | 27.90         |                  | ug/L |   | 140  | 45 - 150       |

| Surrogate                   | %Recovery | LCS<br>Qualifier | Limits   |
|-----------------------------|-----------|------------------|----------|
|                             |           |                  |          |
| Dibromofluoromethane (Surr) | 101       |                  | 76 - 130 |
| Toluene-d8 (Surr)           | 101       |                  | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 99        |                  | 80 - 120 |

### Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-465420/1-A

Matrix: Water

Analysis Batch: 466255

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                    | MB<br>Result | MB<br>Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------|--------------|-----------------|------|-------|------|---|----------------|----------------|---------|
|                            |              |                 |      |       |      |   |                |                |         |
| 1,2,4,5-Tetrachlorobenzene | <10.0        |                 | 10.0 | 0.540 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 1,3-Dinitrobenzene         | <10.0        |                 | 10.0 | 3.20  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2,3,4,6-Tetrachlorophenol  | <10.0        |                 | 10.0 | 5.30  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2,4,5-Trichlorophenol      | <10.0        |                 | 10.0 | 5.30  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2,4,6-Trichlorophenol      | <10.0        |                 | 10.0 | 5.00  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2,4-Dichlorophenol         | <10.0        |                 | 10.0 | 0.850 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2,4-Dimethylphenol         | <10.0        |                 | 10.0 | 0.580 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2,4-Dinitrophenol          | <20.0        |                 | 20.0 | 13.0  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2,4-Dinitrotoluene         | <10.0        |                 | 10.0 | 6.40  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2,6-Dichlorophenol         | <10.0        |                 | 10.0 | 0.690 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2,6-Dinitrotoluene         | <10.0        |                 | 10.0 | 0.520 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2-Chloronaphthalene        | <10.0        |                 | 10.0 | 0.640 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2-Chlorophenol             | <10.0        |                 | 10.0 | 0.540 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2-Methylnaphthalene        | <10.0        |                 | 10.0 | 0.590 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2-Methylphenol             | <10.0        |                 | 10.0 | 0.650 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-465420/1-A

Matrix: Water

Analysis Batch: 466255

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                                   | MB<br>Result | MB<br>Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------------------|--------------|-----------------|------|-------|------|---|----------------|----------------|---------|
| 2-Nitroaniline                            | <10.0        |                 | 10.0 | 5.90  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2-Nitrophenol                             | <10.0        |                 | 10.0 | 6.80  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 3,3'-Dichlorobenzidine                    | <10.0        |                 | 10.0 | 1.40  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 3-Nitroaniline                            | <10.0        |                 | 10.0 | 2.70  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 4,6-Dinitro-2-methylphenol                | <10.0        |                 | 10.0 | 6.90  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 4-Bromophenyl phenyl ether                | <10.0        |                 | 10.0 | 0.700 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 4-Chloro-3-methylphenol                   | <10.0        |                 | 10.0 | 0.840 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 4-Chloroaniline                           | <10.0        |                 | 10.0 | 0.620 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 4-Chlorophenyl phenyl ether               | <10.0        |                 | 10.0 | 0.690 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 4-Methylphenol (and/or<br>3-Methylphenol) | <10.0        |                 | 10.0 | 0.700 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 4-Nitroaniline                            | <10.0        |                 | 10.0 | 1.30  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 4-Nitrophenol                             | <10.0        |                 | 10.0 | 7.60  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Acenaphthene                              | <10.0        |                 | 10.0 | 0.640 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Acenaphthylene                            | <10.0        |                 | 10.0 | 0.720 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Acetophenone                              | <10.0        |                 | 10.0 | 0.690 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Anthracene                                | <10.0        |                 | 10.0 | 0.870 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Benzo[a]anthracene                        | <10.0        |                 | 10.0 | 0.850 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Benzo[a]pyrene                            | <10.0        |                 | 10.0 | 8.10  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Benzo[b]fluoranthene                      | <10.0        |                 | 10.0 | 4.90  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Benzo[g,h,i]perylene                      | <10.0        |                 | 10.0 | 6.30  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Benzo[k]fluoranthene                      | <10.0        |                 | 10.0 | 2.20  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Benzyl alcohol                            | <10.0        |                 | 10.0 | 1.30  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Bis(2-chloroethoxy)methane                | <10.0        |                 | 10.0 | 0.760 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Bis(2-chloroethyl)ether                   | <10.0        |                 | 10.0 | 0.820 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| bis (2-chloroisopropyl) ether             | <10.0        |                 | 10.0 | 0.540 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Bis(2-ethylhexyl) phthalate               | <10.0        |                 | 10.0 | 5.50  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Butyl benzyl phthalate                    | <10.0        |                 | 10.0 | 5.40  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Chrysene                                  | <10.0        |                 | 10.0 | 0.870 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Dibenz(a,h)anthracene                     | <10.0        |                 | 10.0 | 3.90  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Dibenzofuran                              | <10.0        |                 | 10.0 | 0.740 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Diethyl phthalate                         | <10.0        |                 | 10.0 | 1.70  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Dimethyl phthalate                        | <10.0        |                 | 10.0 | 1.00  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Di-n-butyl phthalate                      | <10.0        |                 | 10.0 | 5.60  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Di-n-octyl phthalate                      | <20.0        |                 | 20.0 | 7.00  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Diphenylamine                             | <10.0        |                 | 10.0 | 6.00  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Fluoranthene                              | <10.0        |                 | 10.0 | 1.70  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Fluorene                                  | <10.0        |                 | 10.0 | 0.790 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Hexachlorobenzene                         | <10.0        |                 | 10.0 | 0.700 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Hexachlorobutadiene                       | <10.0        |                 | 10.0 | 0.860 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Hexachlorocyclopentadiene                 | <10.0        |                 | 10.0 | 5.10  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Hexachloroethane                          | <10.0        |                 | 10.0 | 0.970 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Indeno[1,2,3-cd]pyrene                    | <10.0        |                 | 10.0 | 4.20  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Isophorone                                | <10.0        |                 | 10.0 | 0.930 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Nitrobenzene                              | <10.0        |                 | 10.0 | 0.800 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| N-Nitrosodimethylamine                    | <10.0        |                 | 10.0 | 0.720 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| N-Nitrosodi-n-propylamine                 | <10.0        |                 | 10.0 | 0.920 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| N-Nitrosodiphenylamine                    | <10.0        |                 | 10.0 | 0.750 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Pentachlorophenol                         | <10.0        |                 | 10.0 | 9.60  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-465420/1-A

Matrix: Water

Analysis Batch: 466255

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 465420

| Analyte      | MB<br>Result | MB<br>Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|--------------|--------------|-----------------|------|-------|------|---|----------------|----------------|---------|
| Phenanthrene | <10.0        |                 | 10.0 | 0.790 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Phenol       | <10.0        |                 | 10.0 | 1.10  | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Pyrene       | <10.0        |                 | 10.0 | 0.790 | ug/L |   | 09/03/25 07:56 | 09/11/25 01:24 | 1       |

| Surrogate                   | MB<br>%Recovery | MB<br>Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------------|-----------------|----------|----------------|----------------|---------|
| 2-Fluorophenol (Surr)       | 63              |                 | 21 - 110 | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Phenol-d5 (Surr)            | 54              |                 | 21 - 110 | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Nitrobenzene-d5 (Surr)      | 104             |                 | 39 - 140 | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2-Fluorobiphenyl (Surr)     | 78              |                 | 33 - 126 | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| 2,4,6-Tribromophenol (Surr) | 61              |                 | 20 - 144 | 09/03/25 07:56 | 09/11/25 01:24 | 1       |
| Terphenyl-d14 (Surr)        | 101             |                 | 13 - 150 | 09/03/25 07:56 | 09/11/25 01:24 | 1       |

Lab Sample ID: MB 310-465420/1-A

Matrix: Water

Analysis Batch: 466352

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                    | MB<br>Result | MB<br>Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------|--------------|-----------------|------|-------|------|---|----------------|----------------|---------|
| 1,2,4,5-Tetrachlorobenzene | <10.0        |                 | 10.0 | 0.540 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 1,3,5-Trinitrobenzene      | <10.0        |                 | 10.0 | 2.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 1,3-Dinitrobenzene         | <10.0        |                 | 10.0 | 3.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 1,4-Naphthoquinone         | <10.0        |                 | 10.0 | 3.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 1-Naphthylamine            | <10.0        |                 | 10.0 | 2.50  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2,3,4,6-Tetrachlorophenol  | <10.0        |                 | 10.0 | 5.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2,4,5-Trichlorophenol      | <10.0        |                 | 10.0 | 5.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2,4,6-Trichlorophenol      | <10.0        |                 | 10.0 | 5.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2,4-Dichlorophenol         | <10.0        |                 | 10.0 | 0.850 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2,4-Dimethylphenol         | <10.0        |                 | 10.0 | 0.580 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2,4-Dinitrophenol          | <20.0        |                 | 20.0 | 13.0  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2,4-Dinitrotoluene         | <10.0        |                 | 10.0 | 6.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2,6-Dichlorophenol         | <10.0        |                 | 10.0 | 0.690 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2,6-Dinitrotoluene         | <10.0        |                 | 10.0 | 0.520 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2-Acetylaminofluorene      | <10.0        |                 | 10.0 | 2.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2-Chloronaphthalene        | <10.0        |                 | 10.0 | 0.640 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2-Chlorophenol             | <10.0        |                 | 10.0 | 0.540 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2-Methylnaphthalene        | <10.0        |                 | 10.0 | 0.590 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2-Methylphenol             | <10.0        |                 | 10.0 | 0.650 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2-Naphthylamine            | <10.0        |                 | 10.0 | 2.10  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2-Nitroaniline             | <10.0        |                 | 10.0 | 5.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2-Nitrophenol              | <10.0        |                 | 10.0 | 6.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 3,3'-Dichlorobenzidine     | <10.0        |                 | 10.0 | 1.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 3,3'-Dimethylbenzidine     | <10.0        |                 | 10.0 | 1.50  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 3-Methylcholanthrene       | <10.0        |                 | 10.0 | 0.320 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 3-Nitroaniline             | <10.0        |                 | 10.0 | 2.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 4,6-Dinitro-2-methylphenol | <10.0        |                 | 10.0 | 6.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 4-Aminobiphenyl            | <10.0        |                 | 10.0 | 2.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 4-Bromophenyl phenyl ether | <10.0        |                 | 10.0 | 0.700 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 4-Chloro-3-methylphenol    | <10.0        |                 | 10.0 | 0.840 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 4-Chloroaniline            | <10.0        |                 | 10.0 | 0.620 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-465420/1-A

Matrix: Water

Analysis Batch: 466352

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                                   | MB<br>Result | MB<br>Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------------------|--------------|-----------------|------|-------|------|---|----------------|----------------|---------|
| 4-Chlorophenyl phenyl ether               | <10.0        |                 | 10.0 | 0.690 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 4-Methylphenol (and/or<br>3-Methylphenol) | <10.0        |                 | 10.0 | 0.700 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 4-Nitroaniline                            | <10.0        |                 | 10.0 | 1.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 4-Nitrophenol                             | <10.0        |                 | 10.0 | 7.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 5-Nitro-o-toluidine                       | <10.0        |                 | 10.0 | 2.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 7,12-Dimethylbenz(a)anthracene            | <10.0        |                 | 10.0 | 1.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Acenaphthene                              | <10.0        |                 | 10.0 | 0.640 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Acenaphthylene                            | <10.0        |                 | 10.0 | 0.720 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Acetophenone                              | <10.0        |                 | 10.0 | 0.690 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Anthracene                                | <10.0        |                 | 10.0 | 0.870 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Benzo[a]anthracene                        | <10.0        |                 | 10.0 | 0.850 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Benzo[a]pyrene                            | <10.0        |                 | 10.0 | 8.10  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Benzo[b]fluoranthene                      | <10.0        |                 | 10.0 | 4.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Benzo[g,h,i]perylene                      | <10.0        |                 | 10.0 | 6.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Benzo[k]fluoranthene                      | <10.0        |                 | 10.0 | 2.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Benzyl alcohol                            | <10.0        |                 | 10.0 | 1.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Bis(2-chloroethoxy)methane                | <10.0        |                 | 10.0 | 0.760 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Bis(2-chloroethyl)ether                   | <10.0        |                 | 10.0 | 0.820 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| bis (2-chloroisopropyl) ether             | <10.0        |                 | 10.0 | 0.540 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Bis(2-ethylhexyl) phthalate               | <10.0        |                 | 10.0 | 5.50  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Butyl benzyl phthalate                    | <10.0        |                 | 10.0 | 5.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Chlorobenzilate                           | <10.0        |                 | 10.0 | 3.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Chrysene                                  | <10.0        |                 | 10.0 | 0.870 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Diallate                                  | <10.0        |                 | 10.0 | 4.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Dibenz(a,h)anthracene                     | <10.0        |                 | 10.0 | 3.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Dibenzofuran                              | <10.0        |                 | 10.0 | 0.740 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Diethyl phthalate                         | <10.0        |                 | 10.0 | 1.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Dimethoate                                | <10.0        |                 | 10.0 | 3.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Dimethyl phthalate                        | <10.0        |                 | 10.0 | 1.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Di-n-butyl phthalate                      | <10.0        |                 | 10.0 | 5.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Di-n-octyl phthalate                      | <20.0        |                 | 20.0 | 7.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Dinoseb                                   | <10.0        |                 | 10.0 | 2.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Diphenylamine                             | <10.0        |                 | 10.0 | 6.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Disulfoton                                | <10.0        |                 | 10.0 | 2.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Ethyl methanesulfonate                    | <10.0        |                 | 10.0 | 3.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Ethyl parathion                           | <10.0        |                 | 10.0 | 2.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Famphur                                   | <10.0        |                 | 10.0 | 3.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Fluoranthene                              | <10.0        |                 | 10.0 | 1.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Fluorene                                  | <10.0        |                 | 10.0 | 0.790 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Hexachlorobenzene                         | <10.0        |                 | 10.0 | 0.700 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Hexachlorobutadiene                       | <10.0        |                 | 10.0 | 0.860 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Hexachlorocyclopentadiene                 | <10.0        |                 | 10.0 | 5.10  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Hexachloroethane                          | <10.0        |                 | 10.0 | 0.970 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Hexachloropropene                         | <10.0        |                 | 10.0 | 2.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Indeno[1,2,3-cd]pyrene                    | <10.0        |                 | 10.0 | 4.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Isodrin                                   | <10.0        |                 | 10.0 | 4.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Isophorone                                | <10.0        |                 | 10.0 | 0.930 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Isosafrole                                | <10.0        |                 | 10.0 | 2.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-465420/1-A

Matrix: Water

Analysis Batch: 466352

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                           | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------------------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Kepone                            | <10.0     |              | 10.0 | 1.00  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Methapyrilene                     | <10.0     |              | 10.0 | 0.760 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Methyl methanesulfonate           | <10.0     |              | 10.0 | 3.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Methyl parathion                  | <10.0     |              | 10.0 | 2.30  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Nitrobenzene                      | <10.0     |              | 10.0 | 0.800 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| N-Nitrosodiethylamine             | <10.0     |              | 10.0 | 3.40  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| N-Nitrosodimethylamine            | <10.0     |              | 10.0 | 0.720 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| N-Nitrosodi-n-butylamine          | <10.0     |              | 10.0 | 3.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| N-Nitrosodi-n-propylamine         | <10.0     |              | 10.0 | 0.920 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| N-Nitrosodiphenylamine            | <10.0     |              | 10.0 | 0.750 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| N-Nitrosomethylethylamine         | <10.0     |              | 10.0 | 4.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| N-Nitrosopiperidine               | <10.0     |              | 10.0 | 2.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| N-Nitrosopyrrolidine              | <10.0     |              | 10.0 | 3.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| o,o',o''-Triethylphosphorothioate | <10.0     |              | 10.0 | 3.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| o-Toluidine                       | <10.0     |              | 10.0 | 2.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| p-Dimethylamino azobenzene        | <10.0     |              | 10.0 | 2.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Pentachlorobenzene                | <10.0     |              | 10.0 | 2.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Pentachloronitrobenzene           | <10.0     |              | 10.0 | 5.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Pentachlorophenol                 | <10.0     |              | 10.0 | 9.60  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Phenacetin                        | <10.0     |              | 10.0 | 1.90  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Phenanthrene                      | <10.0     |              | 10.0 | 0.790 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Phenol                            | <10.0     |              | 10.0 | 1.10  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Phorate                           | <10.0     |              | 10.0 | 3.20  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Pronamide                         | <10.0     |              | 10.0 | 2.70  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Pyrene                            | <10.0     |              | 10.0 | 0.790 | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Safrole                           | <10.0     |              | 10.0 | 2.80  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Thionazin                         | <10.0     |              | 10.0 | 3.50  | ug/L |   | 09/03/25 07:56 | 09/12/25 03:02 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2-Fluorophenol (Surr)       | 70           |              | 21 - 110 | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Phenol-d5 (Surr)            | 59           |              | 21 - 110 | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Nitrobenzene-d5 (Surr)      | 83           |              | 39 - 140 | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2-Fluorobiphenyl (Surr)     | 80           |              | 33 - 126 | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| 2,4,6-Tribromophenol (Surr) | 81           |              | 20 - 144 | 09/03/25 07:56 | 09/12/25 03:02 | 1       |
| Terphenyl-d14 (Surr)        | 105          |              | 13 - 150 | 09/03/25 07:56 | 09/12/25 03:02 | 1       |

Lab Sample ID: MB 310-465420/1-A

Matrix: Water

Analysis Batch: 467052

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 465420

| Analyte              | MB Result | MB Qualifier | RL   | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------|-----------|--------------|------|------|------|---|----------------|----------------|---------|
| 1,4-Phenylenediamine | <10.0     |              | 10.0 | 1.90 | ug/L |   | 09/03/25 07:56 | 09/18/25 06:22 | 1       |

Lab Sample ID: LCS 310-465420/2-A

Matrix: Water

Analysis Batch: 466352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                    | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,2,4,5-Tetrachlorobenzene | 100         | 69.73      |               | ug/L |   | 70   | 35 - 110    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-465420/2-A

Matrix: Water

Analysis Batch: 466352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,3,5-Trinitrobenzene                  | 51.2        | 59.94      |               | ug/L |   | 117  | 26 - 150    |
| 1,3-Dinitrobenzene                     | 100         | 92.32      |               | ug/L |   | 92   | 36 - 147    |
| 1,4-Naphthoquinone                     | 51.2        | 52.33      |               | ug/L |   | 102  | 38 - 137    |
| 1-Naphthylamine                        | 51.2        | 34.05      |               | ug/L |   | 67   | 10 - 110    |
| 2,3,4,6-Tetrachlorophenol              | 100         | 80.42      |               | ug/L |   | 80   | 32 - 142    |
| 2,4,5-Trichlorophenol                  | 100         | 88.27      |               | ug/L |   | 88   | 39 - 136    |
| 2,4,6-Trichlorophenol                  | 100         | 89.45      |               | ug/L |   | 89   | 35 - 141    |
| 2,4-Dichlorophenol                     | 100         | 91.71      |               | ug/L |   | 92   | 44 - 131    |
| 2,4-Dimethylphenol                     | 100         | 85.17      |               | ug/L |   | 85   | 30 - 128    |
| 2,4-Dinitrophenol                      | 200         | 128.0      |               | ug/L |   | 64   | 10 - 150    |
| 2,4-Dinitrotoluene                     | 100         | 96.22      |               | ug/L |   | 96   | 48 - 136    |
| 2,6-Dichlorophenol                     | 100         | 88.99      |               | ug/L |   | 89   | 41 - 131    |
| 2,6-Dinitrotoluene                     | 100         | 97.33      |               | ug/L |   | 97   | 49 - 135    |
| 2-Acetylaminofluorene                  | 51.2        | 72.91      |               | ug/L |   | 142  | 37 - 149    |
| 2-Chloronaphthalene                    | 100         | 71.70      |               | ug/L |   | 72   | 33 - 112    |
| 2-Chlorophenol                         | 100         | 79.34      |               | ug/L |   | 79   | 43 - 119    |
| 2-Methylnaphthalene                    | 100         | 71.21      |               | ug/L |   | 71   | 35 - 110    |
| 2-Methylphenol                         | 100         | 75.08      |               | ug/L |   | 75   | 47 - 114    |
| 2-Naphthylamine                        | 51.2        | 26.66      |               | ug/L |   | 52   | 18 - 111    |
| 2-Nitroaniline                         | 100         | 96.27      |               | ug/L |   | 96   | 48 - 135    |
| 2-Nitrophenol                          | 100         | 101.2      |               | ug/L |   | 101  | 36 - 144    |
| 3,3'-Dimethylbenzidine                 | 51.2        | 12.73      |               | ug/L |   | 25   | 10 - 147    |
| 3-Methylcholanthrene                   | 51.2        | 70.07      |               | ug/L |   | 137  | 13 - 140    |
| 3-Nitroaniline                         | 100         | 95.31      |               | ug/L |   | 95   | 38 - 142    |
| 4,6-Dinitro-2-methylphenol             | 200         | 183.5      |               | ug/L |   | 92   | 22 - 150    |
| 4-Aminobiphenyl                        | 51.2        | 28.83      |               | ug/L |   | 56   | 23 - 123    |
| 4-Bromophenyl phenyl ether             | 100         | 91.67      |               | ug/L |   | 92   | 41 - 131    |
| 4-Chloro-3-methylphenol                | 100         | 89.67      |               | ug/L |   | 90   | 51 - 132    |
| 4-Chloroaniline                        | 100         | 69.10      |               | ug/L |   | 69   | 13 - 143    |
| 4-Chlorophenyl phenyl ether            | 100         | 86.11      |               | ug/L |   | 86   | 44 - 118    |
| 4-Methylphenol (and/or 3-Methylphenol) | 100         | 75.70      |               | ug/L |   | 76   | 45 - 114    |
| 4-Nitroaniline                         | 100         | 92.89      |               | ug/L |   | 93   | 33 - 141    |
| 4-Nitrophenol                          | 200         | 115.4      |               | ug/L |   | 58   | 22 - 110    |
| 5-Nitro-o-toluidine                    | 51.2        | 53.09      |               | ug/L |   | 104  | 43 - 139    |
| 7,12-Dimethylbenz(a)anthracene         | 51.2        | 54.06      |               | ug/L |   | 106  | 47 - 129    |
| Acenaphthene                           | 100         | 81.51      |               | ug/L |   | 82   | 38 - 118    |
| Acenaphthylene                         | 100         | 76.49      |               | ug/L |   | 76   | 39 - 115    |
| Acetophenone                           | 100         | 77.17      |               | ug/L |   | 77   | 47 - 118    |
| Anthracene                             | 100         | 101.1      |               | ug/L |   | 101  | 49 - 127    |
| Benzo[a]anthracene                     | 100         | 104.7      |               | ug/L |   | 105  | 49 - 126    |
| Benzo[a]pyrene                         | 100         | 110.0      |               | ug/L |   | 110  | 44 - 133    |
| Benzo[b]fluoranthene                   | 100         | 99.94      |               | ug/L |   | 100  | 44 - 136    |
| Benzo[g,h,i]perylene                   | 100         | 110.4      |               | ug/L |   | 110  | 42 - 135    |
| Benzo[k]fluoranthene                   | 100         | 98.97      |               | ug/L |   | 99   | 49 - 134    |
| Benzyl alcohol                         | 100         | 75.02      |               | ug/L |   | 75   | 46 - 123    |
| Bis(2-chloroethoxy)methane             | 100         | 84.04      |               | ug/L |   | 84   | 44 - 126    |
| Bis(2-chloroethyl)ether                | 100         | 73.79      |               | ug/L |   | 74   | 41 - 116    |
| bis (2-chloroisopropyl) ether          | 100         | 70.40      |               | ug/L |   | 70   | 36 - 115    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-465420/2-A

Matrix: Water

Analysis Batch: 466352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                          | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------------------|-------------|------------|---------------|------|---|------|-------------|
| Bis(2-ethylhexyl) phthalate      | 100         | 116.4      |               | ug/L |   | 116  | 46 - 138    |
| Butyl benzyl phthalate           | 100         | 106.6      |               | ug/L |   | 107  | 47 - 133    |
| Chlorobenzilate                  | 51.2        | 66.14      |               | ug/L |   | 129  | 39 - 145    |
| Chrysene                         | 100         | 95.37      |               | ug/L |   | 95   | 50 - 128    |
| Diallate                         | 44.8        | 47.19      |               | ug/L |   | 105  | 40 - 135    |
| Dibenz(a,h)anthracene            | 100         | 114.9      |               | ug/L |   | 115  | 36 - 146    |
| Dibenzofuran                     | 100         | 83.86      |               | ug/L |   | 84   | 44 - 114    |
| Diethyl phthalate                | 100         | 94.72      |               | ug/L |   | 95   | 43 - 135    |
| Dimethoate                       | 44.8        | 59.70      |               | ug/L |   | 133  | 31 - 150    |
| Dimethyl phthalate               | 100         | 89.85      |               | ug/L |   | 90   | 46 - 129    |
| Di-n-butyl phthalate             | 100         | 103.0      |               | ug/L |   | 103  | 49 - 138    |
| Di-n-octyl phthalate             | 100         | 141.3      |               | ug/L |   | 141  | 33 - 148    |
| Dinoseb                          | 51.2        | 53.71      |               | ug/L |   | 105  | 22 - 150    |
| Diphenylamine                    | 85.0        | 80.95      |               | ug/L |   | 95   | 43 - 132    |
| Disulfoton                       | 44.8        | 50.36      |               | ug/L |   | 112  | 27 - 138    |
| Ethyl methanesulfonate           | 51.2        | 35.29      |               | ug/L |   | 69   | 44 - 110    |
| Ethyl parathion                  | 44.8        | 59.03      |               | ug/L |   | 132  | 52 - 141    |
| Famphur                          | 44.8        | 86.16      | E *+          | ug/L |   | 192  | 67 - 150    |
| Fluoranthene                     | 100         | 98.28      |               | ug/L |   | 98   | 49 - 132    |
| Fluorene                         | 100         | 87.49      |               | ug/L |   | 87   | 46 - 118    |
| Hexachlorobenzene                | 100         | 92.79      |               | ug/L |   | 93   | 42 - 134    |
| Hexachlorobutadiene              | 100         | 55.39      |               | ug/L |   | 55   | 29 - 110    |
| Hexachlorocyclopentadiene        | 100         | 45.12      |               | ug/L |   | 45   | 10 - 110    |
| Hexachloroethane                 | 100         | 47.19      |               | ug/L |   | 47   | 25 - 110    |
| Hexachloropropene                | 51.2        | 23.01      |               | ug/L |   | 45   | 10 - 110    |
| Indeno[1,2,3-cd]pyrene           | 100         | 126.2      |               | ug/L |   | 126  | 36 - 149    |
| Isodrin                          | 51.2        | 45.09      |               | ug/L |   | 88   | 50 - 122    |
| Isophorone                       | 100         | 86.14      |               | ug/L |   | 86   | 46 - 126    |
| Isosafrole                       | 51.2        | 39.11      |               | ug/L |   | 76   | 10 - 129    |
| Kepone                           | 44.8        | 41.68      |               | ug/L |   | 93   | 10 - 150    |
| Methapyrilene                    | 44.8        | 12.10      |               | ug/L |   | 27   | 10 - 110    |
| Methyl methanesulfonate          | 51.2        | 31.16      |               | ug/L |   | 61   | 16 - 110    |
| Methyl parathion                 | 44.8        | 58.26      |               | ug/L |   | 130  | 49 - 150    |
| Nitrobenzene                     | 100         | 77.36      |               | ug/L |   | 77   | 42 - 123    |
| N-Nitrosodiethylamine            | 51.2        | 37.23      |               | ug/L |   | 73   | 51 - 116    |
| N-Nitrosodimethylamine           | 100         | 54.02      |               | ug/L |   | 54   | 37 - 110    |
| N-Nitrosodi-n-butylamine         | 51.2        | 46.91      |               | ug/L |   | 92   | 49 - 135    |
| N-Nitrosodi-n-propylamine        | 100         | 80.74      |               | ug/L |   | 81   | 44 - 124    |
| N-Nitrosodiphenylamine           | 100         | 93.95      |               | ug/L |   | 94   | 43 - 132    |
| N-Nitrosomethylethylamine        | 51.2        | 31.75      |               | ug/L |   | 62   | 43 - 114    |
| N-Nitrosopiperidine              | 51.2        | 38.25      |               | ug/L |   | 75   | 50 - 120    |
| N-Nitrosopyrrolidine             | 51.2        | 41.89      |               | ug/L |   | 82   | 47 - 129    |
| o,o',o"-Triethylphosphorothioate | 44.8        | 34.40      |               | ug/L |   | 77   | 34 - 125    |
| o-Toluidine                      | 51.2        | 22.84      |               | ug/L |   | 45   | 19 - 128    |
| p-Dimethylamino azobenzene       | 51.2        | 54.06      |               | ug/L |   | 106  | 45 - 133    |
| Pentachlorobenzene               | 51.2        | 36.26      |               | ug/L |   | 71   | 27 - 112    |
| Pentachloronitrobenzene          | 51.2        | 56.40      |               | ug/L |   | 110  | 45 - 132    |
| Pentachlorophenol                | 200         | 171.1      |               | ug/L |   | 86   | 28 - 142    |
| Phenacetin                       | 51.2        | 57.08      |               | ug/L |   | 111  | 51 - 139    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-465420/2-A

Matrix: Water

Analysis Batch: 466352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 465420

| Analyte      | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------|-------------|------------|---------------|------|---|------|-------------|
| Phenanthrene | 100         | 96.33      |               | ug/L |   | 96   | 48 - 126    |
| Phenol       | 100         | 56.09      |               | ug/L |   | 56   | 29 - 110    |
| Phorate      | 44.8        | 47.19      |               | ug/L |   | 105  | 21 - 147    |
| Pronamide    | 51.2        | 54.94      |               | ug/L |   | 107  | 52 - 135    |
| Pyrene       | 100         | 101.1      |               | ug/L |   | 101  | 45 - 134    |
| Safrole      | 44.8        | 33.16      |               | ug/L |   | 74   | 26 - 117    |
| Thionazin    | 44.8        | 45.37      |               | ug/L |   | 101  | 48 - 135    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 2-Fluorophenol (Surr)       | 66            |               | 21 - 110 |
| Phenol-d5 (Surr)            | 55            |               | 21 - 110 |
| Nitrobenzene-d5 (Surr)      | 81            |               | 39 - 140 |
| 2-Fluorobiphenyl (Surr)     | 79            |               | 33 - 126 |
| 2,4,6-Tribromophenol (Surr) | 109           |               | 20 - 144 |
| Terphenyl-d14 (Surr)        | 109           |               | 13 - 150 |

Lab Sample ID: LCS 310-465420/2-A

Matrix: Water

Analysis Batch: 466781

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,2,4,5-Tetrachlorobenzene             | 100         | 64.78      |               | ug/L |   | 65   | 35 - 110    |
| 1,3-Dinitrobenzene                     | 100         | 87.44      |               | ug/L |   | 87   | 36 - 147    |
| 2,3,4,6-Tetrachlorophenol              | 100         | 98.02      |               | ug/L |   | 98   | 32 - 142    |
| 2,4,5-Trichlorophenol                  | 100         | 39.67      |               | ug/L |   | 40   | 39 - 136    |
| 2,4,6-Trichlorophenol                  | 100         | 101.3      |               | ug/L |   | 101  | 35 - 141    |
| 2,4-Dichlorophenol                     | 100         | 71.07      |               | ug/L |   | 71   | 44 - 131    |
| 2,4-Dimethylphenol                     | 100         | 73.67      |               | ug/L |   | 74   | 30 - 128    |
| 2,4-Dinitrophenol                      | 200         | 91.34      |               | ug/L |   | 46   | 10 - 150    |
| 2,4-Dinitrotoluene                     | 100         | 77.82      |               | ug/L |   | 78   | 48 - 136    |
| 2,6-Dichlorophenol                     | 100         | 72.88      |               | ug/L |   | 73   | 41 - 131    |
| 2,6-Dinitrotoluene                     | 100         | 76.51      |               | ug/L |   | 77   | 49 - 135    |
| 2-Chloronaphthalene                    | 100         | 90.41      |               | ug/L |   | 90   | 33 - 112    |
| 2-Chlorophenol                         | 100         | 69.11      |               | ug/L |   | 69   | 43 - 119    |
| 2-Methylnaphthalene                    | 100         | 65.98      |               | ug/L |   | 66   | 35 - 110    |
| 2-Methylphenol                         | 100         | 68.37      |               | ug/L |   | 68   | 47 - 114    |
| 2-Nitroaniline                         | 100         | 77.20      |               | ug/L |   | 77   | 48 - 135    |
| 2-Nitrophenol                          | 100         | 73.19      |               | ug/L |   | 73   | 36 - 144    |
| 3-Nitroaniline                         | 100         | 79.34      |               | ug/L |   | 79   | 38 - 142    |
| 4,6-Dinitro-2-methylphenol             | 200         | 153.3      |               | ug/L |   | 77   | 22 - 150    |
| 4-Bromophenyl phenyl ether             | 100         | 78.80      |               | ug/L |   | 79   | 41 - 131    |
| 4-Chloro-3-methylphenol                | 100         | 77.92      |               | ug/L |   | 78   | 51 - 132    |
| 4-Chloroaniline                        | 100         | 30.60      |               | ug/L |   | 31   | 13 - 143    |
| 4-Chlorophenyl phenyl ether            | 100         | 70.68      |               | ug/L |   | 71   | 44 - 118    |
| 4-Methylphenol (and/or 3-Methylphenol) | 100         | 68.29      |               | ug/L |   | 68   | 45 - 114    |
| 4-Nitroaniline                         | 100         | 73.09      |               | ug/L |   | 73   | 33 - 141    |
| 4-Nitrophenol                          | 200         | 99.92      |               | ug/L |   | 50   | 22 - 110    |
| Acenaphthene                           | 100         | 72.77      |               | ug/L |   | 73   | 38 - 118    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-465420/2-A

Matrix: Water

Analysis Batch: 466781

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                       | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------------------------|-------------|------------|---------------|------|---|------|-------------|
| Acenaphthylene                | 100         | 70.61      |               | ug/L |   | 71   | 39 - 115    |
| Acetophenone                  | 100         | 78.30      |               | ug/L |   | 78   | 47 - 118    |
| Anthracene                    | 100         | 67.76      |               | ug/L |   | 68   | 49 - 127    |
| Benzo[a]anthracene            | 100         | 87.54      |               | ug/L |   | 88   | 49 - 126    |
| Benzo[a]pyrene                | 100         | 79.98      |               | ug/L |   | 80   | 44 - 133    |
| Benzo[b]fluoranthene          | 100         | 88.96      |               | ug/L |   | 89   | 44 - 136    |
| Benzo[g,h,i]perylene          | 100         | 80.91      |               | ug/L |   | 81   | 42 - 135    |
| Benzo[k]fluoranthene          | 100         | 88.95      |               | ug/L |   | 89   | 49 - 134    |
| Benzyl alcohol                | 100         | 64.31      |               | ug/L |   | 64   | 46 - 123    |
| Bis(2-chloroethoxy)methane    | 100         | 74.63      |               | ug/L |   | 75   | 44 - 126    |
| Bis(2-chloroethyl)ether       | 100         | 71.27      |               | ug/L |   | 71   | 41 - 116    |
| bis (2-chloroisopropyl) ether | 100         | 74.37      |               | ug/L |   | 74   | 36 - 115    |
| Bis(2-ethylhexyl) phthalate   | 100         | 83.19      |               | ug/L |   | 83   | 46 - 138    |
| Butyl benzyl phthalate        | 100         | 83.94      |               | ug/L |   | 84   | 47 - 133    |
| Chrysene                      | 100         | 82.49      |               | ug/L |   | 82   | 50 - 128    |
| Dibenz(a,h)anthracene         | 100         | 72.34      |               | ug/L |   | 72   | 36 - 146    |
| Dibenzofuran                  | 100         | 70.53      |               | ug/L |   | 71   | 44 - 114    |
| Diethyl phthalate             | 100         | 78.81      |               | ug/L |   | 79   | 43 - 135    |
| Dimethyl phthalate            | 100         | 74.98      |               | ug/L |   | 75   | 46 - 129    |
| Di-n-butyl phthalate          | 100         | 82.40      |               | ug/L |   | 82   | 49 - 138    |
| Di-n-octyl phthalate          | 100         | 78.58      |               | ug/L |   | 79   | 33 - 148    |
| Diphenylamine                 | 85.0        | 72.04      |               | ug/L |   | 85   | 43 - 132    |
| Fluoranthene                  | 100         | 80.32      |               | ug/L |   | 80   | 49 - 132    |
| Fluorene                      | 100         | 72.81      |               | ug/L |   | 73   | 46 - 118    |
| Hexachlorobenzene             | 100         | 80.62      |               | ug/L |   | 81   | 42 - 134    |
| Hexachlorobutadiene           | 100         | 51.69      |               | ug/L |   | 52   | 29 - 110    |
| Hexachlorocyclopentadiene     | 100         | 37.69      |               | ug/L |   | 38   | 10 - 110    |
| Hexachloroethane              | 100         | 46.35      |               | ug/L |   | 46   | 25 - 110    |
| Indeno[1,2,3-cd]pyrene        | 100         | 74.20      |               | ug/L |   | 74   | 36 - 149    |
| Isophorone                    | 100         | 78.75      |               | ug/L |   | 79   | 46 - 126    |
| Nitrobenzene                  | 100         | 76.46      |               | ug/L |   | 76   | 42 - 123    |
| N-Nitrosodimethylamine        | 100         | 58.89      |               | ug/L |   | 59   | 37 - 110    |
| N-Nitrosodi-n-propylamine     | 100         | 79.55      |               | ug/L |   | 80   | 44 - 124    |
| N-Nitrosodiphenylamine        | 100         | 84.47      |               | ug/L |   | 84   | 43 - 132    |
| Pentachlorophenol             | 200         | 114.5      |               | ug/L |   | 57   | 28 - 142    |
| Phenanthrene                  | 100         | 99.86      |               | ug/L |   | 100  | 48 - 126    |
| Phenol                        | 100         | 50.26      |               | ug/L |   | 50   | 29 - 110    |
| Pyrene                        | 100         | 88.48      |               | ug/L |   | 88   | 45 - 134    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 2-Fluorophenol (Surr)       | 71            |               | 21 - 110 |
| Phenol-d5 (Surr)            | 60            |               | 21 - 110 |
| Nitrobenzene-d5 (Surr)      | 102           |               | 39 - 140 |
| 2-Fluorobiphenyl (Surr)     | 79            |               | 33 - 126 |
| 2,4,6-Tribromophenol (Surr) | 86            |               | 20 - 144 |
| Terphenyl-d14 (Surr)        | 104           |               | 13 - 150 |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-465420/2-A

Matrix: Water

Analysis Batch: 467052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 465420

| Analyte              | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,4-Phenylenediamine | 51.2        | <10.0      | *-            | ug/L |   | 0.8  | 20 - 120    |

Lab Sample ID: LCSD 310-465420/3-A

Matrix: Water

Analysis Batch: 466352

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                                | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------------------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| 1,2,4,5-Tetrachlorobenzene             | 100         | 69.78       |                | ug/L |   | 70   | 35 - 110    | 0   | 35        |
| 1,3,5-Trinitrobenzene                  | 51.2        | 55.16       |                | ug/L |   | 108  | 26 - 150    | 8   | 29        |
| 1,3-Dinitrobenzene                     | 100         | 94.75       |                | ug/L |   | 95   | 36 - 147    | 3   | 35        |
| 1,4-Naphthoquinone                     | 51.2        | 62.04       |                | ug/L |   | 121  | 38 - 137    | 17  | 27        |
| 1-Naphthylamine                        | 51.2        | 25.85       |                | ug/L |   | 50   | 10 - 110    | 27  | 35        |
| 2,3,4,6-Tetrachlorophenol              | 100         | 85.67       |                | ug/L |   | 86   | 32 - 142    | 6   | 35        |
| 2,4,5-Trichlorophenol                  | 100         | 89.99       |                | ug/L |   | 90   | 39 - 136    | 2   | 35        |
| 2,4,6-Trichlorophenol                  | 100         | 87.93       |                | ug/L |   | 88   | 35 - 141    | 2   | 35        |
| 2,4-Dichlorophenol                     | 100         | 89.70       |                | ug/L |   | 90   | 44 - 131    | 2   | 35        |
| 2,4-Dimethylphenol                     | 100         | 86.34       |                | ug/L |   | 86   | 30 - 128    | 1   | 35        |
| 2,4-Dinitrophenol                      | 200         | 139.8       |                | ug/L |   | 70   | 10 - 150    | 9   | 35        |
| 2,4-Dinitrotoluene                     | 100         | 94.78       |                | ug/L |   | 95   | 48 - 136    | 2   | 35        |
| 2,6-Dichlorophenol                     | 100         | 88.57       |                | ug/L |   | 89   | 41 - 131    | 0   | 35        |
| 2,6-Dinitrotoluene                     | 100         | 102.2       |                | ug/L |   | 102  | 49 - 135    | 5   | 35        |
| 2-Acetylaminofluorene                  | 51.2        | 73.11       |                | ug/L |   | 143  | 37 - 149    | 0   | 26        |
| 2-Chloronaphthalene                    | 100         | 72.80       |                | ug/L |   | 73   | 33 - 112    | 2   | 35        |
| 2-Chlorophenol                         | 100         | 77.35       |                | ug/L |   | 77   | 43 - 119    | 3   | 35        |
| 2-Methylnaphthalene                    | 100         | 72.85       |                | ug/L |   | 73   | 35 - 110    | 2   | 35        |
| 2-Methylphenol                         | 100         | 73.98       |                | ug/L |   | 74   | 47 - 114    | 1   | 35        |
| 2-Naphthylamine                        | 51.2        | 29.88       |                | ug/L |   | 58   | 18 - 111    | 11  | 35        |
| 2-Nitroaniline                         | 100         | 95.73       |                | ug/L |   | 96   | 48 - 135    | 1   | 35        |
| 2-Nitrophenol                          | 100         | 94.11       |                | ug/L |   | 94   | 36 - 144    | 7   | 35        |
| 3,3'-Dimethylbenzidine                 | 51.2        | 13.89       |                | ug/L |   | 27   | 10 - 147    | 9   | 35        |
| 3-Methylcholanthrene                   | 51.2        | 67.88       |                | ug/L |   | 133  | 13 - 140    | 3   | 35        |
| 3-Nitroaniline                         | 100         | 100.2       |                | ug/L |   | 100  | 38 - 142    | 5   | 35        |
| 4,6-Dinitro-2-methylphenol             | 200         | 186.9       |                | ug/L |   | 93   | 22 - 150    | 2   | 35        |
| 4-Aminobiphenyl                        | 51.2        | 30.24       |                | ug/L |   | 59   | 23 - 123    | 5   | 35        |
| 4-Bromophenyl phenyl ether             | 100         | 94.74       |                | ug/L |   | 95   | 41 - 131    | 3   | 35        |
| 4-Chloro-3-methylphenol                | 100         | 89.14       |                | ug/L |   | 89   | 51 - 132    | 1   | 35        |
| 4-Chloroaniline                        | 100         | 71.72       |                | ug/L |   | 72   | 13 - 143    | 4   | 35        |
| 4-Chlorophenyl phenyl ether            | 100         | 85.50       |                | ug/L |   | 86   | 44 - 118    | 1   | 35        |
| 4-Methylphenol (and/or 3-Methylphenol) | 100         | 72.97       |                | ug/L |   | 73   | 45 - 114    | 4   | 35        |
| 4-Nitroaniline                         | 100         | 92.47       |                | ug/L |   | 92   | 33 - 141    | 0   | 35        |
| 4-Nitrophenol                          | 200         | 111.4       |                | ug/L |   | 56   | 22 - 110    | 4   | 35        |
| 5-Nitro-o-toluidine                    | 51.2        | 51.03       |                | ug/L |   | 100  | 43 - 139    | 4   | 32        |
| 7,12-Dimethylbenz(a)anthracene         | 51.2        | 52.48       |                | ug/L |   | 102  | 47 - 129    | 3   | 29        |
| Acenaphthene                           | 100         | 83.01       |                | ug/L |   | 83   | 38 - 118    | 2   | 35        |
| Acenaphthylene                         | 100         | 77.80       |                | ug/L |   | 78   | 39 - 115    | 2   | 35        |
| Acetophenone                           | 100         | 73.16       |                | ug/L |   | 73   | 47 - 118    | 5   | 35        |
| Anthracene                             | 100         | 101.3       |                | ug/L |   | 101  | 49 - 127    | 0   | 35        |
| Benzo[a]anthracene                     | 100         | 106.2       |                | ug/L |   | 106  | 49 - 126    | 1   | 35        |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-465420/3-A

Matrix: Water

Analysis Batch: 466352

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                       | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit | D | %Rec | %Rec     |  | RPD |       |
|-------------------------------|----------------|----------------|-------------------|------|---|------|----------|--|-----|-------|
|                               |                |                |                   |      |   |      | Limits   |  |     | Limit |
| Benzo[a]pyrene                | 100            | 108.4          |                   | ug/L |   | 108  | 44 - 133 |  | 1   | 35    |
| Benzo[b]fluoranthene          | 100            | 100.2          |                   | ug/L |   | 100  | 44 - 136 |  | 0   | 35    |
| Benzo[g,h,i]perylene          | 100            | 113.5          |                   | ug/L |   | 113  | 42 - 135 |  | 3   | 35    |
| Benzo[k]fluoranthene          | 100            | 106.4          |                   | ug/L |   | 106  | 49 - 134 |  | 7   | 35    |
| Benzyl alcohol                | 100            | 74.11          |                   | ug/L |   | 74   | 46 - 123 |  | 1   | 35    |
| Bis(2-chloroethoxy)methane    | 100            | 83.16          |                   | ug/L |   | 83   | 44 - 126 |  | 1   | 35    |
| Bis(2-chloroethyl)ether       | 100            | 72.99          |                   | ug/L |   | 73   | 41 - 116 |  | 1   | 35    |
| bis (2-chloroisopropyl) ether | 100            | 68.58          |                   | ug/L |   | 69   | 36 - 115 |  | 3   | 35    |
| Bis(2-ethylhexyl) phthalate   | 100            | 115.9          |                   | ug/L |   | 116  | 46 - 138 |  | 0   | 35    |
| Butyl benzyl phthalate        | 100            | 106.0          |                   | ug/L |   | 106  | 47 - 133 |  | 1   | 35    |
| Chlorobenzilate               | 51.2           | 64.15          |                   | ug/L |   | 125  | 39 - 145 |  | 3   | 28    |
| Chrysene                      | 100            | 103.2          |                   | ug/L |   | 103  | 50 - 128 |  | 8   | 35    |
| Diallate                      | 44.8           | 47.26          |                   | ug/L |   | 105  | 40 - 135 |  | 0   | 29    |
| Dibenz(a,h)anthracene         | 100            | 113.6          |                   | ug/L |   | 114  | 36 - 146 |  | 1   | 35    |
| Dibenzofuran                  | 100            | 85.06          |                   | ug/L |   | 85   | 44 - 114 |  | 1   | 35    |
| Diethyl phthalate             | 100            | 95.10          |                   | ug/L |   | 95   | 43 - 135 |  | 0   | 35    |
| Dimethoate                    | 44.8           | 58.05          |                   | ug/L |   | 130  | 31 - 150 |  | 3   | 35    |
| Dimethyl phthalate            | 100            | 90.36          |                   | ug/L |   | 90   | 46 - 129 |  | 1   | 35    |
| Di-n-butyl phthalate          | 100            | 99.97          |                   | ug/L |   | 100  | 49 - 138 |  | 3   | 35    |
| Di-n-octyl phthalate          | 100            | 138.9          |                   | ug/L |   | 139  | 33 - 148 |  | 2   | 35    |
| Dinoseb                       | 51.2           | 52.71          |                   | ug/L |   | 103  | 22 - 150 |  | 2   | 35    |
| Diphenylamine                 | 85.0           | 81.20          |                   | ug/L |   | 96   | 43 - 132 |  | 0   | 35    |
| Disulfoton                    | 44.8           | 49.36          |                   | ug/L |   | 110  | 27 - 138 |  | 2   | 32    |
| Ethyl methanesulfonate        | 51.2           | 36.63          |                   | ug/L |   | 72   | 44 - 110 |  | 4   | 30    |
| Ethyl parathion               | 44.8           | 56.23          |                   | ug/L |   | 126  | 52 - 141 |  | 5   | 30    |
| Famphur                       | 44.8           | 85.18          | *+ E              | ug/L |   | 190  | 67 - 150 |  | 1   | 28    |
| Fluoranthene                  | 100            | 98.86          |                   | ug/L |   | 99   | 49 - 132 |  | 1   | 35    |
| Fluorene                      | 100            | 88.66          |                   | ug/L |   | 89   | 46 - 118 |  | 1   | 35    |
| Hexachlorobenzene             | 100            | 88.55          |                   | ug/L |   | 89   | 42 - 134 |  | 5   | 35    |
| Hexachlorobutadiene           | 100            | 61.09          |                   | ug/L |   | 61   | 29 - 110 |  | 10  | 35    |
| Hexachlorocyclopentadiene     | 100            | 46.64          |                   | ug/L |   | 47   | 10 - 110 |  | 3   | 35    |
| Hexachloroethane              | 100            | 49.24          |                   | ug/L |   | 49   | 25 - 110 |  | 4   | 35    |
| Hexachloropropene             | 51.2           | 27.68          |                   | ug/L |   | 54   | 10 - 110 |  | 18  | 35    |
| Indeno[1,2,3-cd]pyrene        | 100            | 120.7          |                   | ug/L |   | 121  | 36 - 149 |  | 4   | 35    |
| Isodrin                       | 51.2           | 47.13          |                   | ug/L |   | 92   | 50 - 122 |  | 4   | 28    |
| Isophorone                    | 100            | 87.08          |                   | ug/L |   | 87   | 46 - 126 |  | 1   | 35    |
| Isosafrole                    | 51.2           | 39.46          |                   | ug/L |   | 77   | 10 - 129 |  | 1   | 35    |
| Kepone                        | 44.8           | 40.56          |                   | ug/L |   | 91   | 10 - 150 |  | 3   | 35    |
| Methapyrilene                 | 44.8           | 22.31          | *1                | ug/L |   | 50   | 10 - 110 |  | 59  | 35    |
| Methyl methanesulfonate       | 51.2           | 32.95          |                   | ug/L |   | 64   | 16 - 110 |  | 6   | 28    |
| Methyl parathion              | 44.8           | 59.11          |                   | ug/L |   | 132  | 49 - 150 |  | 1   | 29    |
| Nitrobenzene                  | 100            | 76.19          |                   | ug/L |   | 76   | 42 - 123 |  | 2   | 35    |
| N-Nitrosodiethylamine         | 51.2           | 36.71          |                   | ug/L |   | 72   | 51 - 116 |  | 1   | 27    |
| N-Nitrosodimethylamine        | 100            | 55.08          |                   | ug/L |   | 55   | 37 - 110 |  | 2   | 35    |
| N-Nitrosodi-n-butylamine      | 51.2           | 42.38          |                   | ug/L |   | 83   | 49 - 135 |  | 10  | 28    |
| N-Nitrosodi-n-propylamine     | 100            | 77.92          |                   | ug/L |   | 78   | 44 - 124 |  | 4   | 35    |
| N-Nitrosodiphenylamine        | 100            | 92.77          |                   | ug/L |   | 93   | 43 - 132 |  | 1   | 35    |
| N-Nitrosomethylethylamine     | 51.2           | 31.78          |                   | ug/L |   | 62   | 43 - 114 |  | 0   | 29    |
| N-Nitrosopiperidine           | 51.2           | 37.56          |                   | ug/L |   | 73   | 50 - 120 |  | 2   | 26    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-465420/3-A

Matrix: Water

Analysis Batch: 466352

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                           | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|-----------------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| N-Nitrosopyrrolidine              | 51.2        | 41.72       |                | ug/L |   | 81   | 47 - 129    | 0   | 31        |
| o,o',o''-Triethylphosphorothioate | 44.8        | 35.55       |                | ug/L |   | 79   | 34 - 125    | 3   | 33        |
| o-Toluidine                       | 51.2        | 25.42       |                | ug/L |   | 50   | 19 - 128    | 11  | 35        |
| p-Dimethylamino azobenzene        | 51.2        | 51.11       |                | ug/L |   | 100  | 45 - 133    | 6   | 31        |
| Pentachlorobenzene                | 51.2        | 37.66       |                | ug/L |   | 74   | 27 - 112    | 4   | 35        |
| Pentachloronitrobenzene           | 51.2        | 52.17       |                | ug/L |   | 102  | 45 - 132    | 8   | 29        |
| Pentachlorophenol                 | 200         | 165.6       |                | ug/L |   | 83   | 28 - 142    | 3   | 35        |
| Phenacetin                        | 51.2        | 56.50       |                | ug/L |   | 110  | 51 - 139    | 1   | 29        |
| Phenanthrene                      | 100         | 97.81       |                | ug/L |   | 98   | 48 - 126    | 2   | 35        |
| Phenol                            | 100         | 55.45       |                | ug/L |   | 55   | 29 - 110    | 1   | 35        |
| Phorate                           | 44.8        | 47.50       |                | ug/L |   | 106  | 21 - 147    | 1   | 35        |
| Pronamide                         | 51.2        | 57.26       |                | ug/L |   | 112  | 52 - 135    | 4   | 28        |
| Pyrene                            | 100         | 101.7       |                | ug/L |   | 102  | 45 - 134    | 1   | 35        |
| Safrole                           | 44.8        | 33.12       |                | ug/L |   | 74   | 26 - 117    | 0   | 35        |
| Thionazin                         | 44.8        | 47.63       |                | ug/L |   | 106  | 48 - 135    | 5   | 30        |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 2-Fluorophenol (Surr)       | 59             |                | 21 - 110 |
| Phenol-d5 (Surr)            | 50             |                | 21 - 110 |
| Nitrobenzene-d5 (Surr)      | 74             |                | 39 - 140 |
| 2-Fluorobiphenyl (Surr)     | 74             |                | 33 - 126 |
| 2,4,6-Tribromophenol (Surr) | 100            |                | 20 - 144 |
| Terphenyl-d14 (Surr)        | 102            |                | 13 - 150 |

Lab Sample ID: LCSD 310-465420/3-A

Matrix: Water

Analysis Batch: 466781

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                    | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| 1,2,4,5-Tetrachlorobenzene | 100         | 64.61       |                | ug/L |   |      |             |     |           |
| 1,3-Dinitrobenzene         | 100         | 94.43       |                | ug/L |   |      |             |     |           |
| 2,3,4,6-Tetrachlorophenol  | 100         | 98.95       |                | ug/L |   |      |             |     |           |
| 2,4,5-Trichlorophenol      | 100         | 42.26       |                | ug/L |   |      |             |     |           |
| 2,4,6-Trichlorophenol      | 100         | 95.14       |                | ug/L |   |      |             |     |           |
| 2,4-Dichlorophenol         | 100         | 70.97       |                | ug/L |   |      |             |     |           |
| 2,4-Dimethylphenol         | 100         | 73.47       |                | ug/L |   |      |             |     |           |
| 2,4-Dinitrophenol          | 200         | 91.75       |                | ug/L |   |      |             |     |           |
| 2,4-Dinitrotoluene         | 100         | 79.80       |                | ug/L |   |      |             |     |           |
| 2,6-Dichlorophenol         | 100         | 73.53       |                | ug/L |   |      |             |     |           |
| 2,6-Dinitrotoluene         | 100         | 77.98       |                | ug/L |   |      |             |     |           |
| 2-Chloronaphthalene        | 100         | 93.54       |                | ug/L |   |      |             |     |           |
| 2-Chlorophenol             | 100         | 68.11       |                | ug/L |   |      |             |     |           |
| 2-Methylnaphthalene        | 100         | 67.01       |                | ug/L |   |      |             |     |           |
| 2-Methylphenol             | 100         | 67.65       |                | ug/L |   |      |             |     |           |
| 2-Nitroaniline             | 100         | 77.49       |                | ug/L |   |      |             |     |           |
| 2-Nitrophenol              | 100         | 73.07       |                | ug/L |   |      |             |     |           |
| 3-Nitroaniline             | 100         | 77.53       |                | ug/L |   |      |             |     |           |
| 4,6-Dinitro-2-methylphenol | 200         | 152.8       |                | ug/L |   |      |             |     |           |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-465420/3-A

Matrix: Water

Analysis Batch: 466781

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 465420

| Analyte                                | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------------------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| 4-Bromophenyl phenyl ether             | 100         | 80.81       |                | ug/L |   |      |             |     |           |
| 4-Chloro-3-methylphenol                | 100         | 78.59       |                | ug/L |   |      |             |     |           |
| 4-Chloroaniline                        | 100         | 34.46       |                | ug/L |   |      |             |     |           |
| 4-Chlorophenyl phenyl ether            | 100         | 70.35       |                | ug/L |   |      |             |     |           |
| 4-Methylphenol (and/or 3-Methylphenol) | 100         | 67.37       |                | ug/L |   |      |             |     |           |
| 4-Nitroaniline                         | 100         | 74.33       |                | ug/L |   |      |             |     |           |
| 4-Nitrophenol                          | 200         | 95.81       |                | ug/L |   |      |             |     |           |
| Acenaphthene                           | 100         | 70.83       |                | ug/L |   |      |             |     |           |
| Acenaphthylene                         | 100         | 69.79       |                | ug/L |   |      |             |     |           |
| Acetophenone                           | 100         | 76.24       |                | ug/L |   |      |             |     |           |
| Anthracene                             | 100         | 75.61       |                | ug/L |   |      |             |     |           |
| Benzo[a]anthracene                     | 100         | 85.00       |                | ug/L |   |      |             |     |           |
| Benzo[a]pyrene                         | 100         | 79.84       |                | ug/L |   |      |             |     |           |
| Benzo[b]fluoranthene                   | 100         | 83.43       |                | ug/L |   |      |             |     |           |
| Benzo[g,h,i]perylene                   | 100         | 81.22       |                | ug/L |   |      |             |     |           |
| Benzo[k]fluoranthene                   | 100         | 87.97       |                | ug/L |   |      |             |     |           |
| Benzyl alcohol                         | 100         | 66.32       |                | ug/L |   |      |             |     |           |
| Bis(2-chloroethoxy)methane             | 100         | 75.10       |                | ug/L |   |      |             |     |           |
| Bis(2-chloroethyl)ether                | 100         | 70.23       |                | ug/L |   |      |             |     |           |
| bis (2-chloroisopropyl) ether          | 100         | 73.85       |                | ug/L |   |      |             |     |           |
| Bis(2-ethylhexyl) phthalate            | 100         | 82.68       |                | ug/L |   |      |             |     |           |
| Butyl benzyl phthalate                 | 100         | 83.85       |                | ug/L |   |      |             |     |           |
| Chrysene                               | 100         | 84.40       |                | ug/L |   |      |             |     |           |
| Dibenz(a,h)anthracene                  | 100         | 70.10       |                | ug/L |   |      |             |     |           |
| Dibenzofuran                           | 100         | 72.78       |                | ug/L |   |      |             |     |           |
| Diethyl phthalate                      | 100         | 78.89       |                | ug/L |   |      |             |     |           |
| Dimethyl phthalate                     | 100         | 76.26       |                | ug/L |   |      |             |     |           |
| Di-n-butyl phthalate                   | 100         | 83.39       |                | ug/L |   |      |             |     |           |
| Di-n-octyl phthalate                   | 100         | 75.42       |                | ug/L |   |      |             |     |           |
| Diphenylamine                          | 85.0        | 72.03       |                | ug/L |   |      |             |     |           |
| Fluoranthene                           | 100         | 81.20       |                | ug/L |   |      |             |     |           |
| Fluorene                               | 100         | 72.19       |                | ug/L |   |      |             |     |           |
| Hexachlorobenzene                      | 100         | 83.39       |                | ug/L |   |      |             |     |           |
| Hexachlorobutadiene                    | 100         | 56.48       |                | ug/L |   |      |             |     |           |
| Hexachlorocyclopentadiene              | 100         | 39.54       |                | ug/L |   |      |             |     |           |
| Hexachloroethane                       | 100         | 50.38       |                | ug/L |   |      |             |     |           |
| Indeno[1,2,3-cd]pyrene                 | 100         | 74.81       |                | ug/L |   |      |             |     |           |
| Isophorone                             | 100         | 77.79       |                | ug/L |   |      |             |     |           |
| Nitrobenzene                           | 100         | 76.48       |                | ug/L |   |      |             |     |           |
| N-Nitrosodimethylamine                 | 100         | 58.87       |                | ug/L |   |      |             |     |           |
| N-Nitrosodi-n-propylamine              | 100         | 78.66       |                | ug/L |   |      |             |     |           |
| N-Nitrosodiphenylamine                 | 100         | 84.52       |                | ug/L |   |      |             |     |           |
| Pentachlorophenol                      | 200         | 101.6       |                | ug/L |   |      |             |     |           |
| Phenanthrene                           | 100         | 106.1       |                | ug/L |   |      |             |     |           |
| Phenol                                 | 100         | 52.07       |                | ug/L |   |      |             |     |           |
| Pyrene                                 | 100         | 87.37       |                | ug/L |   |      |             |     |           |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-465420/3-A

Matrix: Water

Analysis Batch: 466781

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 465420

| Surrogate                   | LCSD<br>%Recovery | LCSD<br>Qualifier | Limits |
|-----------------------------|-------------------|-------------------|--------|
| 2-Fluorophenol (Surr)       |                   |                   |        |
| Phenol-d5 (Surr)            |                   |                   |        |
| Nitrobenzene-d5 (Surr)      |                   |                   |        |
| 2-Fluorobiphenyl (Surr)     |                   |                   |        |
| 2,4,6-Tribromophenol (Surr) |                   |                   |        |
| Terphenyl-d14 (Surr)        |                   |                   |        |

Lab Sample ID: LCSD 310-465420/3-A

Matrix: Water

Analysis Batch: 467052

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 465420

| Analyte              | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|----------------------|----------------|----------------|-------------------|------|---|------|----------------|-----|--------------|
| 1,4-Phenylenediamine | 51.2           | <10.0          | *- *1             | ug/L |   | 0.4  | 20 - 120       | 62  | 35           |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: LB 310-465673/1-D

Matrix: Water

Analysis Batch: 466055

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 466058

| Analyte                       | LB<br>Result    | LB<br>Qualifier | RL       | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------------|-----------------|----------|-------|------|---|----------------|----------------|---------|
| PCB-1016                      | <1.85           |                 | 1.85     | 0.757 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:54 | 1       |
| PCB-1221                      | <1.85           |                 | 1.85     | 0.757 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:54 | 1       |
| PCB-1232                      | <1.85           |                 | 1.85     | 0.757 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:54 | 1       |
| PCB-1242                      | <1.85           |                 | 1.85     | 0.757 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:54 | 1       |
| PCB-1248                      | <1.85           |                 | 1.85     | 0.637 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:54 | 1       |
| PCB-1254                      | <1.85           |                 | 1.85     | 0.637 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:54 | 1       |
| PCB-1260                      | <1.85           |                 | 1.85     | 0.637 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:54 | 1       |
| Surrogate                     | LB<br>%Recovery | LB<br>Qualifier | Limits   |       |      |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 61              |                 | 10 - 150 |       |      |   | 09/09/25 09:04 | 09/09/25 12:54 | 1       |
| Tetrachloro-m-xylene          | 82              |                 | 17 - 150 |       |      |   | 09/09/25 09:04 | 09/09/25 12:54 | 1       |

Lab Sample ID: MB 310-466058/1-A

Matrix: Water

Analysis Batch: 466055

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 466058

| Analyte                       | MB<br>Result    | MB<br>Qualifier | RL       | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------------|-----------------|----------|-------|------|---|----------------|----------------|---------|
| PCB-1016                      | <1.96           |                 | 1.96     | 0.804 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:42 | 1       |
| PCB-1221                      | <1.96           |                 | 1.96     | 0.804 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:42 | 1       |
| PCB-1232                      | <1.96           |                 | 1.96     | 0.804 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:42 | 1       |
| PCB-1242                      | <1.96           |                 | 1.96     | 0.804 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:42 | 1       |
| PCB-1248                      | <1.96           |                 | 1.96     | 0.676 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:42 | 1       |
| PCB-1254                      | <1.96           |                 | 1.96     | 0.676 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:42 | 1       |
| PCB-1260                      | <1.96           |                 | 1.96     | 0.676 | ug/L |   | 09/09/25 09:04 | 09/09/25 12:42 | 1       |
| Surrogate                     | MB<br>%Recovery | MB<br>Qualifier | Limits   |       |      |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 80              |                 | 10 - 150 |       |      |   | 09/09/25 09:04 | 09/09/25 12:42 | 1       |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 310-466058/1-A

Matrix: Water

Analysis Batch: 466055

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 466058

| Surrogate            | MB<br>%Recovery | MB<br>Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------------|-----------------|-----------------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 102             |                 | 17 - 150 | 09/09/25 09:04 | 09/09/25 12:42 | 1       |

Lab Sample ID: LCS 310-466058/25-A

Matrix: Water

Analysis Batch: 466055

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 466058

| Analyte  | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|----------|----------------|---------------|------------------|------|---|------|----------------|
| PCB-1016 | 27.9           | 26.20         |                  | ug/L |   | 94   | 25 - 150       |
| PCB-1260 | 27.9           | 22.79         |                  | ug/L |   | 82   | 14 - 150       |

| Surrogate                     | LCS<br>%Recovery | LCS<br>Qualifier | Limits   |
|-------------------------------|------------------|------------------|----------|
| DCB Decachlorobiphenyl (Surr) | 78               |                  | 10 - 150 |
| Tetrachloro-m-xylene          | 94               |                  | 17 - 150 |

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-465852/1-A

Matrix: Water

Analysis Batch: 466340

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 465852

| Analyte   | MB<br>Result | MB<br>Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------------|-----------------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | <0.00200     |                 | 0.00200  | 0.00100  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Arsenic   | <0.00200     |                 | 0.00200  | 0.000530 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Barium    | <0.00200     |                 | 0.00200  | 0.000660 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Beryllium | <0.00100     |                 | 0.00100  | 0.000330 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Cadmium   | <0.000200    |                 | 0.000200 | 0.000100 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Chromium  | <0.00500     |                 | 0.00500  | 0.00180  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Cobalt    | <0.000500    |                 | 0.000500 | 0.000170 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Copper    | <0.00500     |                 | 0.00500  | 0.00320  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Lead      | <0.000500    |                 | 0.000500 | 0.000330 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Nickel    | <0.00500     |                 | 0.00500  | 0.00230  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Selenium  | <0.00500     |                 | 0.00500  | 0.00140  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Silver    | <0.00100     |                 | 0.00100  | 0.000500 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Thallium  | <0.00100     |                 | 0.00100  | 0.000570 | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Vanadium  | <0.00500     |                 | 0.00500  | 0.00170  | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |
| Zinc      | <0.0200      |                 | 0.0200   | 0.0130   | mg/L |   | 09/08/25 10:00 | 09/10/25 15:35 | 1       |

Lab Sample ID: LCS 310-465852/2-A

Matrix: Water

Analysis Batch: 466340

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 465852

| Analyte   | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|-----------|----------------|---------------|------------------|------|---|------|----------------|
| Antimony  | 0.200          | 0.2133        |                  | mg/L |   | 107  | 80 - 120       |
| Arsenic   | 0.200          | 0.2026        |                  | mg/L |   | 101  | 80 - 120       |
| Barium    | 0.100          | 0.09827       |                  | mg/L |   | 98   | 80 - 120       |
| Beryllium | 0.100          | 0.09706       |                  | mg/L |   | 97   | 80 - 120       |
| Cadmium   | 0.100          | 0.09789       |                  | mg/L |   | 98   | 80 - 120       |
| Chromium  | 0.100          | 0.09945       |                  | mg/L |   | 99   | 80 - 120       |
| Cobalt    | 0.100          | 0.1055        |                  | mg/L |   | 105  | 80 - 120       |

Eurofins Cedar Falls

## QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

### Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-465852/2-A

Matrix: Water

Analysis Batch: 466340

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 465852

| Analyte  | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|----------|----------------|---------------|------------------|------|---|------|----------------|
| Copper   | 0.200          | 0.2091        |                  | mg/L |   | 105  | 80 - 120       |
| Lead     | 0.200          | 0.2073        |                  | mg/L |   | 104  | 80 - 120       |
| Nickel   | 0.200          | 0.2044        |                  | mg/L |   | 102  | 80 - 120       |
| Selenium | 0.400          | 0.3828        |                  | mg/L |   | 96   | 80 - 120       |
| Silver   | 0.100          | 0.1068        |                  | mg/L |   | 107  | 80 - 120       |
| Thallium | 0.100          | 0.09807       |                  | mg/L |   | 98   | 80 - 120       |
| Vanadium | 0.100          | 0.09750       |                  | mg/L |   | 98   | 80 - 120       |
| Zinc     | 0.200          | 0.1848        |                  | mg/L |   | 92   | 80 - 120       |

## QC Association Summary

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

### GC/MS VOA

#### Analysis Batch: 465659

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|--------|------------|
| 310-314562-3     | PZ-2A              | Total/NA  | Ground Water | 8260D  |            |
| MB 310-465659/5  | Method Blank       | Total/NA  | Water        | 8260D  |            |
| LCS 310-465659/6 | Lab Control Sample | Total/NA  | Water        | 8260D  |            |
| LCS 310-465659/7 | Lab Control Sample | Total/NA  | Water        | 8260D  |            |

### GC/MS Semi VOA

#### Prep Batch: 465420

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix       | Method | Prep Batch |
|---------------------|------------------------|-----------|--------------|--------|------------|
| 310-314562-1        | MW-2                   | Total/NA  | Ground Water | 3510C  |            |
| 310-314562-2        | MW-8                   | Total/NA  | Ground Water | 3510C  |            |
| MB 310-465420/1-A   | Method Blank           | Total/NA  | Water        | 3510C  |            |
| LCS 310-465420/2-A  | Lab Control Sample     | Total/NA  | Water        | 3510C  |            |
| LCSD 310-465420/3-A | Lab Control Sample Dup | Total/NA  | Water        | 3510C  |            |

#### Analysis Batch: 466255

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| MB 310-465420/1-A | Method Blank     | Total/NA  | Water  | 8270E  | 465420     |

#### Analysis Batch: 466352

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix       | Method | Prep Batch |
|---------------------|------------------------|-----------|--------------|--------|------------|
| 310-314562-1        | MW-2                   | Total/NA  | Ground Water | 8270E  | 465420     |
| 310-314562-2        | MW-8                   | Total/NA  | Ground Water | 8270E  | 465420     |
| MB 310-465420/1-A   | Method Blank           | Total/NA  | Water        | 8270E  | 465420     |
| LCS 310-465420/2-A  | Lab Control Sample     | Total/NA  | Water        | 8270E  | 465420     |
| LCSD 310-465420/3-A | Lab Control Sample Dup | Total/NA  | Water        | 8270E  | 465420     |

#### Analysis Batch: 466781

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| LCS 310-465420/2-A  | Lab Control Sample     | Total/NA  | Water  | 8270E  | 465420     |
| LCSD 310-465420/3-A | Lab Control Sample Dup | Total/NA  | Water  | 8270E  | 465420     |

#### Analysis Batch: 467052

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix       | Method | Prep Batch |
|---------------------|------------------------|-----------|--------------|--------|------------|
| 310-314562-1        | MW-2                   | Total/NA  | Ground Water | 8270E  | 465420     |
| 310-314562-2        | MW-8                   | Total/NA  | Ground Water | 8270E  | 465420     |
| MB 310-465420/1-A   | Method Blank           | Total/NA  | Water        | 8270E  | 465420     |
| LCS 310-465420/2-A  | Lab Control Sample     | Total/NA  | Water        | 8270E  | 465420     |
| LCSD 310-465420/3-A | Lab Control Sample Dup | Total/NA  | Water        | 8270E  | 465420     |

### GC Semi VOA

#### Leach Batch: 465673

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| LB 310-465673/1-D | Method Blank     | Total/NA  | Water  | 1311   |            |

#### Analysis Batch: 466055

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix       | Method | Prep Batch |
|-------------------|------------------|-----------|--------------|--------|------------|
| 310-314562-1      | MW-2             | Total/NA  | Ground Water | 8082A  | 466058     |
| 310-314562-2      | MW-8             | Total/NA  | Ground Water | 8082A  | 466058     |
| LB 310-465673/1-D | Method Blank     | Total/NA  | Water        | 8082A  | 466058     |
| MB 310-466058/1-A | Method Blank     | Total/NA  | Water        | 8082A  | 466058     |

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## QC Association Summary

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

### GC Semi VOA (Continued)

#### Analysis Batch: 466055 (Continued)

| Lab Sample ID       | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| LCS 310-466058/25-A | Lab Control Sample | Total/NA  | Water  | 8082A  | 466058     |

#### Prep Batch: 466058

| Lab Sample ID       | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|---------------------|--------------------|-----------|--------------|--------|------------|
| 310-314562-1        | MW-2               | Total/NA  | Ground Water | 3511   | 465673     |
| 310-314562-2        | MW-8               | Total/NA  | Ground Water | 3511   |            |
| LB 310-465673/1-D   | Method Blank       | Total/NA  | Water        | 3511   |            |
| MB 310-466058/1-A   | Method Blank       | Total/NA  | Water        | 3511   |            |
| LCS 310-466058/25-A | Lab Control Sample | Total/NA  | Water        | 3511   |            |

### Metals

#### Prep Batch: 465852

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-314562-3       | PZ-2A              | Total/NA  | Ground Water | 3005A  | 465852     |
| MB 310-465852/1-A  | Method Blank       | Total/NA  | Water        | 3005A  |            |
| LCS 310-465852/2-A | Lab Control Sample | Total/NA  | Water        | 3005A  |            |

#### Analysis Batch: 466340

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-314562-3       | PZ-2A              | Total/NA  | Ground Water | 6020B  | 465852     |
| MB 310-465852/1-A  | Method Blank       | Total/NA  | Water        | 6020B  | 465852     |
| LCS 310-465852/2-A | Lab Control Sample | Total/NA  | Water        | 6020B  | 465852     |



## Lab Chronicle

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

### Client Sample ID: MW-2

### Lab Sample ID: 310-314562-1

Date Collected: 08/28/25 12:57

Matrix: Ground Water

Date Received: 08/29/25 16:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Prep       | 3510C        |     |                 | 465420       | J5BR    | EET CF | 09/03/25 07:56       |
| Total/NA  | Analysis   | 8270E        |     | 1               | 466352       | V7YZ    | EET CF | 09/12/25 04:21       |
| Total/NA  | Prep       | 3510C        |     |                 | 465420       | J5BR    | EET CF | 09/03/25 07:56       |
| Total/NA  | Analysis   | 8270E        |     | 1               | 467052       | V7YZ    | EET CF | 09/17/25 23:25       |
| Total/NA  | Prep       | 3511         |     |                 | 466058       | BW2O    | EET CF | 09/09/25 09:04       |
| Total/NA  | Analysis   | 8082A        |     | 1               | 466055       | BW2O    | EET CF | 09/09/25 16:53       |

### Client Sample ID: MW-8

### Lab Sample ID: 310-314562-2

Date Collected: 08/28/25 12:14

Matrix: Ground Water

Date Received: 08/29/25 16:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Prep       | 3510C        |     |                 | 465420       | J5BR    | EET CF | 09/03/25 07:56       |
| Total/NA  | Analysis   | 8270E        |     | 1               | 466352       | V7YZ    | EET CF | 09/12/25 04:47       |
| Total/NA  | Prep       | 3510C        |     |                 | 465420       | J5BR    | EET CF | 09/03/25 07:56       |
| Total/NA  | Analysis   | 8270E        |     | 1               | 467052       | V7YZ    | EET CF | 09/17/25 23:51       |
| Total/NA  | Prep       | 3511         |     |                 | 466058       | BW2O    | EET CF | 09/09/25 09:04       |
| Total/NA  | Analysis   | 8082A        |     | 1               | 466055       | BW2O    | EET CF | 09/09/25 17:06       |

### Client Sample ID: PZ-2A

### Lab Sample ID: 310-314562-3

Date Collected: 08/28/25 13:27

Matrix: Ground Water

Date Received: 08/29/25 16:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 465659       | FE5V    | EET CF | 09/05/25 07:24       |
| Total/NA  | Prep       | 3005A        |     |                 | 465852       | QTZ5    | EET CF | 09/08/25 10:00       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 466340       | NFT2    | EET CF | 09/10/25 15:58       |

#### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

Laboratory: Eurofins Cedar Falls

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Iowa      | State   | 007                   | 12-01-25        |

- 1
- 2
- 3
- 4
- 5
- 6
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- 8
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- 10
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- 13
- 14
- 15

## Method Summary

Client: SCS Engineers  
Project/Site: Woodbury County Landfill Resamples

Job ID: 310-314562-1  
SDG: MW-2, MW-8, PZ-2A

| Method | Method Description                                     | Protocol | Laboratory |
|--------|--------------------------------------------------------|----------|------------|
| 8260D  | Volatile Organic Compounds by GC/MS                    | SW846    | EET CF     |
| 8270E  | Semivolatile Organic Compounds (GC/MS)                 | SW846    | EET CF     |
| 8082A  | Polychlorinated Biphenyls (PCBs) by Gas Chromatography | SW846    | EET CF     |
| 6020B  | Metals (ICP/MS)                                        | SW846    | EET CF     |
| 3005A  | Preparation, Total Metals                              | SW846    | EET CF     |
| 3510C  | Liquid-Liquid Extraction (Separatory Funnel)           | SW846    | EET CF     |
| 3511   | Microextraction of Organic Compounds                   | SW846    | EET CF     |
| 5030B  | Purge and Trap                                         | SW846    | EET CF     |

### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Environment Testing  
America



310-314562 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

|                                                                                                                                                                                                                                                                                                                                                                 |                             |                                                                     |                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Client Information                                                                                                                                                                                                                                                                                                                                              |                             |                                                                     |                                                                                              |
| Client: <u>SCS</u>                                                                                                                                                                                                                                                                                                                                              |                             |                                                                     |                                                                                              |
| City/State:                                                                                                                                                                                                                                                                                                                                                     | CITY <u>West Des Moines</u> | STATE <u>IA</u>                                                     | Project                                                                                      |
| Receipt Information                                                                                                                                                                                                                                                                                                                                             |                             |                                                                     |                                                                                              |
| Date/Time Received:                                                                                                                                                                                                                                                                                                                                             | DATE <u>8/24/25</u>         | TIME <u>1630</u>                                                    | Received By <u>BT</u>                                                                        |
| Delivery Type <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other _____ |                             |                                                                     |                                                                                              |
| Condition of Cooler/Containers                                                                                                                                                                                                                                                                                                                                  |                             |                                                                     |                                                                                              |
| Sample(s) received in Cooler?                                                                                                                                                                                                                                                                                                                                   |                             | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes Cooler ID                                                                             |
| Multiple Coolers?                                                                                                                                                                                                                                                                                                                                               |                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes Cooler # _____ of _____                                                               |
| Cooler Custody Seals Present?                                                                                                                                                                                                                                                                                                                                   |                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Sample Custody Seals Present?                                                                                                                                                                                                                                                                                                                                   |                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trip Blank Present?                                                                                                                                                                                                                                                                                                                                             |                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes Which VOA samples are in cooler? ↓                                                    |
| Temperature Record                                                                                                                                                                                                                                                                                                                                              |                             |                                                                     |                                                                                              |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other _____ <input type="checkbox"/> NONE                                                                                                                                                                      |                             |                                                                     |                                                                                              |
| Thermometer ID: <u>BB</u>                                                                                                                                                                                                                                                                                                                                       |                             | Correction Factor (°C): <u>±0</u>                                   |                                                                                              |
| • Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                                  |                             |                                                                     |                                                                                              |
| Uncorrected Temp (°C): <u>0.6</u>                                                                                                                                                                                                                                                                                                                               |                             | Corrected Temp (°C) <u>0.6</u>                                      |                                                                                              |
| • Sample Container Temperature                                                                                                                                                                                                                                                                                                                                  |                             |                                                                     |                                                                                              |
| Container(s) used                                                                                                                                                                                                                                                                                                                                               | CONTAINER 1                 |                                                                     | CONTAINER 2                                                                                  |
| Uncorrected Temp (°C):                                                                                                                                                                                                                                                                                                                                          |                             |                                                                     |                                                                                              |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                            |                             |                                                                     |                                                                                              |
| Exceptions Noted                                                                                                                                                                                                                                                                                                                                                |                             |                                                                     |                                                                                              |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                             |                             |                                                                     |                                                                                              |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                |                             |                                                                     |                                                                                              |
| NOTE If yes, contact PM before proceeding If no, proceed with login                                                                                                                                                                                                                                                                                             |                             |                                                                     |                                                                                              |
| Additional Comments                                                                                                                                                                                                                                                                                                                                             |                             |                                                                     |                                                                                              |
| <u>Nothing in IL UT <del>to</del> GH (saturday)</u>                                                                                                                                                                                                                                                                                                             |                             |                                                                     |                                                                                              |
| <u>2 empty ur vial</u>                                                                                                                                                                                                                                                                                                                                          |                             |                                                                     |                                                                                              |

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

| Project Manager: Ben Madson<br>Email smarczewski@scsengineers.com                                                                                                                                   |                                                          |                 |               |           |         | Site Contact: Sean Marcze |    | Date:                           |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------|---------------|-----------|---------|---------------------------|----|---------------------------------|-----|
| Client Contact                                                                                                                                                                                      |                                                          |                 |               |           |         | Lab Contact: S. Miller    |    | Carrier:                        |     |
| SCS Engineers<br>1690 All-State Court, Suite 100<br>West Des Moines, IA 50265<br>515-631-6160                                                                                                       |                                                          |                 |               |           |         |                           |    |                                 |     |
| Analysis Turnaround Time                                                                                                                                                                            |                                                          |                 |               |           |         |                           |    |                                 |     |
| <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS                                                                                                                        |                                                          |                 |               |           |         |                           |    |                                 |     |
| Other:<br><input type="checkbox"/> 2 weeks<br><input type="checkbox"/> 1 week<br><input type="checkbox"/> 2 days<br><input type="checkbox"/> 1 day                                                  |                                                          |                 |               |           |         |                           |    |                                 |     |
| Sample Identification                                                                                                                                                                               |                                                          |                 |               |           |         | Sample Date               |    | Sample Type<br>(C=Comp, G=Grab) |     |
| # of Cont.                                                                                                                                                                                          |                                                          |                 |               |           |         | Matrix                    |    | # of Cont.                      |     |
| MW-2                                                                                                                                                                                                | 8/28/25                                                  | 12 57           | G             | GW        |         |                           | X  |                                 |     |
| MW-8                                                                                                                                                                                                | 8/28/25                                                  | 12 14           | G             | GW        |         |                           | X  |                                 |     |
| PZ-2A                                                                                                                                                                                               | 8/28/25                                                  | 13 27           | G             | GW        |         |                           | X  |                                 |     |
| Trip Blank                                                                                                                                                                                          |                                                          |                 |               |           |         |                           | X  |                                 |     |
| Preservation Used: 1= Ice, 2= HCl; 3= H <sub>2</sub> SO <sub>4</sub> ; 4= HNO <sub>3</sub> ; 5= NaOH; 6= Other                                                                                      |                                                          |                 |               |           |         |                           |    |                                 |     |
| Possible Hazard Identification:<br>Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample |                                                          |                 |               |           |         |                           |    |                                 |     |
| <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown                    |                                                          |                 |               |           |         |                           |    |                                 |     |
| Special Instructions/QC Requirements & Comments:                                                                                                                                                    |                                                          |                 |               |           |         |                           |    |                                 |     |
| Custody Seals Intact                                                                                                                                                                                | <input type="checkbox"/> Yes <input type="checkbox"/> No | Custody Seal No |               |           |         |                           |    |                                 |     |
| Relinquished by                                                                                                                                                                                     | <i>[Signature]</i>                                       | Company         | SCS Engineers | Date/Time | 8/28/25 | Received by               | GM | Company                         | SCS |
| Relinquished by                                                                                                                                                                                     |                                                          | Company         |               | Date/Time |         | Received by               |    | Company                         |     |
| Relinquished by                                                                                                                                                                                     |                                                          | Company         |               | Date/Time |         | Received in Laboratory by |    | Company                         |     |

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-314562-1  
SDG Number: MW-2, MW-8, PZ-2A

**Login Number: 314562**

**List Number: 1**

**Creator: Homolar, Dana J**

**List Source: Eurofins Cedar Falls**

| Question                                                                                 | Answer | Comment                              |
|------------------------------------------------------------------------------------------|--------|--------------------------------------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | N/A    |                                      |
| The cooler's custody seal, if present, is intact.                                        | N/A    |                                      |
| Sample custody seals, if present, are 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 is acceptable.                                                        | True   |                                      |
| Cooler Temperature is recorded.                                                          | True   |                                      |
| COC is present.                                                                          | True   |                                      |
| COC is filled out in ink and legible.                                                    | True   |                                      |
| COC is filled out with all pertinent information.                                        | True   |                                      |
| Is the Field Sampler's name present on COC?                                              | True   |                                      |
| There are no discrepancies between the containers received and the COC.                  | False  | MW-2 on COC received MW-3 containers |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | True   |                                      |
| Sample containers have legible labels.                                                   | True   |                                      |
| Containers are not broken or leaking.                                                    | N/A    |                                      |
| Sample collection date/times are provided.                                               | True   |                                      |
| Appropriate sample containers are used.                                                  | True   |                                      |
| Sample bottles are completely filled.                                                    | True   |                                      |
| Sample Preservation Verified.                                                            | True   |                                      |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |                                      |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |                                      |
| Multiphasic samples are not present.                                                     | True   |                                      |
| Samples do not require splitting or compositing.                                         | True   |                                      |
| Residual Chlorine Checked.                                                               | N/A    |                                      |

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Sean Marczewski  
SCS Engineers  
1690 All State Court  
Suite 100

West Des Moines, Iowa 50265

Generated 12/11/2025 2:54:46 PM Revision 1

## JOB DESCRIPTION

Woodbury 2nd 2025 HMSP  
Woodbury County Sanitary Landfill  
2025 Semi-Annual HMSP

## JOB NUMBER

310-321076-1

# Eurofins Cedar Falls

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



Authorized for release by  
Samuel Miller, Project Management Assistant I  
[Samuel.Miller@et.eurofinsus.com](mailto:Samuel.Miller@et.eurofinsus.com)  
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# Case Narrative

Client: SCS Engineers  
Project: Woodbury 2nd 2025 HMSF

Job ID: 310-321076-1

**Job ID: 310-321076-1**

**Eurofins Cedar Falls**

## Job Narrative 310-321076-1

### REVISION

The report being provided is a revision of the original report sent on 12/10/2025. The report (revision 1) is being revised due to Updated analyte list for MW-3 per client request.

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### **Receipt**

The samples were received on 11/20/2025 4:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.3°C and 0.8°C.

### **GC/MS VOA**

Method 8260D: The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container: Trip Blank 2 (310-321076-7).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-474409 recovered above the upper control limit for Carbon tetrachloride (27%D). The LCS associated with this CCV passed CCV criteria for the affected analyte; therefore, the data have been reported. The associated sample is:(CCV 310-474409/3).

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

### **GC/MS Semi VOA**

Method 8270E: The continuing calibration verification (CCV) associated with batch 310-474898 recovered above the upper control limit for 2-Nitrophenol(27%D) and Hexachlorocyclopentadiene(22%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-474898/3).

Method 8270E: The initial calibration verification (ICV) result for batch 310-475609 was above the upper control limit. The affected analytes are: 3-Methylcholanthrene (40 %D), N-Nitrosodi-n-butylamine (35 %D) and p-Phenylamine diamine (43%D). Sample results were non-detects, and have been reported as qualified data.

Method 8270E: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-474714 and analytical batch 310-475609 recovered outside control limits for the following analytes: Famphur. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-474714 and analytical batch 310-475609 recovered outside control limits for the following analyte(s): p-Phenylamine diamine. p-Phenylamine diamine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

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

### **GC VOA**

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

### **GC Semi VOA**

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## Case Narrative

Client: SCS Engineers  
Project: Woodbury 2nd 2025 HMSF

Job ID: 310-321076-1

### Job ID: 310-321076-1 (Continued)

Eurofins Cedar Falls

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

#### Herbicides

Method 8151A: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 500-844545 and analytical batch 500-844705 recovered outside control limits for the following analytes: Silvex (2,4,5-TP). These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8151A: The %RPD between the primary and confirmation column exceeded 40% for 2,4-D for the following sample: MW-3 (310-321076-2). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

Method 8151A: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 500-844545 and analytical batch 500-844705 recovered outside control limits for the following analytes: Silvex (2,4,5-TP) and 2,4,5-T. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

#### PCBs

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

#### Pesticides

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

#### HPLC/IC

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

#### Metals

Method 6020B: The initial calibration verification (ICV) result for batch 310-475370 was above the upper control limit. The affected analytes are: thallium. Sample results were non-detects, and have been reported as qualified data.

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

#### General Chemistry

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

Eurofins Cedar Falls

## Case Narrative

Client: SCS Engineers  
Project: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1

**Job ID: 310-321076-2**

**Eurofins Cedar Falls**

### **Job Narrative 310-321076-2**

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### **Receipt**

The samples were received on 11/20/2025 4:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.3°C and 0.8°C.

### **HPLC/IC**

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

Eurofins Cedar Falls

# Sample Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

| Lab Sample ID | Client Sample ID | Matrix      | Collected      | Received       | Sample Origin |
|---------------|------------------|-------------|----------------|----------------|---------------|
| 310-321076-1  | MW-2             | Groundwater | 11/18/25 16:04 | 11/20/25 16:15 | Iowa          |
| 310-321076-2  | MW-3             | Groundwater | 11/18/25 13:40 | 11/20/25 16:15 | Iowa          |
| 310-321076-3  | MW-5             | Groundwater | 11/18/25 14:44 | 11/20/25 16:15 | Iowa          |
| 310-321076-4  | PZ-2B            | Groundwater | 11/18/25 16:44 | 11/20/25 16:15 | Iowa          |
| 310-321076-5  | MW-D             | Groundwater | 11/18/25 14:44 | 11/20/25 16:15 | Iowa          |
| 310-321076-6  | Trip Blank 1     | Trip Blank  | 11/18/25 00:00 | 11/20/25 16:15 | Iowa          |
| 310-321076-7  | Trip Blank 2     | Trip Blank  | 11/18/25 00:00 | 11/20/25 16:15 | Iowa          |

# Detection Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Client Sample ID: MW-2

## Lab Sample ID: 310-321076-1

| Analyte                 | Result   | Qualifier | RL       | MDL      | Unit | Dil Fac | D | Method    | Prep Type |
|-------------------------|----------|-----------|----------|----------|------|---------|---|-----------|-----------|
| 1,1-Dichloroethane      | 4.71     |           | 1.00     | 0.400    | ug/L | 1       |   | 8260D     | Total/NA  |
| cis-1,2-Dichloroethene  | 4.77     |           | 1.00     | 0.550    | ug/L | 1       |   | 8260D     | Total/NA  |
| Dichlorodifluoromethane | 2.38     | J         | 3.00     | 0.850    | ug/L | 1       |   | 8260D     | Total/NA  |
| Tetrachloroethene       | 2.69     |           | 1.00     | 0.480    | ug/L | 1       |   | 8260D     | Total/NA  |
| Trichloroethene         | 8.08     |           | 1.00     | 0.350    | ug/L | 1       |   | 8260D     | Total/NA  |
| Arsenic                 | 0.000574 | J         | 0.00200  | 0.000530 | mg/L | 1       |   | 6020B     | Total/NA  |
| Barium                  | 0.531    |           | 0.00200  | 0.000660 | mg/L | 1       |   | 6020B     | Total/NA  |
| Cadmium                 | 0.000315 |           | 0.000200 | 0.000100 | mg/L | 1       |   | 6020B     | Total/NA  |
| Cobalt                  | 0.000896 |           | 0.000500 | 0.000170 | mg/L | 1       |   | 6020B     | Total/NA  |
| Nickel                  | 0.00558  |           | 0.00500  | 0.00230  | mg/L | 1       |   | 6020B     | Total/NA  |
| Vanadium                | 0.00183  | J         | 0.00500  | 0.00170  | mg/L | 1       |   | 6020B     | Total/NA  |
| Total Suspended Solids  | 2.25     |           | 1.88     | 1.31     | mg/L | 1       |   | I-3765-85 | Total/NA  |

## Client Sample ID: MW-3

## Lab Sample ID: 310-321076-2

| Analyte                 | Result   | Qualifier | RL       | MDL      | Unit | Dil Fac | D | Method    | Prep Type |
|-------------------------|----------|-----------|----------|----------|------|---------|---|-----------|-----------|
| 1,1-Dichloroethane      | 5.27     |           | 1.00     | 0.400    | ug/L | 1       |   | 8260D     | Total/NA  |
| 1,2-Dichloropropane     | 0.585    | J         | 1.00     | 0.380    | ug/L | 1       |   | 8260D     | Total/NA  |
| Benzene                 | 0.380    | J         | 0.500    | 0.220    | ug/L | 1       |   | 8260D     | Total/NA  |
| Chloroethane            | 1.26     | J         | 4.00     | 0.900    | ug/L | 1       |   | 8260D     | Total/NA  |
| cis-1,2-Dichloroethene  | 8.16     |           | 1.00     | 0.550    | ug/L | 1       |   | 8260D     | Total/NA  |
| Dichlorodifluoromethane | 1.02     | J         | 3.00     | 0.850    | ug/L | 1       |   | 8260D     | Total/NA  |
| Trichloroethene         | 9.09     |           | 1.00     | 0.350    | ug/L | 1       |   | 8260D     | Total/NA  |
| Di-n-octyl phthalate    | 7.06     | J         | 20.0     | 7.00     | ug/L | 1       |   | 8270E     | Total/NA  |
| Methane                 | 661      |           | 1.00     | 0.174    | ug/L | 1       |   | RSK-175   | Total/NA  |
| 2,4-D                   | 1.02     |           | 0.989    | 0.125    | ug/L | 1       |   | 8151A     | Total/NA  |
| Sulfate                 | 29.6     |           | 1.00     | 0.420    | mg/L | 1       |   | 9056A     | Total/NA  |
| Antimony                | 0.00327  |           | 0.00200  | 0.00100  | mg/L | 1       |   | 6020B     | Total/NA  |
| Arsenic                 | 0.00824  |           | 0.00200  | 0.000530 | mg/L | 1       |   | 6020B     | Total/NA  |
| Barium                  | 0.565    |           | 0.00200  | 0.000660 | mg/L | 1       |   | 6020B     | Total/NA  |
| Cadmium                 | 0.000279 |           | 0.000200 | 0.000100 | mg/L | 1       |   | 6020B     | Total/NA  |
| Cobalt                  | 0.0139   |           | 0.000500 | 0.000170 | mg/L | 1       |   | 6020B     | Total/NA  |
| Copper                  | 0.00377  | J         | 0.00500  | 0.00320  | mg/L | 1       |   | 6020B     | Total/NA  |
| Lead                    | 0.00104  |           | 0.000500 | 0.000330 | mg/L | 1       |   | 6020B     | Total/NA  |
| Nickel                  | 0.0320   |           | 0.00500  | 0.00230  | mg/L | 1       |   | 6020B     | Total/NA  |
| Vanadium                | 0.00255  | J         | 0.00500  | 0.00170  | mg/L | 1       |   | 6020B     | Total/NA  |
| Zinc                    | 0.0220   |           | 0.0200   | 0.0130   | mg/L | 1       |   | 6020B     | Total/NA  |
| Iron                    | 0.997    |           | 0.100    | 0.0500   | mg/L | 1       |   | 6020B     | Total/NA  |
| Manganese               | 0.979    |           | 0.0100   | 0.00360  | mg/L | 1       |   | 6020B     | Total/NA  |
| Total Suspended Solids  | 64.3     |           | 3.75     | 2.63     | mg/L | 1       |   | I-3765-85 | Total/NA  |

## Client Sample ID: MW-5

## Lab Sample ID: 310-321076-3

| Analyte                | Result   | Qualifier | RL       | MDL      | Unit | Dil Fac | D | Method    | Prep Type |
|------------------------|----------|-----------|----------|----------|------|---------|---|-----------|-----------|
| Arsenic                | 0.00111  | J         | 0.00200  | 0.000530 | mg/L | 1       |   | 6020B     | Total/NA  |
| Barium                 | 0.0248   |           | 0.00200  | 0.000660 | mg/L | 1       |   | 6020B     | Total/NA  |
| Cobalt                 | 0.000232 | J         | 0.000500 | 0.000170 | mg/L | 1       |   | 6020B     | Total/NA  |
| Total Suspended Solids | 5.13     |           | 1.88     | 1.31     | mg/L | 1       |   | I-3765-85 | Total/NA  |

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

## Detection Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

### Client Sample ID: PZ-2B

### Lab Sample ID: 310-321076-4

| Analyte                 | Result   | Qualifier | RL       | MDL      | Unit | Dil | Fac | D | Method    | Prep Type |
|-------------------------|----------|-----------|----------|----------|------|-----|-----|---|-----------|-----------|
| 1,1-Dichloroethane      | 2.80     |           | 1.00     | 0.400    | ug/L |     | 1   |   | 8260D     | Total/NA  |
| cis-1,2-Dichloroethene  | 1.42     |           | 1.00     | 0.550    | ug/L |     | 1   |   | 8260D     | Total/NA  |
| Dichlorodifluoromethane | 2.99     | J         | 3.00     | 0.850    | ug/L |     | 1   |   | 8260D     | Total/NA  |
| Tetrachloroethene       | 2.41     |           | 1.00     | 0.480    | ug/L |     | 1   |   | 8260D     | Total/NA  |
| Trichloroethene         | 5.00     |           | 1.00     | 0.350    | ug/L |     | 1   |   | 8260D     | Total/NA  |
| Arsenic                 | 0.00552  |           | 0.00200  | 0.000530 | mg/L |     | 1   |   | 6020B     | Total/NA  |
| Barium                  | 0.555    |           | 0.00200  | 0.000660 | mg/L |     | 1   |   | 6020B     | Total/NA  |
| Cobalt                  | 0.000597 |           | 0.000500 | 0.000170 | mg/L |     | 1   |   | 6020B     | Total/NA  |
| Total Suspended Solids  | 5.88     |           | 1.88     | 1.31     | mg/L |     | 1   |   | I-3765-85 | Total/NA  |

### Client Sample ID: MW-D

### Lab Sample ID: 310-321076-5

| Analyte                | Result   | Qualifier | RL       | MDL      | Unit | Dil | Fac | D | Method    | Prep Type |
|------------------------|----------|-----------|----------|----------|------|-----|-----|---|-----------|-----------|
| Arsenic                | 0.00104  | J         | 0.00200  | 0.000530 | mg/L |     | 1   |   | 6020B     | Total/NA  |
| Barium                 | 0.0261   |           | 0.00200  | 0.000660 | mg/L |     | 1   |   | 6020B     | Total/NA  |
| Cobalt                 | 0.000233 | J         | 0.000500 | 0.000170 | mg/L |     | 1   |   | 6020B     | Total/NA  |
| Total Suspended Solids | 6.12     |           | 1.88     | 1.31     | mg/L |     | 1   |   | I-3765-85 | Total/NA  |

### Client Sample ID: Trip Blank 1

### Lab Sample ID: 310-321076-6

No Detections.

### Client Sample ID: Trip Blank 2

### Lab Sample ID: 310-321076-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-2

Lab Sample ID: 310-321076-1

Date Collected: 11/18/25 16:04

Matrix: Groundwater

Date Received: 11/20/25 16:15

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                        | Result        | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------------------------|---------------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane      | <1.00         |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,1,1-Trichloroethane          | <1.00         |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,1,2,2-Tetrachloroethane      | <1.00         |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,1,2-Trichloroethane          | <1.00         |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 18:45 | 1       |
| <b>1,1-Dichloroethane</b>      | <b>4.71</b>   |           | 1.00  | 0.400 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,1-Dichloroethene             | <2.00         |           | 2.00  | 0.460 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,2,3-Trichloropropane         | <1.00         |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,2-Dibromo-3-chloropropane    | <5.00         |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,2-Dibromoethane (EDB)        | <1.00         |           | 1.00  | 0.340 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,2-Dichlorobenzene            | <1.00         |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,2-Dichloroethane             | <1.00         |           | 1.00  | 0.890 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,2-Dichloropropane            | <1.00         |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 1,4-Dichlorobenzene            | <1.00         |           | 1.00  | 0.490 | ug/L |   |          | 11/21/25 18:45 | 1       |
| 2-Butanone (MEK)               | <10.0         |           | 10.0  | 3.40  | ug/L |   |          | 11/21/25 18:45 | 1       |
| 2-Hexanone                     | <10.0         |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 18:45 | 1       |
| 4-Methyl-2-pentanone (MIBK)    | <10.0         |           | 10.0  | 3.50  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Acetone                        | <10.0         |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Acrylonitrile                  | <5.00         |           | 5.00  | 2.20  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Benzene                        | <0.500        |           | 0.500 | 0.220 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Bromochloromethane             | <5.00         |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Bromodichloromethane           | <1.00         |           | 1.00  | 0.390 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Bromoform                      | <5.00         |           | 5.00  | 2.60  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Bromomethane                   | <4.00         |           | 4.00  | 1.10  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Carbon disulfide               | <1.00         |           | 1.00  | 0.450 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Carbon tetrachloride           | <2.00         |           | 2.00  | 0.650 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Chlorobenzene                  | <1.00         |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Chlorodibromomethane           | <5.00         |           | 5.00  | 1.50  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Chloroethane                   | <4.00         |           | 4.00  | 0.900 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Chloroform                     | <3.00         |           | 3.00  | 1.30  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Chloromethane                  | <3.00         |           | 3.00  | 0.610 | ug/L |   |          | 11/21/25 18:45 | 1       |
| <b>cis-1,2-Dichloroethene</b>  | <b>4.77</b>   |           | 1.00  | 0.550 | ug/L |   |          | 11/21/25 18:45 | 1       |
| cis-1,3-Dichloropropene        | <5.00         |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Dibromomethane                 | <1.00         |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 18:45 | 1       |
| <b>Dichlorodifluoromethane</b> | <b>2.38 J</b> |           | 3.00  | 0.850 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Ethylbenzene                   | <1.00         |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Iodomethane                    | <10.0         |           | 10.0  | 2.60  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Methylene chloride             | <5.00         |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Styrene                        | <1.00         |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 18:45 | 1       |
| <b>Tetrachloroethene</b>       | <b>2.69</b>   |           | 1.00  | 0.480 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Toluene                        | <1.00         |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 18:45 | 1       |
| trans-1,2-Dichloroethene       | <1.00         |           | 1.00  | 0.410 | ug/L |   |          | 11/21/25 18:45 | 1       |
| trans-1,3-Dichloropropene      | <5.00         |           | 5.00  | 2.30  | ug/L |   |          | 11/21/25 18:45 | 1       |
| trans-1,4-Dichloro-2-butene    | <10.0         |           | 10.0  | 2.40  | ug/L |   |          | 11/21/25 18:45 | 1       |
| <b>Trichloroethene</b>         | <b>8.08</b>   |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Trichlorofluoromethane         | <4.00         |           | 4.00  | 0.470 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Vinyl acetate                  | <10.0         |           | 10.0  | 7.10  | ug/L |   |          | 11/21/25 18:45 | 1       |
| Vinyl chloride                 | <1.00         |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 18:45 | 1       |
| Xylenes, Total                 | <3.00         |           | 3.00  | 1.10  | ug/L |   |          | 11/21/25 18:45 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-2

Lab Sample ID: 310-321076-1

Date Collected: 11/18/25 16:04

Matrix: Groundwater

Date Received: 11/20/25 16:15

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 111       |           | 76 - 130 |          | 11/21/25 18:45 | 1       |
| Toluene-d8 (Surr)           | 95        |           | 80 - 120 |          | 11/21/25 18:45 | 1       |
| 4-Bromofluorobenzene (Surr) | 107       |           | 80 - 120 |          | 11/21/25 18:45 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte   | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | <0.00200  |           | 0.00200  | 0.00100  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Arsenic   | 0.000574  | J         | 0.00200  | 0.000530 | mg/L |   | 11/24/25 08:30 | 12/05/25 16:47 | 1       |
| Barium    | 0.531     |           | 0.00200  | 0.000660 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Beryllium | <0.00100  |           | 0.00100  | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Cadmium   | 0.000315  |           | 0.000200 | 0.000100 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Chromium  | <0.00500  |           | 0.00500  | 0.00180  | mg/L |   | 11/24/25 08:30 | 12/05/25 16:47 | 1       |
| Cobalt    | 0.000896  |           | 0.000500 | 0.000170 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Copper    | <0.00500  |           | 0.00500  | 0.00320  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Lead      | <0.000500 |           | 0.000500 | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Nickel    | 0.00558   |           | 0.00500  | 0.00230  | mg/L |   | 11/24/25 08:30 | 12/05/25 16:47 | 1       |
| Selenium  | <0.00500  |           | 0.00500  | 0.00140  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Silver    | <0.00100  |           | 0.00100  | 0.000500 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Thallium  | <0.00100  |           | 0.00100  | 0.000570 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Vanadium  | 0.00183   | J         | 0.00500  | 0.00170  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:29 | 1       |
| Zinc      | <0.0200   |           | 0.0200   | 0.0130   | mg/L |   | 11/24/25 08:30 | 12/05/25 16:47 | 1       |

## General Chemistry

| Analyte                                 | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Total Suspended Solids (USGS I-3765-85) | 2.25   |           | 1.88 | 1.31 | mg/L |   |          | 11/21/25 07:02 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-3

Lab Sample ID: 310-321076-2

Date Collected: 11/18/25 13:40

Matrix: Groundwater

Date Received: 11/20/25 16:15

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                        | Result         | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------------------------|----------------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane      | <1.00          |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,1,1-Trichloroethane          | <1.00          |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,1,2,2-Tetrachloroethane      | <1.00          |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,1,2-Trichloroethane          | <1.00          |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 19:07 | 1       |
| <b>1,1-Dichloroethane</b>      | <b>5.27</b>    |           | 1.00  | 0.400 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,1-Dichloroethene             | <2.00          |           | 2.00  | 0.460 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,1-Dichloropropene            | <1.00          |           | 1.00  | 0.410 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,2,3-Trichloropropane         | <1.00          |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,2,4-Trichlorobenzene         | <5.00          |           | 5.00  | 1.90  | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,2-Dibromo-3-chloropropane    | <5.00          |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,2-Dibromoethane (EDB)        | <1.00          |           | 1.00  | 0.340 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,2-Dichlorobenzene            | <1.00          |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,2-Dichloroethane             | <1.00          |           | 1.00  | 0.890 | ug/L |   |          | 11/21/25 19:07 | 1       |
| <b>1,2-Dichloropropane</b>     | <b>0.585 J</b> |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,3-Dichlorobenzene            | <1.00          |           | 1.00  | 0.470 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,3-Dichloropropane            | <1.00          |           | 1.00  | 0.390 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 1,4-Dichlorobenzene            | <1.00          |           | 1.00  | 0.490 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 2,2-Dichloropropane            | <4.00          |           | 4.00  | 0.690 | ug/L |   |          | 11/21/25 19:07 | 1       |
| 2-Butanone (MEK)               | <10.0          |           | 10.0  | 3.40  | ug/L |   |          | 11/21/25 19:07 | 1       |
| 2-Hexanone                     | <10.0          |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 19:07 | 1       |
| 4-Methyl-2-pentanone (MIBK)    | <10.0          |           | 10.0  | 3.50  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Acetone                        | <10.0          |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Acrolein                       | <10.0          |           | 10.0  | 3.60  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Acrylonitrile                  | <5.00          |           | 5.00  | 2.20  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Allyl chloride                 | <2.00          |           | 2.00  | 0.700 | ug/L |   |          | 11/21/25 19:07 | 1       |
| <b>Benzene</b>                 | <b>0.380 J</b> |           | 0.500 | 0.220 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Bromochloromethane             | <5.00          |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Bromodichloromethane           | <1.00          |           | 1.00  | 0.390 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Bromoform                      | <5.00          |           | 5.00  | 2.60  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Bromomethane                   | <4.00          |           | 4.00  | 1.10  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Carbon disulfide               | <1.00          |           | 1.00  | 0.450 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Carbon tetrachloride           | <2.00          |           | 2.00  | 0.650 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Chlorobenzene                  | <1.00          |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Chlorodibromomethane           | <5.00          |           | 5.00  | 1.50  | ug/L |   |          | 11/21/25 19:07 | 1       |
| <b>Chloroethane</b>            | <b>1.26 J</b>  |           | 4.00  | 0.900 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Chloroform                     | <3.00          |           | 3.00  | 1.30  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Chloromethane                  | <3.00          |           | 3.00  | 0.610 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Chloroprene                    | <1.00          |           | 1.00  | 0.320 | ug/L |   |          | 11/21/25 19:07 | 1       |
| <b>cis-1,2-Dichloroethene</b>  | <b>8.16</b>    |           | 1.00  | 0.550 | ug/L |   |          | 11/21/25 19:07 | 1       |
| cis-1,3-Dichloropropene        | <5.00          |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Dibromomethane                 | <1.00          |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 19:07 | 1       |
| <b>Dichlorodifluoromethane</b> | <b>1.02 J</b>  |           | 3.00  | 0.850 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Ethyl methacrylate             | <2.00          |           | 2.00  | 0.630 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Ethylbenzene                   | <1.00          |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Iodomethane                    | <10.0          |           | 10.0  | 2.60  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Methacrylonitrile              | <10.0          |           | 10.0  | 3.30  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Methyl methacrylate            | <2.00          |           | 2.00  | 0.760 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Methylene chloride             | <5.00          |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Naphthalene                    | <5.00          |           | 5.00  | 1.80  | ug/L |   |          | 11/21/25 19:07 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-3

Lab Sample ID: 310-321076-2

Date Collected: 11/18/25 13:40

Matrix: Groundwater

Date Received: 11/20/25 16:15

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                     | Result | Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|------|-------|------|---|----------|----------------|---------|
| Propionitrile               | <10.0  |           | 10.0 | 3.40  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Styrene                     | <1.00  |           | 1.00 | 0.370 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00 | 0.480 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Toluene                     | <1.00  |           | 1.00 | 0.430 | ug/L |   |          | 11/21/25 19:07 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00 | 0.410 | ug/L |   |          | 11/21/25 19:07 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00 | 2.30  | ug/L |   |          | 11/21/25 19:07 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0 | 2.40  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Trichloroethene             | 9.09   |           | 1.00 | 0.350 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00 | 0.470 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0 | 7.10  | ug/L |   |          | 11/21/25 19:07 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00 | 0.430 | ug/L |   |          | 11/21/25 19:07 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00 | 1.10  | ug/L |   |          | 11/21/25 19:07 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 113       |           | 76 - 130 |          | 11/21/25 19:07 | 1       |
| Toluene-d8 (Surr)           | 93        |           | 80 - 120 |          | 11/21/25 19:07 | 1       |
| 4-Bromofluorobenzene (Surr) | 103       |           | 80 - 120 |          | 11/21/25 19:07 | 1       |

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

| Analyte                    | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| 1,2,4,5-Tetrachlorobenzene | <10.0  |           | 10.0 | 0.540 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 1,3,5-Trinitrobenzene      | <10.0  |           | 10.0 | 2.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 1,3-Dinitrobenzene         | <10.0  |           | 10.0 | 3.20  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 1,4-Naphthoquinone         | <10.0  |           | 10.0 | 3.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 1,4-Phenylenediamine       | <10.0  | *         | 10.0 | 1.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 1-Naphthylamine            | <10.0  |           | 10.0 | 2.50  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 2,3,4,6-Tetrachlorophenol  | <10.0  |           | 10.0 | 5.30  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2,4,5-Trichlorophenol      | <10.0  |           | 10.0 | 5.30  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2,4,6-Trichlorophenol      | <10.0  |           | 10.0 | 5.00  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2,4-Dichlorophenol         | <10.0  |           | 10.0 | 0.850 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2,4-Dimethylphenol         | <10.0  |           | 10.0 | 0.580 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2,4-Dinitrophenol          | <20.0  |           | 20.0 | 13.0  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2,4-Dinitrotoluene         | <10.0  |           | 10.0 | 6.40  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2,6-Dichlorophenol         | <10.0  |           | 10.0 | 0.690 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2,6-Dinitrotoluene         | <10.0  |           | 10.0 | 0.520 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2-Acetylaminofluorene      | <20.0  |           | 20.0 | 2.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 2-Chloronaphthalene        | <10.0  |           | 10.0 | 0.640 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2-Chlorophenol             | <10.0  |           | 10.0 | 0.540 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2-Methylnaphthalene        | <10.0  |           | 10.0 | 0.590 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2-Methylphenol             | <10.0  |           | 10.0 | 0.650 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2-Naphthylamine            | <10.0  |           | 10.0 | 2.10  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 2-Nitroaniline             | <10.0  |           | 10.0 | 5.90  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2-Nitrophenol              | <10.0  |           | 10.0 | 6.80  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 3,3'-Dichlorobenzidine     | <10.0  |           | 10.0 | 1.40  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 3,3'-Dimethylbenzidine     | <10.0  |           | 10.0 | 1.50  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 3-Methylcholanthrene       | <10.0  |           | 10.0 | 0.320 | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 3-Nitroaniline             | <10.0  |           | 10.0 | 2.70  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 4,6-Dinitro-2-methylphenol | <10.0  |           | 10.0 | 6.90  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 4-Aminobiphenyl            | <10.0  |           | 10.0 | 2.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 4-Bromophenyl phenyl ether | <10.0  |           | 10.0 | 0.700 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-3

Lab Sample ID: 310-321076-2

Date Collected: 11/18/25 13:40

Matrix: Groundwater

Date Received: 11/20/25 16:15

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte                                   | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| 4-Chloro-3-methylphenol                   | <10.0  |           | 10.0 | 0.840 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 4-Chloroaniline                           | <10.0  |           | 10.0 | 0.620 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 4-Chlorophenyl phenyl ether               | <10.0  |           | 10.0 | 0.690 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 4-Methylphenol (and/or<br>3-Methylphenol) | <10.0  |           | 10.0 | 0.700 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 4-Nitroaniline                            | <10.0  |           | 10.0 | 1.30  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 4-Nitrophenol                             | <10.0  |           | 10.0 | 7.60  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 5-Nitro-o-toluidine                       | <10.0  |           | 10.0 | 2.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 7,12-Dimethylbenz(a)anthracene            | <10.0  |           | 10.0 | 1.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Acenaphthene                              | <10.0  |           | 10.0 | 0.640 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Acenaphthylene                            | <10.0  |           | 10.0 | 0.720 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Acetophenone                              | <10.0  |           | 10.0 | 0.690 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Anthracene                                | <10.0  |           | 10.0 | 0.870 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Benzo[a]anthracene                        | <10.0  |           | 10.0 | 0.850 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Benzo[a]pyrene                            | <10.0  |           | 10.0 | 8.10  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Benzo[b]fluoranthene                      | <10.0  |           | 10.0 | 4.90  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Benzo[g,h,i]perylene                      | <10.0  |           | 10.0 | 6.30  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Benzo[k]fluoranthene                      | <10.0  |           | 10.0 | 2.20  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Benzyl alcohol                            | <10.0  |           | 10.0 | 1.30  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Bis(2-chloroethoxy)methane                | <10.0  |           | 10.0 | 0.760 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Bis(2-chloroethyl)ether                   | <10.0  |           | 10.0 | 0.820 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| bis (2-chloroisopropyl) ether             | <10.0  |           | 10.0 | 0.540 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Bis(2-ethylhexyl) phthalate               | <10.0  |           | 10.0 | 5.50  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Butyl benzyl phthalate                    | <10.0  |           | 10.0 | 5.40  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Chlorobenzilate                           | <10.0  |           | 10.0 | 3.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Chrysene                                  | <10.0  |           | 10.0 | 0.870 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Diallate                                  | <10.0  |           | 10.0 | 4.00  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Dibenz(a,h)anthracene                     | <10.0  |           | 10.0 | 3.90  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Dibenzofuran                              | <10.0  |           | 10.0 | 0.740 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Diethyl phthalate                         | <10.0  |           | 10.0 | 1.70  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Dimethoate                                | <10.0  |           | 10.0 | 3.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Dimethyl phthalate                        | <10.0  |           | 10.0 | 1.00  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Di-n-butyl phthalate                      | <10.0  |           | 10.0 | 5.60  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Di-n-octyl phthalate                      | 7.06   | J         | 20.0 | 7.00  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Dinoseb                                   | <10.0  |           | 10.0 | 2.40  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Diphenylamine                             | <10.0  |           | 10.0 | 6.00  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Disulfoton                                | <10.0  |           | 10.0 | 2.40  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Ethyl methanesulfonate                    | <10.0  |           | 10.0 | 3.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Ethyl parathion                           | <10.0  |           | 10.0 | 2.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Famphur                                   | <10.0  | *+        | 10.0 | 3.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Fluoranthene                              | <10.0  |           | 10.0 | 1.70  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Fluorene                                  | <10.0  |           | 10.0 | 0.790 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Hexachlorobenzene                         | <10.0  |           | 10.0 | 0.700 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Hexachlorobutadiene                       | <10.0  |           | 10.0 | 0.860 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Hexachlorocyclopentadiene                 | <10.0  |           | 10.0 | 5.10  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Hexachloroethane                          | <10.0  |           | 10.0 | 0.970 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Hexachloropropene                         | <10.0  |           | 10.0 | 2.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Indeno[1,2,3-cd]pyrene                    | <10.0  |           | 10.0 | 4.20  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Isodrin                                   | <10.0  |           | 10.0 | 4.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Isophorone                                | <10.0  |           | 10.0 | 0.930 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-3

Lab Sample ID: 310-321076-2

Date Collected: 11/18/25 13:40

Matrix: Groundwater

Date Received: 11/20/25 16:15

## Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte                          | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| Isosafrole                       | <10.0  |           | 10.0 | 2.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Kepone                           | <10.0  |           | 10.0 | 1.00  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Methapyrilene                    | <10.0  |           | 10.0 | 0.760 | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Methyl methanesulfonate          | <10.0  |           | 10.0 | 3.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Methyl parathion                 | <10.0  |           | 10.0 | 2.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Nitrobenzene                     | <10.0  |           | 10.0 | 0.800 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| N-Nitrosodiethylamine            | <10.0  |           | 10.0 | 3.40  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| N-Nitrosodimethylamine           | <10.0  |           | 10.0 | 0.720 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| N-Nitrosodi-n-butylamine         | <10.0  |           | 10.0 | 3.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| N-Nitrosodi-n-propylamine        | <10.0  |           | 10.0 | 0.920 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| N-Nitrosodiphenylamine           | <10.0  |           | 10.0 | 0.750 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| N-Nitrosomethylethylamine        | <10.0  |           | 10.0 | 4.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| N-Nitrosopiperidine              | <10.0  |           | 10.0 | 2.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| N-Nitrosopyrrolidine             | <10.0  |           | 10.0 | 3.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| o,o',o"-Triethylphosphorothioate | <10.0  |           | 10.0 | 3.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| o-Toluidine                      | <10.0  |           | 10.0 | 2.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| p-Dimethylamino azobenzene       | <10.0  |           | 10.0 | 2.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Pentachlorobenzene               | <10.0  |           | 10.0 | 2.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Pentachloronitrobenzene          | <10.0  |           | 10.0 | 5.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Pentachlorophenol                | <10.0  |           | 10.0 | 9.60  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Phenacetin                       | <10.0  |           | 10.0 | 1.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Phenanthrene                     | <10.0  |           | 10.0 | 0.790 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Phenol                           | <10.0  |           | 10.0 | 1.10  | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Phorate                          | <10.0  |           | 10.0 | 3.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Pronamide                        | <10.0  |           | 10.0 | 2.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Pyrene                           | <10.0  |           | 10.0 | 0.790 | ug/L |   | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Safrole                          | <10.0  |           | 10.0 | 2.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Thionazin                        | <10.0  |           | 10.0 | 3.50  | ug/L |   | 11/25/25 07:09 | 12/05/25 14:52 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorophenol (Surr)       | 61        |           | 21 - 110 | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2-Fluorophenol (Surr)       | 60        |           | 21 - 110 | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Phenol-d5 (Surr)            | 47        |           | 21 - 110 | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Phenol-d5 (Surr)            | 48        |           | 21 - 110 | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Nitrobenzene-d5 (Surr)      | 82        |           | 39 - 140 | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Nitrobenzene-d5 (Surr)      | 79        |           | 39 - 140 | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 2-Fluorobiphenyl (Surr)     | 77        |           | 33 - 126 | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2-Fluorobiphenyl (Surr)     | 76        |           | 33 - 126 | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| 2,4,6-Tribromophenol (Surr) | 86        |           | 20 - 144 | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| 2,4,6-Tribromophenol (Surr) | 68        |           | 20 - 144 | 11/25/25 07:09 | 12/05/25 14:52 | 1       |
| Terphenyl-d14 (Surr)        | 80        |           | 13 - 150 | 11/25/25 07:09 | 11/26/25 15:04 | 1       |
| Terphenyl-d14 (Surr)        | 107       |           | 13 - 150 | 11/25/25 07:09 | 12/05/25 14:52 | 1       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|------|-------|------|---|----------|----------------|---------|
| Methane | 661    |           | 1.00 | 0.174 | ug/L |   |          | 11/29/25 21:10 | 1       |

| Surrogate             | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,1,1-Trifluoroethane | 96        |           | 60 - 140 |          | 11/29/25 21:10 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-3

Lab Sample ID: 310-321076-2

Date Collected: 11/18/25 13:40

Matrix: Groundwater

Date Received: 11/20/25 16:15

## Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

| Analyte      | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Acetonitrile | <10.0  |           | 10.0 | 2.60 | mg/L |   |          | 11/26/25 04:52 | 1       |
| Isobutanol   | <10.0  |           | 10.0 | 2.40 | mg/L |   |          | 11/26/25 04:52 | 1       |

## Method: SW846 8081B - Organochlorine Pesticides (GC)

| Analyte               | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| 4,4'-DDD              | <0.0907 |           | 0.0907 | 0.0227  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| 4,4'-DDE              | <0.0907 |           | 0.0907 | 0.0272  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| 4,4'-DDT              | <0.0907 |           | 0.0907 | 0.0181  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Aldrin                | <0.0907 |           | 0.0907 | 0.0199  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| alpha-BHC             | <0.0907 |           | 0.0907 | 0.00907 | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| beta-BHC              | <0.0907 |           | 0.0907 | 0.0381  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Chlordane (technical) | <1.81   |           | 1.81   | 0.354   | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| delta-BHC             | <0.0907 |           | 0.0907 | 0.0290  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Dieldrin              | <0.0907 |           | 0.0907 | 0.0190  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Endosulfan I          | <0.0907 |           | 0.0907 | 0.0254  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Endosulfan II         | <0.0907 |           | 0.0907 | 0.0236  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Endosulfan sulfate    | <0.0907 |           | 0.0907 | 0.0163  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Endrin                | <0.0907 |           | 0.0907 | 0.0254  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Endrin aldehyde       | <0.0907 |           | 0.0907 | 0.0245  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| gamma-BHC (Lindane)   | <0.0907 |           | 0.0907 | 0.00907 | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Heptachlor            | <0.0907 |           | 0.0907 | 0.0209  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Heptachlor epoxide    | <0.0907 |           | 0.0907 | 0.0290  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Methoxychlor          | <0.0907 |           | 0.0907 | 0.0290  | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Toxaphene             | <1.81   |           | 1.81   | 0.907   | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |

| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 70        |           | 10 - 150 | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Tetrachloro-m-xylene          | 78        |           | 17 - 150 | 11/25/25 11:59 | 12/03/25 21:19 | 1       |

## Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte  | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| PCB-1016 | <1.81  |           | 1.81 | 0.744 | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| PCB-1221 | <1.81  |           | 1.81 | 0.744 | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| PCB-1232 | <1.81  |           | 1.81 | 0.744 | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| PCB-1242 | <1.81  |           | 1.81 | 0.744 | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| PCB-1248 | <1.81  |           | 1.81 | 0.626 | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| PCB-1254 | <1.81  |           | 1.81 | 0.626 | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| PCB-1260 | <1.81  |           | 1.81 | 0.626 | ug/L |   | 11/25/25 11:59 | 12/03/25 21:19 | 1       |

| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 70        |           | 10 - 150 | 11/25/25 11:59 | 12/03/25 21:19 | 1       |
| Tetrachloro-m-xylene          | 77        |           | 17 - 150 | 11/25/25 11:59 | 12/03/25 21:19 | 1       |

## Method: SW846 8151A - Herbicides (GC)

| Analyte           | Result | Qualifier | RL    | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------|--------|-----------|-------|-------|------|---|----------------|----------------|---------|
| 2,4-D             | 1.02   |           | 0.989 | 0.125 | ug/L |   | 11/24/25 07:50 | 11/24/25 18:28 | 1       |
| Silvex (2,4,5-TP) | <0.989 | +         | 0.989 | 0.104 | ug/L |   | 11/24/25 07:50 | 11/24/25 18:28 | 1       |
| 2,4,5-T           | <0.989 |           | 0.989 | 0.138 | ug/L |   | 11/24/25 07:50 | 11/24/25 18:28 | 1       |

| Surrogate | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------------|----------------|---------|
| DCAA      | 81        |           | 25 - 130 | 11/24/25 07:50 | 11/24/25 18:28 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: MW-3**

**Lab Sample ID: 310-321076-2**

Date Collected: 11/18/25 13:40

**Matrix: Groundwater**

Date Received: 11/20/25 16:15

## Method: SW846 9056A - Anions, Ion Chromatography

| Analyte      | Result | Qualifier | RL    | MDL    | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|-------|--------|------|---|----------|----------------|---------|
| Nitrate as N | <0.200 | H H3      | 0.200 | 0.0780 | mg/L |   |          | 11/21/25 10:21 | 1       |
| Sulfate      | 29.6   |           | 1.00  | 0.420  | mg/L |   |          | 11/21/25 12:44 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte   | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | 0.00327   |           | 0.00200  | 0.00100  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Arsenic   | 0.00824   |           | 0.00200  | 0.000530 | mg/L |   | 11/24/25 08:30 | 12/05/25 16:49 | 1       |
| Barium    | 0.565     |           | 0.00200  | 0.000660 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Beryllium | <0.00100  |           | 0.00100  | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Cadmium   | 0.000279  |           | 0.000200 | 0.000100 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Chromium  | <0.00500  |           | 0.00500  | 0.00180  | mg/L |   | 11/24/25 08:30 | 12/05/25 16:49 | 1       |
| Cobalt    | 0.0139    |           | 0.000500 | 0.000170 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Copper    | 0.00377 J |           | 0.00500  | 0.00320  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Lead      | 0.00104   |           | 0.000500 | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Nickel    | 0.0320    |           | 0.00500  | 0.00230  | mg/L |   | 11/24/25 08:30 | 12/05/25 16:49 | 1       |
| Selenium  | <0.00500  |           | 0.00500  | 0.00140  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Silver    | <0.00100  |           | 0.00100  | 0.000500 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Thallium  | <0.00100  |           | 0.00100  | 0.000570 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Vanadium  | 0.00255 J |           | 0.00500  | 0.00170  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Zinc      | 0.0220    |           | 0.0200   | 0.0130   | mg/L |   | 11/24/25 08:30 | 12/05/25 16:49 | 1       |
| Tin       | <0.00500  |           | 0.00500  | 0.00250  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Iron      | 0.997     |           | 0.100    | 0.0500   | mg/L |   | 11/24/25 08:30 | 12/04/25 20:32 | 1       |
| Manganese | 0.979     |           | 0.0100   | 0.00360  | mg/L |   | 11/24/25 08:30 | 12/05/25 16:49 | 1       |

## Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Mercury | <0.000200 |           | 0.000200 | 0.000110 | mg/L |   | 11/26/25 13:30 | 12/01/25 10:06 | 1       |

## General Chemistry

| Analyte                                 | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------------------------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Cyanide, Total (SW846 9012B)            | <0.0100 |           | 0.0100 | 0.00350 | mg/L |   | 11/26/25 10:29 | 11/26/25 19:09 | 1       |
| Sulfide (SW846 9034)                    | <1.00   |           | 1.00   | 0.231   | mg/L |   | 11/25/25 18:03 | 11/25/25 23:42 | 1       |
| Total Suspended Solids (USGS I-3765-85) | 64.3    |           | 3.75   | 2.63    | mg/L |   |                | 11/21/25 07:02 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-5

Lab Sample ID: 310-321076-3

Date Collected: 11/18/25 14:44

Matrix: Groundwater

Date Received: 11/20/25 16:15

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,1-Dichloroethane          | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.460 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.890 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.490 | ug/L |   |          | 11/21/25 19:30 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 3.40  | ug/L |   |          | 11/21/25 19:30 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 19:30 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 3.50  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Acetone                     | <10.0  |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Benzene                     | <0.500 |           | 0.500 | 0.220 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 2.60  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 1.50  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.900 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 11/21/25 19:30 | 1       |
| cis-1,2-Dichloroethene      | <1.00  |           | 1.00  | 0.550 | ug/L |   |          | 11/21/25 19:30 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 2.60  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Styrene                     | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00  | 0.480 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Toluene                     | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 19:30 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00  | 0.410 | ug/L |   |          | 11/21/25 19:30 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00  | 2.30  | ug/L |   |          | 11/21/25 19:30 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0  | 2.40  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Trichloroethene             | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00  | 0.470 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0  | 7.10  | ug/L |   |          | 11/21/25 19:30 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 19:30 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00  | 1.10  | ug/L |   |          | 11/21/25 19:30 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 105       |           | 76 - 130 |          | 11/21/25 19:30 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: MW-5**

**Date Collected: 11/18/25 14:44**

**Date Received: 11/20/25 16:15**

**Lab Sample ID: 310-321076-3**

**Matrix: Groundwater**

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 93        |           | 80 - 120 |          | 11/21/25 19:30 | 1       |
| 4-Bromofluorobenzene (Surr) | 104       |           | 80 - 120 |          | 11/21/25 19:30 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte        | Result          | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony       | <0.00200        |           | 0.00200  | 0.00100  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| <b>Arsenic</b> | <b>0.00111</b>  | <b>J</b>  | 0.00200  | 0.000530 | mg/L |   | 11/24/25 08:30 | 12/06/25 15:46 | 1       |
| <b>Barium</b>  | <b>0.0248</b>   |           | 0.00200  | 0.000660 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| Beryllium      | <0.00100        |           | 0.00100  | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| Cadmium        | <0.000200       |           | 0.000200 | 0.000100 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| Chromium       | <0.00500        |           | 0.00500  | 0.00180  | mg/L |   | 11/24/25 08:30 | 12/05/25 16:58 | 1       |
| <b>Cobalt</b>  | <b>0.000232</b> | <b>J</b>  | 0.000500 | 0.000170 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| Copper         | <0.00500        |           | 0.00500  | 0.00320  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| Lead           | <0.000500       |           | 0.000500 | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| Nickel         | <0.00500        |           | 0.00500  | 0.00230  | mg/L |   | 11/24/25 08:30 | 12/05/25 16:58 | 1       |
| Selenium       | <0.00500        |           | 0.00500  | 0.00140  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| Silver         | <0.00100        |           | 0.00100  | 0.000500 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| Thallium       | <0.00100        |           | 0.00100  | 0.000570 | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| Vanadium       | <0.00500        |           | 0.00500  | 0.00170  | mg/L |   | 11/24/25 08:30 | 12/04/25 20:35 | 1       |
| Zinc           | <0.0200         |           | 0.0200   | 0.0130   | mg/L |   | 11/24/25 08:30 | 12/05/25 16:58 | 1       |

## General Chemistry

| Analyte                                        | Result      | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------------------------------|-------------|-----------|------|------|------|---|----------|----------------|---------|
| <b>Total Suspended Solids (USGS I-3765-85)</b> | <b>5.13</b> |           | 1.88 | 1.31 | mg/L |   |          | 11/21/25 07:02 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: PZ-2B

Lab Sample ID: 310-321076-4

Date Collected: 11/18/25 16:44

Matrix: Groundwater

Date Received: 11/20/25 16:15

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                        | Result        | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------------------------|---------------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane      | <1.00         |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,1,1-Trichloroethane          | <1.00         |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,1,2,2-Tetrachloroethane      | <1.00         |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,1,2-Trichloroethane          | <1.00         |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 19:53 | 1       |
| <b>1,1-Dichloroethane</b>      | <b>2.80</b>   |           | 1.00  | 0.400 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,1-Dichloroethene             | <2.00         |           | 2.00  | 0.460 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,2,3-Trichloropropane         | <1.00         |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,2-Dibromo-3-chloropropane    | <5.00         |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,2-Dibromoethane (EDB)        | <1.00         |           | 1.00  | 0.340 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,2-Dichlorobenzene            | <1.00         |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,2-Dichloroethane             | <1.00         |           | 1.00  | 0.890 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,2-Dichloropropane            | <1.00         |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 1,4-Dichlorobenzene            | <1.00         |           | 1.00  | 0.490 | ug/L |   |          | 11/21/25 19:53 | 1       |
| 2-Butanone (MEK)               | <10.0         |           | 10.0  | 3.40  | ug/L |   |          | 11/21/25 19:53 | 1       |
| 2-Hexanone                     | <10.0         |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 19:53 | 1       |
| 4-Methyl-2-pentanone (MIBK)    | <10.0         |           | 10.0  | 3.50  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Acetone                        | <10.0         |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Acrylonitrile                  | <5.00         |           | 5.00  | 2.20  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Benzene                        | <0.500        |           | 0.500 | 0.220 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Bromochloromethane             | <5.00         |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Bromodichloromethane           | <1.00         |           | 1.00  | 0.390 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Bromoform                      | <5.00         |           | 5.00  | 2.60  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Bromomethane                   | <4.00         |           | 4.00  | 1.10  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Carbon disulfide               | <1.00         |           | 1.00  | 0.450 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Carbon tetrachloride           | <2.00         |           | 2.00  | 0.650 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Chlorobenzene                  | <1.00         |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Chlorodibromomethane           | <5.00         |           | 5.00  | 1.50  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Chloroethane                   | <4.00         |           | 4.00  | 0.900 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Chloroform                     | <3.00         |           | 3.00  | 1.30  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Chloromethane                  | <3.00         |           | 3.00  | 0.610 | ug/L |   |          | 11/21/25 19:53 | 1       |
| <b>cis-1,2-Dichloroethene</b>  | <b>1.42</b>   |           | 1.00  | 0.550 | ug/L |   |          | 11/21/25 19:53 | 1       |
| cis-1,3-Dichloropropene        | <5.00         |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Dibromomethane                 | <1.00         |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 19:53 | 1       |
| <b>Dichlorodifluoromethane</b> | <b>2.99 J</b> |           | 3.00  | 0.850 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Ethylbenzene                   | <1.00         |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Iodomethane                    | <10.0         |           | 10.0  | 2.60  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Methylene chloride             | <5.00         |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Styrene                        | <1.00         |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 19:53 | 1       |
| <b>Tetrachloroethene</b>       | <b>2.41</b>   |           | 1.00  | 0.480 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Toluene                        | <1.00         |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 19:53 | 1       |
| trans-1,2-Dichloroethene       | <1.00         |           | 1.00  | 0.410 | ug/L |   |          | 11/21/25 19:53 | 1       |
| trans-1,3-Dichloropropene      | <5.00         |           | 5.00  | 2.30  | ug/L |   |          | 11/21/25 19:53 | 1       |
| trans-1,4-Dichloro-2-butene    | <10.0         |           | 10.0  | 2.40  | ug/L |   |          | 11/21/25 19:53 | 1       |
| <b>Trichloroethene</b>         | <b>5.00</b>   |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Trichlorofluoromethane         | <4.00         |           | 4.00  | 0.470 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Vinyl acetate                  | <10.0         |           | 10.0  | 7.10  | ug/L |   |          | 11/21/25 19:53 | 1       |
| Vinyl chloride                 | <1.00         |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 19:53 | 1       |
| Xylenes, Total                 | <3.00         |           | 3.00  | 1.10  | ug/L |   |          | 11/21/25 19:53 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: PZ-2B**

**Date Collected: 11/18/25 16:44**

**Date Received: 11/20/25 16:15**

**Lab Sample ID: 310-321076-4**

**Matrix: Groundwater**

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 112       |           | 76 - 130 |          | 11/21/25 19:53 | 1       |
| Toluene-d8 (Surr)           | 91        |           | 80 - 120 |          | 11/21/25 19:53 | 1       |
| 4-Bromofluorobenzene (Surr) | 105       |           | 80 - 120 |          | 11/21/25 19:53 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte        | Result          | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony       | <0.00200        |           | 0.00200  | 0.00100  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| <b>Arsenic</b> | <b>0.00552</b>  |           | 0.00200  | 0.000530 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| <b>Barium</b>  | <b>0.555</b>    |           | 0.00200  | 0.000660 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Beryllium      | <0.00100        |           | 0.00100  | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Cadmium        | <0.000200       |           | 0.000200 | 0.000100 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Chromium       | <0.00500        |           | 0.00500  | 0.00180  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| <b>Cobalt</b>  | <b>0.000597</b> |           | 0.000500 | 0.000170 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Copper         | <0.00500        |           | 0.00500  | 0.00320  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Lead           | <0.000500       |           | 0.000500 | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Nickel         | <0.00500        |           | 0.00500  | 0.00230  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Selenium       | <0.00500        |           | 0.00500  | 0.00140  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Silver         | <0.00100        |           | 0.00100  | 0.000500 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Thallium       | <0.00100        | ^1+       | 0.00100  | 0.000570 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Vanadium       | <0.00500        |           | 0.00500  | 0.00170  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |
| Zinc           | <0.0200         |           | 0.0200   | 0.0130   | mg/L |   | 11/24/25 08:30 | 12/02/25 19:27 | 1       |

## General Chemistry

| Analyte                                        | Result      | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------------------------------|-------------|-----------|------|------|------|---|----------|----------------|---------|
| <b>Total Suspended Solids (USGS I-3765-85)</b> | <b>5.88</b> |           | 1.88 | 1.31 | mg/L |   |          | 11/21/25 07:02 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-D

Lab Sample ID: 310-321076-5

Date Collected: 11/18/25 14:44

Matrix: Groundwater

Date Received: 11/20/25 16:15

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,1-Dichloroethane          | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.460 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.890 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.490 | ug/L |   |          | 11/21/25 20:15 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 3.40  | ug/L |   |          | 11/21/25 20:15 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 20:15 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 3.50  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Acetone                     | <10.0  |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Benzene                     | <0.500 |           | 0.500 | 0.220 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 2.60  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 1.50  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.900 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 11/21/25 20:15 | 1       |
| cis-1,2-Dichloroethene      | <1.00  |           | 1.00  | 0.550 | ug/L |   |          | 11/21/25 20:15 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 2.60  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Styrene                     | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00  | 0.480 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Toluene                     | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 20:15 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00  | 0.410 | ug/L |   |          | 11/21/25 20:15 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00  | 2.30  | ug/L |   |          | 11/21/25 20:15 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0  | 2.40  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Trichloroethene             | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00  | 0.470 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0  | 7.10  | ug/L |   |          | 11/21/25 20:15 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 20:15 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00  | 1.10  | ug/L |   |          | 11/21/25 20:15 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 109       |           | 76 - 130 |          | 11/21/25 20:15 | 1       |

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-D

Lab Sample ID: 310-321076-5

Date Collected: 11/18/25 14:44

Matrix: Groundwater

Date Received: 11/20/25 16:15

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 90        |           | 80 - 120 |          | 11/21/25 20:15 | 1       |
| 4-Bromofluorobenzene (Surr) | 106       |           | 80 - 120 |          | 11/21/25 20:15 | 1       |

## Method: SW846 6020B - Metals (ICP/MS)

| Analyte   | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|-----------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | <0.00200  |           | 0.00200  | 0.00100  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Arsenic   | 0.00104   | J         | 0.00200  | 0.000530 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Barium    | 0.0261    |           | 0.00200  | 0.000660 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Beryllium | <0.00100  |           | 0.00100  | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Cadmium   | <0.000200 |           | 0.000200 | 0.000100 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Chromium  | <0.00500  |           | 0.00500  | 0.00180  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Cobalt    | 0.000233  | J         | 0.000500 | 0.000170 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Copper    | <0.00500  |           | 0.00500  | 0.00320  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Lead      | <0.000500 |           | 0.000500 | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Nickel    | <0.00500  |           | 0.00500  | 0.00230  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Selenium  | <0.00500  |           | 0.00500  | 0.00140  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Silver    | <0.00100  |           | 0.00100  | 0.000500 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Thallium  | <0.00100  | ^1+       | 0.00100  | 0.000570 | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Vanadium  | <0.00500  |           | 0.00500  | 0.00170  | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |
| Zinc      | <0.0200   |           | 0.0200   | 0.0130   | mg/L |   | 11/24/25 08:30 | 12/02/25 19:30 | 1       |

## General Chemistry

| Analyte                                 | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Total Suspended Solids (USGS I-3765-85) | 6.12   |           | 1.88 | 1.31 | mg/L |   |          | 11/21/25 07:02 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: Trip Blank 1**

**Lab Sample ID: 310-321076-6**

**Date Collected: 11/18/25 00:00**

**Matrix: Trip Blank**

**Date Received: 11/20/25 16:15**

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,1-Dichloroethane          | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.460 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.890 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.490 | ug/L |   |          | 11/21/25 15:45 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 3.40  | ug/L |   |          | 11/21/25 15:45 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 15:45 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 3.50  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Acetone                     | <10.0  |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Benzene                     | <0.500 |           | 0.500 | 0.220 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 2.60  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 1.50  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.900 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 11/21/25 15:45 | 1       |
| cis-1,2-Dichloroethene      | <1.00  |           | 1.00  | 0.550 | ug/L |   |          | 11/21/25 15:45 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 2.60  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Styrene                     | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00  | 0.480 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Toluene                     | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 15:45 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00  | 0.410 | ug/L |   |          | 11/21/25 15:45 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00  | 2.30  | ug/L |   |          | 11/21/25 15:45 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0  | 2.40  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Trichloroethene             | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00  | 0.470 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0  | 7.10  | ug/L |   |          | 11/21/25 15:45 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 15:45 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00  | 1.10  | ug/L |   |          | 11/21/25 15:45 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 110       |           | 76 - 130 |          | 11/21/25 15:45 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: Trip Blank 1

Lab Sample ID: 310-321076-6

Date Collected: 11/18/25 00:00

Matrix: Trip Blank

Date Received: 11/20/25 16:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 95        |           | 80 - 120 |          | 11/21/25 15:45 | 1       |
| 4-Bromofluorobenzene (Surr) | 106       |           | 80 - 120 |          | 11/21/25 15:45 | 1       |

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: Trip Blank 2**

**Lab Sample ID: 310-321076-7**

**Date Collected: 11/18/25 00:00**

**Matrix: Trip Blank**

**Date Received: 11/20/25 16:15**

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,1,1-Trichloroethane       | <1.00  |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,1,2-Trichloroethane       | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,1-Dichloroethane          | <1.00  |           | 1.00  | 0.400 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,1-Dichloroethene          | <2.00  |           | 2.00  | 0.460 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,2,3-Trichloropropane      | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00  |           | 1.00  | 0.340 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,2-Dichlorobenzene         | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,2-Dichloroethane          | <1.00  |           | 1.00  | 0.890 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,2-Dichloropropane         | <1.00  |           | 1.00  | 0.380 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 1,4-Dichlorobenzene         | <1.00  |           | 1.00  | 0.490 | ug/L |   |          | 11/21/25 16:07 | 1       |
| 2-Butanone (MEK)            | <10.0  |           | 10.0  | 3.40  | ug/L |   |          | 11/21/25 16:07 | 1       |
| 2-Hexanone                  | <10.0  |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 16:07 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0  |           | 10.0  | 3.50  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Acetone                     | <10.0  |           | 10.0  | 3.80  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Acrylonitrile               | <5.00  |           | 5.00  | 2.20  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Benzene                     | <0.500 |           | 0.500 | 0.220 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Bromochloromethane          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Bromodichloromethane        | <1.00  |           | 1.00  | 0.390 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Bromoform                   | <5.00  |           | 5.00  | 2.60  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Bromomethane                | <4.00  |           | 4.00  | 1.10  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Carbon disulfide            | <1.00  |           | 1.00  | 0.450 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Carbon tetrachloride        | <2.00  |           | 2.00  | 0.650 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Chlorobenzene               | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Chlorodibromomethane        | <5.00  |           | 5.00  | 1.50  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Chloroethane                | <4.00  |           | 4.00  | 0.900 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Chloroform                  | <3.00  |           | 3.00  | 1.30  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Chloromethane               | <3.00  |           | 3.00  | 0.610 | ug/L |   |          | 11/21/25 16:07 | 1       |
| cis-1,2-Dichloroethene      | <1.00  |           | 1.00  | 0.550 | ug/L |   |          | 11/21/25 16:07 | 1       |
| cis-1,3-Dichloropropene     | <5.00  |           | 5.00  | 1.20  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Dibromomethane              | <1.00  |           | 1.00  | 0.330 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Ethylbenzene                | <1.00  |           | 1.00  | 0.420 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Iodomethane                 | <10.0  |           | 10.0  | 2.60  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Methylene chloride          | <5.00  |           | 5.00  | 1.70  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Styrene                     | <1.00  |           | 1.00  | 0.370 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Tetrachloroethene           | <1.00  |           | 1.00  | 0.480 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Toluene                     | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 16:07 | 1       |
| trans-1,2-Dichloroethene    | <1.00  |           | 1.00  | 0.410 | ug/L |   |          | 11/21/25 16:07 | 1       |
| trans-1,3-Dichloropropene   | <5.00  |           | 5.00  | 2.30  | ug/L |   |          | 11/21/25 16:07 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0  |           | 10.0  | 2.40  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Trichloroethene             | <1.00  |           | 1.00  | 0.350 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Trichlorofluoromethane      | <4.00  |           | 4.00  | 0.470 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Vinyl acetate               | <10.0  |           | 10.0  | 7.10  | ug/L |   |          | 11/21/25 16:07 | 1       |
| Vinyl chloride              | <1.00  |           | 1.00  | 0.430 | ug/L |   |          | 11/21/25 16:07 | 1       |
| Xylenes, Total              | <3.00  |           | 3.00  | 1.10  | ug/L |   |          | 11/21/25 16:07 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 107       |           | 76 - 130 |          | 11/21/25 16:07 | 1       |

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: Trip Blank 2

Lab Sample ID: 310-321076-7

Date Collected: 11/18/25 00:00

Matrix: Trip Blank

Date Received: 11/20/25 16:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 94        |           | 80 - 120 |          | 11/21/25 16:07 | 1       |
| 4-Bromofluorobenzene (Surr) | 104       |           | 80 - 120 |          | 11/21/25 16:07 | 1       |

# Definitions/Glossary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Qualifiers

### GC/MS VOA

| 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. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| *-        | LCS and/or LCSD is outside acceptance limits, low biased.                                                      |
| *+        | LCS and/or LCSD is outside acceptance limits, high biased.                                                     |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC Semi VOA

| Qualifier | Qualifier Description                                      |
|-----------|------------------------------------------------------------|
| *+        | LCS and/or LCSD is outside acceptance limits, high biased. |

### HPLC/IC

| Qualifier | Qualifier Description                                                                                         |
|-----------|---------------------------------------------------------------------------------------------------------------|
| H         | Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements. |
| H3        | Sample was received and analyzed past holding time. This does not meet regulatory requirements.               |

### Metals

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| ^1+       | Initial Calibration Verification (ICV) is outside acceptance limits, high biased.                              |
| 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)                                                                         |

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## Definitions/Glossary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

### Glossary (Continued)

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|--------------|-----------------------------------------------------------------------------|
| TEQ          | Toxicity Equivalent Quotient (Dioxin)                                       |
| TNTC         | Too Numerous To Count                                                       |

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# Surrogate Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Groundwater

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |
|---------------|------------------|------------------------------------------------|-----------------|-----------------|
|               |                  | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |
| 310-321076-1  | MW-2             | 111                                            | 95              | 107             |
| 310-321076-2  | MW-3             | 113                                            | 93              | 103             |
| 310-321076-3  | MW-5             | 105                                            | 93              | 104             |
| 310-321076-4  | PZ-2B            | 112                                            | 91              | 105             |
| 310-321076-5  | MW-D             | 109                                            | 90              | 106             |

### Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Trip Blank

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |
|---------------|------------------|------------------------------------------------|-----------------|-----------------|
|               |                  | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |
| 310-321076-6  | Trip Blank 1     | 110                                            | 95              | 106             |
| 310-321076-7  | Trip Blank 2     | 107                                            | 94              | 104             |

### Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID    | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |
|------------------|--------------------|------------------------------------------------|-----------------|-----------------|
|                  |                    | DBFM<br>(76-130)                               | TOL<br>(80-120) | BFB<br>(80-120) |
| LCS 310-474409/7 | Lab Control Sample | 111                                            | 99              | 98              |
| LCS 310-474409/8 | Lab Control Sample | 105                                            | 92              | 107             |
| MB 310-474409/6  | Method Blank       | 109                                            | 94              | 106             |

### Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Groundwater

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                 |                 |                  |
|---------------|------------------|------------------------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|
|               |                  | 2FP<br>(21-110)                                | PHL<br>(21-110) | NBZ<br>(39-140) | FBP<br>(33-126) | TBP<br>(20-144) | TPHL<br>(13-150) |
| 310-321076-2  | MW-3             | 61                                             | 47              | 82              | 77              | 86              | 80               |
| 310-321076-2  | MW-3             | 60                                             | 48              | 79              | 76              | 68              | 107              |

### Surrogate Legend

2FP = 2-Fluorophenol (Surr)

PHL = Phenol-d5 (Surr)

NBZ = Nitrobenzene-d5 (Surr)

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# Surrogate Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP  
FBP = 2-Fluorobiphenyl (Surr)  
TBP = 2,4,6-Tribromophenol (Surr)  
TPHL = Terphenyl-d14 (Surr)

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

|                     |                        | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                 |                 |                  |
|---------------------|------------------------|------------------------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|
| Lab Sample ID       | Client Sample ID       | 2FP<br>(21-110)                                | PHL<br>(21-110) | NBZ<br>(39-140) | FBP<br>(33-126) | TBP<br>(20-144) | TPHL<br>(13-150) |
| LCS 310-474714/2-A  | Lab Control Sample     | 50                                             | 42              | 69              | 66              | 80              | 74               |
| LCS 310-474714/2-A  | Lab Control Sample     | 46                                             | 42              | 66              | 62              | 82              | 93               |
| LCSD 310-474714/3-A | Lab Control Sample Dup | 58                                             | 48              | 74              | 71              | 86              | 79               |
| LCSD 310-474714/3-A | Lab Control Sample Dup | 53                                             | 48              | 70              | 66              | 80              | 96               |
| MB 310-474714/1-A   | Method Blank           | 60                                             | 49              | 77              | 70              | 83              | 80               |
| MB 310-474714/1-A   | Method Blank           | 57                                             | 53              | 73              | 68              | 67              | 103              |

### Surrogate Legend

2FP = 2-Fluorophenol (Surr)  
PHL = Phenol-d5 (Surr)  
NBZ = Nitrobenzene-d5 (Surr)  
FBP = 2-Fluorobiphenyl (Surr)  
TBP = 2,4,6-Tribromophenol (Surr)  
TPHL = Terphenyl-d14 (Surr)

## Method: RSK-175 - Dissolved Gases (GC)

Matrix: Groundwater

Prep Type: Total/NA

|               |                  | Percent Surrogate Recovery (Acceptance Limits) |  |  |  |  |  |
|---------------|------------------|------------------------------------------------|--|--|--|--|--|
| Lab Sample ID | Client Sample ID | TFE1<br>(60-140)                               |  |  |  |  |  |
| 310-321076-2  | MW-3             | 96                                             |  |  |  |  |  |

### Surrogate Legend

TFE = 1,1,1-Trifluoroethane

## Method: RSK-175 - Dissolved Gases (GC)

Matrix: Water

Prep Type: Total/NA

|                    |                        | Percent Surrogate Recovery (Acceptance Limits) |  |  |  |  |  |
|--------------------|------------------------|------------------------------------------------|--|--|--|--|--|
| Lab Sample ID      | Client Sample ID       | TFE1<br>(60-140)                               |  |  |  |  |  |
| LCS 240-682334/33  | Lab Control Sample     | 103                                            |  |  |  |  |  |
| LCSD 240-682334/34 | Lab Control Sample Dup | 102                                            |  |  |  |  |  |
| MB 240-682334/32   | Method Blank           | 104                                            |  |  |  |  |  |

### Surrogate Legend

TFE = 1,1,1-Trifluoroethane

## Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Groundwater

Prep Type: Total/NA

|               |                  | Percent Surrogate Recovery (Acceptance Limits) |                  |  |  |  |  |
|---------------|------------------|------------------------------------------------|------------------|--|--|--|--|
| Lab Sample ID | Client Sample ID | DCB1<br>(10-150)                               | TCX1<br>(17-150) |  |  |  |  |
| 310-321076-2  | MW-3             | 70                                             | 78               |  |  |  |  |

### Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)  
TCX = Tetrachloro-m-xylene

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# Surrogate Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

|                                     |                    | Percent Surrogate Recovery (Acceptance Limits) |                  |  |  |  |  |  |
|-------------------------------------|--------------------|------------------------------------------------|------------------|--|--|--|--|--|
| Lab Sample ID                       | Client Sample ID   | DCB1<br>(10-150)                               | TCX1<br>(17-150) |  |  |  |  |  |
| LB 310-473959/1-E                   | Method Blank       | 50                                             | 70               |  |  |  |  |  |
| LCS 310-474794/2-A                  | Lab Control Sample | 45                                             | 64               |  |  |  |  |  |
| MB 310-474794/1-A                   | Method Blank       | 41                                             | 65               |  |  |  |  |  |
| <b>Surrogate Legend</b>             |                    |                                                |                  |  |  |  |  |  |
| DCB = DCB Decachlorobiphenyl (Surr) |                    |                                                |                  |  |  |  |  |  |
| TCX = Tetrachloro-m-xylene          |                    |                                                |                  |  |  |  |  |  |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Groundwater

Prep Type: Total/NA

|                                     |                  | Percent Surrogate Recovery (Acceptance Limits) |                  |  |  |  |  |  |
|-------------------------------------|------------------|------------------------------------------------|------------------|--|--|--|--|--|
| Lab Sample ID                       | Client Sample ID | DCB1<br>(10-150)                               | TCX1<br>(17-150) |  |  |  |  |  |
| 310-321076-2                        | MW-3             | 70                                             | 77               |  |  |  |  |  |
| <b>Surrogate Legend</b>             |                  |                                                |                  |  |  |  |  |  |
| DCB = DCB Decachlorobiphenyl (Surr) |                  |                                                |                  |  |  |  |  |  |
| TCX = Tetrachloro-m-xylene          |                  |                                                |                  |  |  |  |  |  |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water

Prep Type: Total/NA

|                                     |                    | Percent Surrogate Recovery (Acceptance Limits) |                  |  |  |  |  |  |
|-------------------------------------|--------------------|------------------------------------------------|------------------|--|--|--|--|--|
| Lab Sample ID                       | Client Sample ID   | DCB1<br>(10-150)                               | TCX1<br>(17-150) |  |  |  |  |  |
| LB 310-473822/1-E                   | Method Blank       | 65                                             | 62               |  |  |  |  |  |
| LCS 310-474794/10-A                 | Lab Control Sample | 45                                             | 72               |  |  |  |  |  |
| MB 310-474794/1-A                   | Method Blank       | 41                                             | 64               |  |  |  |  |  |
| <b>Surrogate Legend</b>             |                    |                                                |                  |  |  |  |  |  |
| DCB = DCB Decachlorobiphenyl (Surr) |                    |                                                |                  |  |  |  |  |  |
| TCX = Tetrachloro-m-xylene          |                    |                                                |                  |  |  |  |  |  |

## Method: 8151A - Herbicides (GC)

Matrix: Groundwater

Prep Type: Total/NA

|                         |                  | Percent Surrogate Recovery (Acceptance Limits) |  |  |  |  |  |  |
|-------------------------|------------------|------------------------------------------------|--|--|--|--|--|--|
| Lab Sample ID           | Client Sample ID | DCPAA2<br>(25-130)                             |  |  |  |  |  |  |
| 310-321076-2            | MW-3             | 81                                             |  |  |  |  |  |  |
| <b>Surrogate Legend</b> |                  |                                                |  |  |  |  |  |  |
| DCPAA = DCAA            |                  |                                                |  |  |  |  |  |  |

## Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

|                     |                        | Percent Surrogate Recovery (Acceptance Limits) |  |  |  |  |  |  |
|---------------------|------------------------|------------------------------------------------|--|--|--|--|--|--|
| Lab Sample ID       | Client Sample ID       | DCPAA2<br>(25-130)                             |  |  |  |  |  |  |
| LCS 500-844545/2-A  | Lab Control Sample     | 107                                            |  |  |  |  |  |  |
| LCSD 500-844545/3-A | Lab Control Sample Dup | 96                                             |  |  |  |  |  |  |

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# Surrogate Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

Method: 8151A - Herbicides (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

| Percent Surrogate Recovery (Acceptance Limits) |                  |                    |
|------------------------------------------------|------------------|--------------------|
| Lab Sample ID                                  | Client Sample ID | DCPAA2<br>(25-130) |
| MB 500-844545/1-A                              | Method Blank     | 78                 |
| Surrogate Legend                               |                  |                    |
| DCPAA = DCAA                                   |                  |                    |

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 H MSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-474409/6

Matrix: Water

Analysis Batch: 474409

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | <1.00     |              | 1.00  | 0.380 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,1,1-Trichloroethane       | <1.00     |              | 1.00  | 0.420 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,1,2,2-Tetrachloroethane   | <1.00     |              | 1.00  | 0.350 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,1,2-Trichloroethane       | <1.00     |              | 1.00  | 0.330 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,1-Dichloroethane          | <1.00     |              | 1.00  | 0.400 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,1-Dichloroethene          | <2.00     |              | 2.00  | 0.460 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,1-Dichloropropene         | <1.00     |              | 1.00  | 0.410 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,2,3-Trichloropropane      | <1.00     |              | 1.00  | 0.430 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,2,4-Trichlorobenzene      | <5.00     |              | 5.00  | 1.90  | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,2-Dibromo-3-chloropropane | <5.00     |              | 5.00  | 1.20  | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,2-Dibromoethane (EDB)     | <1.00     |              | 1.00  | 0.340 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,2-Dichlorobenzene         | <1.00     |              | 1.00  | 0.370 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,2-Dichloroethane          | <1.00     |              | 1.00  | 0.890 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,2-Dichloropropane         | <1.00     |              | 1.00  | 0.380 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,3-Dichlorobenzene         | <1.00     |              | 1.00  | 0.470 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,3-Dichloropropane         | <1.00     |              | 1.00  | 0.390 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 1,4-Dichlorobenzene         | <1.00     |              | 1.00  | 0.490 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 2,2-Dichloropropane         | <4.00     |              | 4.00  | 0.690 | ug/L |   |          | 11/21/25 13:29 | 1       |
| 2-Butanone (MEK)            | <10.0     |              | 10.0  | 3.40  | ug/L |   |          | 11/21/25 13:29 | 1       |
| 2-Hexanone                  | <10.0     |              | 10.0  | 3.80  | ug/L |   |          | 11/21/25 13:29 | 1       |
| 4-Methyl-2-pentanone (MIBK) | <10.0     |              | 10.0  | 3.50  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Acetone                     | <10.0     |              | 10.0  | 3.80  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Acrolein                    | <10.0     |              | 10.0  | 3.60  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Acrylonitrile               | <5.00     |              | 5.00  | 2.20  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Allyl chloride              | <2.00     |              | 2.00  | 0.700 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Benzene                     | <0.500    |              | 0.500 | 0.220 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Bromochloromethane          | <5.00     |              | 5.00  | 1.70  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Bromodichloromethane        | <1.00     |              | 1.00  | 0.390 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Bromoform                   | <5.00     |              | 5.00  | 2.60  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Bromomethane                | <4.00     |              | 4.00  | 1.10  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Carbon disulfide            | <1.00     |              | 1.00  | 0.450 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Carbon tetrachloride        | <2.00     |              | 2.00  | 0.650 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Chlorobenzene               | <1.00     |              | 1.00  | 0.350 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Chlorodibromomethane        | <5.00     |              | 5.00  | 1.50  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Chloroethane                | <4.00     |              | 4.00  | 0.900 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Chloroform                  | <3.00     |              | 3.00  | 1.30  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Chloromethane               | <3.00     |              | 3.00  | 0.610 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Chloroprene                 | <1.00     |              | 1.00  | 0.320 | ug/L |   |          | 11/21/25 13:29 | 1       |
| cis-1,2-Dichloroethene      | <1.00     |              | 1.00  | 0.550 | ug/L |   |          | 11/21/25 13:29 | 1       |
| cis-1,3-Dichloropropene     | <5.00     |              | 5.00  | 1.20  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Dibromomethane              | <1.00     |              | 1.00  | 0.330 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Dichlorodifluoromethane     | <3.00     |              | 3.00  | 0.850 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Ethyl methacrylate          | <2.00     |              | 2.00  | 0.630 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Ethylbenzene                | <1.00     |              | 1.00  | 0.420 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Iodomethane                 | <10.0     |              | 10.0  | 2.60  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Methacrylonitrile           | <10.0     |              | 10.0  | 3.30  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Methyl methacrylate         | <2.00     |              | 2.00  | 0.760 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Methylene chloride          | <5.00     |              | 5.00  | 1.70  | ug/L |   |          | 11/21/25 13:29 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-474409/6

Matrix: Water

Analysis Batch: 474409

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|------|-------|------|---|----------|----------------|---------|
| Naphthalene                 | <5.00     |              | 5.00 | 1.80  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Propionitrile               | <10.0     |              | 10.0 | 3.40  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Styrene                     | <1.00     |              | 1.00 | 0.370 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Tetrachloroethene           | <1.00     |              | 1.00 | 0.480 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Toluene                     | <1.00     |              | 1.00 | 0.430 | ug/L |   |          | 11/21/25 13:29 | 1       |
| trans-1,2-Dichloroethene    | <1.00     |              | 1.00 | 0.410 | ug/L |   |          | 11/21/25 13:29 | 1       |
| trans-1,3-Dichloropropene   | <5.00     |              | 5.00 | 2.30  | ug/L |   |          | 11/21/25 13:29 | 1       |
| trans-1,4-Dichloro-2-butene | <10.0     |              | 10.0 | 2.40  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Trichloroethene             | <1.00     |              | 1.00 | 0.350 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Trichlorofluoromethane      | <4.00     |              | 4.00 | 0.470 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Vinyl acetate               | <10.0     |              | 10.0 | 7.10  | ug/L |   |          | 11/21/25 13:29 | 1       |
| Vinyl chloride              | <1.00     |              | 1.00 | 0.430 | ug/L |   |          | 11/21/25 13:29 | 1       |
| Xylenes, Total              | <3.00     |              | 3.00 | 1.10  | ug/L |   |          | 11/21/25 13:29 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------|----------------|---------|
| Dibromofluoromethane (Surr) | 109          |              | 76 - 130 |          | 11/21/25 13:29 | 1       |
| Toluene-d8 (Surr)           | 94           |              | 80 - 120 |          | 11/21/25 13:29 | 1       |
| 4-Bromofluorobenzene (Surr) | 106          |              | 80 - 120 |          | 11/21/25 13:29 | 1       |

Lab Sample ID: LCS 310-474409/7

Matrix: Water

Analysis Batch: 474409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,1,1,2-Tetrachloroethane   | 20.0        | 18.20      |               | ug/L |   | 91   | 70 - 121    |
| 1,1,1-Trichloroethane       | 20.0        | 20.64      |               | ug/L |   | 103  | 69 - 130    |
| 1,1,2,2-Tetrachloroethane   | 20.0        | 17.71      |               | ug/L |   | 89   | 70 - 122    |
| 1,1,2-Trichloroethane       | 20.0        | 18.59      |               | ug/L |   | 93   | 75 - 121    |
| 1,1-Dichloroethane          | 20.0        | 19.87      |               | ug/L |   | 99   | 69 - 127    |
| 1,1-Dichloroethene          | 20.0        | 20.22      |               | ug/L |   | 101  | 64 - 134    |
| 1,1-Dichloropropene         | 20.0        | 17.21      |               | ug/L |   | 86   | 70 - 133    |
| 1,2,3-Trichloropropane      | 20.0        | 18.75      |               | ug/L |   | 94   | 70 - 122    |
| 1,2,4-Trichlorobenzene      | 20.0        | 17.14      |               | ug/L |   | 86   | 69 - 125    |
| 1,2-Dibromo-3-chloropropane | 20.0        | 17.39      |               | ug/L |   | 87   | 62 - 132    |
| 1,2-Dibromoethane (EDB)     | 20.0        | 17.14      |               | ug/L |   | 86   | 74 - 122    |
| 1,2-Dichlorobenzene         | 20.0        | 18.41      |               | ug/L |   | 92   | 74 - 120    |
| 1,2-Dichloroethane          | 20.0        | 20.36      |               | ug/L |   | 102  | 68 - 125    |
| 1,2-Dichloropropane         | 20.0        | 17.25      |               | ug/L |   | 86   | 72 - 128    |
| 1,3-Dichlorobenzene         | 20.0        | 18.64      |               | ug/L |   | 93   | 71 - 120    |
| 1,3-Dichloropropane         | 20.0        | 16.69      |               | ug/L |   | 83   | 72 - 125    |
| 1,4-Dichlorobenzene         | 20.0        | 18.97      |               | ug/L |   | 95   | 72 - 120    |
| 2,2-Dichloropropane         | 20.0        | 20.99      |               | ug/L |   | 105  | 51 - 146    |
| 2-Butanone (MEK)            | 40.0        | 32.83      |               | ug/L |   | 82   | 60 - 134    |
| 2-Hexanone                  | 40.0        | 36.24      |               | ug/L |   | 91   | 62 - 139    |
| 4-Methyl-2-pentanone (MIBK) | 40.0        | 33.78      |               | ug/L |   | 84   | 62 - 136    |
| Acetone                     | 40.0        | 44.97      |               | ug/L |   | 112  | 59 - 136    |
| Acrolein                    | 94.8        | 95.04      |               | ug/L |   | 100  | 50 - 150    |
| Acrylonitrile               | 200         | 224.9      |               | ug/L |   | 112  | 50 - 150    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-474409/7

Matrix: Water

Analysis Batch: 474409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|-------------|
| Allyl chloride              | 20.0        | 19.80      |               | ug/L |   | 99   | 61 - 136    |
| Benzene                     | 20.0        | 18.00      |               | ug/L |   | 90   | 71 - 125    |
| Bromochloromethane          | 20.0        | 20.67      |               | ug/L |   | 103  | 69 - 131    |
| Bromodichloromethane        | 20.0        | 18.99      |               | ug/L |   | 95   | 70 - 122    |
| Bromoform                   | 20.0        | 16.88      |               | ug/L |   | 84   | 62 - 122    |
| Carbon disulfide            | 20.0        | 20.37      |               | ug/L |   | 102  | 58 - 137    |
| Carbon tetrachloride        | 20.0        | 21.17      |               | ug/L |   | 106  | 63 - 136    |
| Chlorobenzene               | 20.0        | 18.19      |               | ug/L |   | 91   | 74 - 120    |
| Chlorodibromomethane        | 20.0        | 17.07      |               | ug/L |   | 85   | 69 - 121    |
| Chloroform                  | 20.0        | 20.13      |               | ug/L |   | 101  | 72 - 122    |
| Chloroprene                 | 20.0        | 17.96      |               | ug/L |   | 90   | 67 - 136    |
| cis-1,2-Dichloroethene      | 20.0        | 19.85      |               | ug/L |   | 99   | 72 - 123    |
| cis-1,3-Dichloropropene     | 20.0        | 17.51      |               | ug/L |   | 88   | 72 - 123    |
| Dibromomethane              | 20.0        | 20.21      |               | ug/L |   | 101  | 72 - 122    |
| Ethyl methacrylate          | 20.0        | 17.40      |               | ug/L |   | 87   | 68 - 128    |
| Ethylbenzene                | 20.0        | 18.06      |               | ug/L |   | 90   | 75 - 120    |
| Iodomethane                 | 20.0        | 14.31      |               | ug/L |   | 72   | 18 - 150    |
| Methacrylonitrile           | 200         | 186.5      |               | ug/L |   | 93   | 67 - 128    |
| Methyl methacrylate         | 40.0        | 38.70      |               | ug/L |   | 97   | 69 - 129    |
| Methylene chloride          | 20.0        | 22.95      |               | ug/L |   | 115  | 72 - 128    |
| Naphthalene                 | 20.0        | 17.48      |               | ug/L |   | 87   | 69 - 126    |
| Propionitrile               | 200         | 205.6      |               | ug/L |   | 103  | 68 - 131    |
| Styrene                     | 20.0        | 18.50      |               | ug/L |   | 92   | 74 - 122    |
| Tetrachloroethene           | 20.0        | 18.39      |               | ug/L |   | 92   | 70 - 128    |
| Toluene                     | 20.0        | 18.34      |               | ug/L |   | 92   | 74 - 120    |
| trans-1,2-Dichloroethene    | 20.0        | 20.42      |               | ug/L |   | 102  | 67 - 127    |
| trans-1,3-Dichloropropene   | 20.0        | 16.03      |               | ug/L |   | 80   | 67 - 123    |
| trans-1,4-Dichloro-2-butene | 20.0        | 17.63      |               | ug/L |   | 88   | 50 - 150    |
| Trichloroethene             | 20.0        | 17.03      |               | ug/L |   | 85   | 70 - 128    |
| Vinyl acetate               | 40.0        | 34.68      |               | ug/L |   | 87   | 50 - 150    |
| Xylenes, Total              | 40.0        | 36.76      |               | ug/L |   | 92   | 74 - 121    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| Dibromofluoromethane (Surr) | 111           |               | 76 - 130 |
| Toluene-d8 (Surr)           | 99            |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 98            |               | 80 - 120 |

Lab Sample ID: LCS 310-474409/8

Matrix: Water

Analysis Batch: 474409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                 | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------------------|-------------|------------|---------------|------|---|------|-------------|
| Bromomethane            | 20.0        | 16.79      |               | ug/L |   | 84   | 33 - 138    |
| Chloroethane            | 20.0        | 18.50      |               | ug/L |   | 93   | 59 - 139    |
| Chloromethane           | 20.0        | 20.00      |               | ug/L |   | 100  | 52 - 146    |
| Dichlorodifluoromethane | 20.0        | 20.12      |               | ug/L |   | 101  | 45 - 150    |
| Trichlorofluoromethane  | 20.0        | 20.73      |               | ug/L |   | 104  | 55 - 150    |
| Vinyl chloride          | 20.0        | 19.80      |               | ug/L |   | 99   | 60 - 142    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-474409/8

Matrix: Water

Analysis Batch: 474409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Surrogate                   | LCS LCS   |           | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| Dibromofluoromethane (Surr) | 105       |           | 76 - 130 |
| Toluene-d8 (Surr)           | 92        |           | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 107       |           | 80 - 120 |

## Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-474714/1-A

Matrix: Water

Analysis Batch: 474898

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                                | MB MB  |           | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
|                                        | Result | Qualifier |      |       |      |   |                |                |         |
| 1,2,4,5-Tetrachlorobenzene             | <10.0  |           | 10.0 | 0.540 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 1,3-Dinitrobenzene                     | <10.0  |           | 10.0 | 3.20  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2,3,4,6-Tetrachlorophenol              | <10.0  |           | 10.0 | 5.30  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2,4,5-Trichlorophenol                  | <10.0  |           | 10.0 | 5.30  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2,4,6-Trichlorophenol                  | <10.0  |           | 10.0 | 5.00  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2,4-Dichlorophenol                     | <10.0  |           | 10.0 | 0.850 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2,4-Dimethylphenol                     | <10.0  |           | 10.0 | 0.580 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2,4-Dinitrophenol                      | <20.0  |           | 20.0 | 13.0  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2,4-Dinitrotoluene                     | <10.0  |           | 10.0 | 6.40  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2,6-Dichlorophenol                     | <10.0  |           | 10.0 | 0.690 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2,6-Dinitrotoluene                     | <10.0  |           | 10.0 | 0.520 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2-Chloronaphthalene                    | <10.0  |           | 10.0 | 0.640 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2-Chlorophenol                         | <10.0  |           | 10.0 | 0.540 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2-Methylnaphthalene                    | <10.0  |           | 10.0 | 0.590 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2-Methylphenol                         | <10.0  |           | 10.0 | 0.650 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2-Nitroaniline                         | <10.0  |           | 10.0 | 5.90  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2-Nitrophenol                          | <10.0  |           | 10.0 | 6.80  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 3,3'-Dichlorobenzidine                 | <10.0  |           | 10.0 | 1.40  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 3-Nitroaniline                         | <10.0  |           | 10.0 | 2.70  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 4,6-Dinitro-2-methylphenol             | <10.0  |           | 10.0 | 6.90  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 4-Bromophenyl phenyl ether             | <10.0  |           | 10.0 | 0.700 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 4-Chloro-3-methylphenol                | <10.0  |           | 10.0 | 0.840 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 4-Chloroaniline                        | <10.0  |           | 10.0 | 0.620 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 4-Chlorophenyl phenyl ether            | <10.0  |           | 10.0 | 0.690 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 4-Methylphenol (and/or 3-Methylphenol) | <10.0  |           | 10.0 | 0.700 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 4-Nitroaniline                         | <10.0  |           | 10.0 | 1.30  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 4-Nitrophenol                          | <10.0  |           | 10.0 | 7.60  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Acenaphthene                           | <10.0  |           | 10.0 | 0.640 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Acenaphthylene                         | <10.0  |           | 10.0 | 0.720 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Acetophenone                           | <10.0  |           | 10.0 | 0.690 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Anthracene                             | <10.0  |           | 10.0 | 0.870 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Benzo[a]anthracene                     | <10.0  |           | 10.0 | 0.850 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Benzo[a]pyrene                         | <10.0  |           | 10.0 | 8.10  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Benzo[b]fluoranthene                   | <10.0  |           | 10.0 | 4.90  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Benzo[g,h,i]perylene                   | <10.0  |           | 10.0 | 6.30  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Benzo[k]fluoranthene                   | <10.0  |           | 10.0 | 2.20  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Benzyl alcohol                         | <10.0  |           | 10.0 | 1.30  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-474714/1-A

Matrix: Water

Analysis Batch: 474898

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                       | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Bis(2-chloroethoxy)methane    | <10.0     |              | 10.0 | 0.760 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Bis(2-chloroethyl)ether       | <10.0     |              | 10.0 | 0.820 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| bis (2-chloroisopropyl) ether | <10.0     |              | 10.0 | 0.540 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Bis(2-ethylhexyl) phthalate   | <10.0     |              | 10.0 | 5.50  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Butyl benzyl phthalate        | <10.0     |              | 10.0 | 5.40  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Chrysene                      | <10.0     |              | 10.0 | 0.870 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Dibenz(a,h)anthracene         | <10.0     |              | 10.0 | 3.90  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Dibenzofuran                  | <10.0     |              | 10.0 | 0.740 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Diethyl phthalate             | <10.0     |              | 10.0 | 1.70  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Dimethyl phthalate            | <10.0     |              | 10.0 | 1.00  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Di-n-butyl phthalate          | <10.0     |              | 10.0 | 5.60  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Di-n-octyl phthalate          | <20.0     |              | 20.0 | 7.00  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Diphenylamine                 | <10.0     |              | 10.0 | 6.00  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Fluoranthene                  | <10.0     |              | 10.0 | 1.70  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Fluorene                      | <10.0     |              | 10.0 | 0.790 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Hexachlorobenzene             | <10.0     |              | 10.0 | 0.700 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Hexachlorobutadiene           | <10.0     |              | 10.0 | 0.860 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Hexachlorocyclopentadiene     | <10.0     |              | 10.0 | 5.10  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Hexachloroethane              | <10.0     |              | 10.0 | 0.970 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Indeno[1,2,3-cd]pyrene        | <10.0     |              | 10.0 | 4.20  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Isophorone                    | <10.0     |              | 10.0 | 0.930 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Nitrobenzene                  | <10.0     |              | 10.0 | 0.800 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| N-Nitrosodimethylamine        | <10.0     |              | 10.0 | 0.720 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| N-Nitrosodi-n-propylamine     | <10.0     |              | 10.0 | 0.920 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| N-Nitrosodiphenylamine        | <10.0     |              | 10.0 | 0.750 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Pentachlorophenol             | <10.0     |              | 10.0 | 9.60  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Phenanthrene                  | <10.0     |              | 10.0 | 0.790 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Phenol                        | <10.0     |              | 10.0 | 1.10  | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Pyrene                        | <10.0     |              | 10.0 | 0.790 | ug/L |   | 11/25/25 07:09 | 11/26/25 11:36 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2-Fluorophenol (Surr)       | 60           |              | 21 - 110 | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Phenol-d5 (Surr)            | 49           |              | 21 - 110 | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Nitrobenzene-d5 (Surr)      | 77           |              | 39 - 140 | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2-Fluorobiphenyl (Surr)     | 70           |              | 33 - 126 | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| 2,4,6-Tribromophenol (Surr) | 83           |              | 20 - 144 | 11/25/25 07:09 | 11/26/25 11:36 | 1       |
| Terphenyl-d14 (Surr)        | 80           |              | 13 - 150 | 11/25/25 07:09 | 11/26/25 11:36 | 1       |

Lab Sample ID: MB 310-474714/1-A

Matrix: Water

Analysis Batch: 475609

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                    | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| 1,2,4,5-Tetrachlorobenzene | <10.0     |              | 10.0 | 0.540 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 1,3,5-Trinitrobenzene      | <10.0     |              | 10.0 | 2.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 1,3-Dinitrobenzene         | <10.0     |              | 10.0 | 3.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 1,4-Naphthoquinone         | <10.0     |              | 10.0 | 3.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 1,4-Phenylenediamine       | <10.0     |              | 10.0 | 1.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-474714/1-A

Matrix: Water

Analysis Batch: 475609

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                                | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| 1-Naphthylamine                        | <10.0     |              | 10.0 | 2.50  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2,3,4,6-Tetrachlorophenol              | <10.0     |              | 10.0 | 5.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2,4,5-Trichlorophenol                  | <10.0     |              | 10.0 | 5.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2,4,6-Trichlorophenol                  | <10.0     |              | 10.0 | 5.00  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2,4-Dichlorophenol                     | <10.0     |              | 10.0 | 0.850 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2,4-Dimethylphenol                     | <10.0     |              | 10.0 | 0.580 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2,4-Dinitrophenol                      | <20.0     |              | 20.0 | 13.0  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2,4-Dinitrotoluene                     | <10.0     |              | 10.0 | 6.40  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2,6-Dichlorophenol                     | <10.0     |              | 10.0 | 0.690 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2,6-Dinitrotoluene                     | <10.0     |              | 10.0 | 0.520 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2-Acetylaminofluorene                  | <20.0     |              | 20.0 | 2.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2-Chloronaphthalene                    | <10.0     |              | 10.0 | 0.640 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2-Chlorophenol                         | <10.0     |              | 10.0 | 0.540 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2-Methylnaphthalene                    | <10.0     |              | 10.0 | 0.590 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2-Methylphenol                         | <10.0     |              | 10.0 | 0.650 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2-Naphthylamine                        | <10.0     |              | 10.0 | 2.10  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2-Nitroaniline                         | <10.0     |              | 10.0 | 5.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2-Nitrophenol                          | <10.0     |              | 10.0 | 6.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 3,3'-Dichlorobenzidine                 | <10.0     |              | 10.0 | 1.40  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 3,3'-Dimethylbenzidine                 | <10.0     |              | 10.0 | 1.50  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 3-Methylcholanthrene                   | <10.0     |              | 10.0 | 0.320 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 3-Nitroaniline                         | <10.0     |              | 10.0 | 2.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 4,6-Dinitro-2-methylphenol             | <10.0     |              | 10.0 | 6.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 4-Aminobiphenyl                        | <10.0     |              | 10.0 | 2.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 4-Bromophenyl phenyl ether             | <10.0     |              | 10.0 | 0.700 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 4-Chloro-3-methylphenol                | <10.0     |              | 10.0 | 0.840 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 4-Chloroaniline                        | <10.0     |              | 10.0 | 0.620 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 4-Chlorophenyl phenyl ether            | <10.0     |              | 10.0 | 0.690 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 4-Methylphenol (and/or 3-Methylphenol) | <10.0     |              | 10.0 | 0.700 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 4-Nitroaniline                         | <10.0     |              | 10.0 | 1.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 4-Nitrophenol                          | <10.0     |              | 10.0 | 7.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 5-Nitro-o-toluidine                    | <10.0     |              | 10.0 | 2.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 7,12-Dimethylbenz(a)anthracene         | <10.0     |              | 10.0 | 1.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Acenaphthene                           | <10.0     |              | 10.0 | 0.640 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Acenaphthylene                         | <10.0     |              | 10.0 | 0.720 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Acetophenone                           | <10.0     |              | 10.0 | 0.690 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Anthracene                             | <10.0     |              | 10.0 | 0.870 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Benzo[a]anthracene                     | <10.0     |              | 10.0 | 0.850 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Benzo[a]pyrene                         | <10.0     |              | 10.0 | 8.10  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Benzo[b]fluoranthene                   | <10.0     |              | 10.0 | 4.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Benzo[g,h,i]perylene                   | <10.0     |              | 10.0 | 6.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Benzo[k]fluoranthene                   | <10.0     |              | 10.0 | 2.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Benzyl alcohol                         | <10.0     |              | 10.0 | 1.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Bis(2-chloroethoxy)methane             | <10.0     |              | 10.0 | 0.760 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Bis(2-chloroethyl)ether                | <10.0     |              | 10.0 | 0.820 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| bis (2-chloroisopropyl) ether          | <10.0     |              | 10.0 | 0.540 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Bis(2-ethylhexyl) phthalate            | <10.0     |              | 10.0 | 5.50  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Butyl benzyl phthalate                 | <10.0     |              | 10.0 | 5.40  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-474714/1-A

Matrix: Water

Analysis Batch: 475609

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                          | MB<br>Result | MB<br>Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|--------------|-----------------|------|-------|------|---|----------------|----------------|---------|
| Chlorobenzilate                  | <10.0        |                 | 10.0 | 3.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Chrysene                         | <10.0        |                 | 10.0 | 0.870 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Diallate                         | <10.0        |                 | 10.0 | 4.00  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Dibenz(a,h)anthracene            | <10.0        |                 | 10.0 | 3.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Dibenzofuran                     | <10.0        |                 | 10.0 | 0.740 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Diethyl phthalate                | <10.0        |                 | 10.0 | 1.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Dimethoate                       | <10.0        |                 | 10.0 | 3.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Dimethyl phthalate               | <10.0        |                 | 10.0 | 1.00  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Di-n-butyl phthalate             | <10.0        |                 | 10.0 | 5.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Di-n-octyl phthalate             | <20.0        |                 | 20.0 | 7.00  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Dinoseb                          | <10.0        |                 | 10.0 | 2.40  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Diphenylamine                    | <10.0        |                 | 10.0 | 6.00  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Disulfoton                       | <10.0        |                 | 10.0 | 2.40  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Ethyl methanesulfonate           | <10.0        |                 | 10.0 | 3.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Ethyl parathion                  | <10.0        |                 | 10.0 | 2.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Famphur                          | <10.0        |                 | 10.0 | 3.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Fluoranthene                     | <10.0        |                 | 10.0 | 1.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Fluorene                         | <10.0        |                 | 10.0 | 0.790 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Hexachlorobenzene                | <10.0        |                 | 10.0 | 0.700 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Hexachlorobutadiene              | <10.0        |                 | 10.0 | 0.860 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Hexachlorocyclopentadiene        | <10.0        |                 | 10.0 | 5.10  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Hexachloroethane                 | <10.0        |                 | 10.0 | 0.970 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Hexachloropropene                | <10.0        |                 | 10.0 | 2.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Indeno[1,2,3-cd]pyrene           | <10.0        |                 | 10.0 | 4.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Isodrin                          | <10.0        |                 | 10.0 | 4.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Isophorone                       | <10.0        |                 | 10.0 | 0.930 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Isosafrole                       | <10.0        |                 | 10.0 | 2.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Kepone                           | <10.0        |                 | 10.0 | 1.00  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Methapyrilene                    | <10.0        |                 | 10.0 | 0.760 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Methyl methanesulfonate          | <10.0        |                 | 10.0 | 3.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Methyl parathion                 | <10.0        |                 | 10.0 | 2.30  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Nitrobenzene                     | <10.0        |                 | 10.0 | 0.800 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| N-Nitrosodiethylamine            | <10.0        |                 | 10.0 | 3.40  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| N-Nitrosodimethylamine           | <10.0        |                 | 10.0 | 0.720 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| N-Nitrosodi-n-butylamine         | <10.0        |                 | 10.0 | 3.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| N-Nitrosodi-n-propylamine        | <10.0        |                 | 10.0 | 0.920 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| N-Nitrosodiphenylamine           | <10.0        |                 | 10.0 | 0.750 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| N-Nitrosomethylethylamine        | <10.0        |                 | 10.0 | 4.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| N-Nitrosopiperidine              | <10.0        |                 | 10.0 | 2.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| N-Nitrosopyrrolidine             | <10.0        |                 | 10.0 | 3.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| o,o',o"-Triethylphosphorothioate | <10.0        |                 | 10.0 | 3.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| o-Toluidine                      | <10.0        |                 | 10.0 | 2.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| p-Dimethylamino azobenzene       | <10.0        |                 | 10.0 | 2.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Pentachlorobenzene               | <10.0        |                 | 10.0 | 2.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Pentachloronitrobenzene          | <10.0        |                 | 10.0 | 5.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Pentachlorophenol                | <10.0        |                 | 10.0 | 9.60  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Phenacetin                       | <10.0        |                 | 10.0 | 1.90  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Phenanthrene                     | <10.0        |                 | 10.0 | 0.790 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Phenol                           | <10.0        |                 | 10.0 | 1.10  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-474714/1-A

Matrix: Water

Analysis Batch: 475609

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 474714

| Analyte   | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Phorate   | <10.0     |              | 10.0 | 3.20  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Pronamide | <10.0     |              | 10.0 | 2.70  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Pyrene    | <10.0     |              | 10.0 | 0.790 | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Safrole   | <10.0     |              | 10.0 | 2.80  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Thionazin | <10.0     |              | 10.0 | 3.50  | ug/L |   | 11/25/25 07:09 | 12/05/25 13:07 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2-Fluorophenol (Surr)       | 57           |              | 21 - 110 | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Phenol-d5 (Surr)            | 53           |              | 21 - 110 | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Nitrobenzene-d5 (Surr)      | 73           |              | 39 - 140 | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2-Fluorobiphenyl (Surr)     | 68           |              | 33 - 126 | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| 2,4,6-Tribromophenol (Surr) | 67           |              | 20 - 144 | 11/25/25 07:09 | 12/05/25 13:07 | 1       |
| Terphenyl-d14 (Surr)        | 103          |              | 13 - 150 | 11/25/25 07:09 | 12/05/25 13:07 | 1       |

Lab Sample ID: LCS 310-474714/2-A

Matrix: Water

Analysis Batch: 474898

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,2,4,5-Tetrachlorobenzene             | 100         | 51.77      |               | ug/L |   | 52   | 35 - 110    |
| 1,3-Dinitrobenzene                     | 100         | 76.23      |               | ug/L |   | 76   | 36 - 147    |
| 2,3,4,6-Tetrachlorophenol              | 100         | 69.90      |               | ug/L |   | 70   | 32 - 142    |
| 2,4,5-Trichlorophenol                  | 100         | 78.59      |               | ug/L |   | 79   | 39 - 136    |
| 2,4,6-Trichlorophenol                  | 100         | 81.64      |               | ug/L |   | 82   | 35 - 141    |
| 2,4-Dichlorophenol                     | 100         | 72.50      |               | ug/L |   | 72   | 44 - 131    |
| 2,4-Dimethylphenol                     | 100         | 70.92      |               | ug/L |   | 71   | 30 - 128    |
| 2,4-Dinitrophenol                      | 200         | 82.31      |               | ug/L |   | 41   | 10 - 150    |
| 2,4-Dinitrotoluene                     | 100         | 76.00      |               | ug/L |   | 76   | 48 - 136    |
| 2,6-Dichlorophenol                     | 100         | 72.84      |               | ug/L |   | 73   | 41 - 131    |
| 2,6-Dinitrotoluene                     | 100         | 79.85      |               | ug/L |   | 80   | 49 - 135    |
| 2-Chloronaphthalene                    | 100         | 60.14      |               | ug/L |   | 60   | 33 - 112    |
| 2-Chlorophenol                         | 100         | 57.22      |               | ug/L |   | 57   | 43 - 119    |
| 2-Methylnaphthalene                    | 100         | 51.72      |               | ug/L |   | 52   | 35 - 110    |
| 2-Methylphenol                         | 100         | 58.06      |               | ug/L |   | 58   | 47 - 114    |
| 2-Nitroaniline                         | 100         | 77.09      |               | ug/L |   | 77   | 48 - 135    |
| 2-Nitrophenol                          | 100         | 80.02      |               | ug/L |   | 80   | 36 - 144    |
| 3-Nitroaniline                         | 100         | 80.04      |               | ug/L |   | 80   | 38 - 142    |
| 4,6-Dinitro-2-methylphenol             | 200         | 149.4      |               | ug/L |   | 75   | 22 - 150    |
| 4-Bromophenyl phenyl ether             | 100         | 71.79      |               | ug/L |   | 72   | 41 - 131    |
| 4-Chloro-3-methylphenol                | 100         | 70.35      |               | ug/L |   | 70   | 51 - 132    |
| 4-Chloroaniline                        | 100         | 63.31      |               | ug/L |   | 63   | 13 - 143    |
| 4-Chlorophenyl phenyl ether            | 100         | 61.69      |               | ug/L |   | 62   | 44 - 118    |
| 4-Methylphenol (and/or 3-Methylphenol) | 100         | 56.49      |               | ug/L |   | 56   | 45 - 114    |
| 4-Nitroaniline                         | 100         | 66.81      |               | ug/L |   | 67   | 33 - 141    |
| 4-Nitrophenol                          | 200         | 86.41      |               | ug/L |   | 43   | 22 - 110    |
| Acenaphthene                           | 100         | 61.68      |               | ug/L |   | 62   | 38 - 118    |
| Acenaphthylene                         | 100         | 62.57      |               | ug/L |   | 63   | 39 - 115    |
| Acetophenone                           | 100         | 54.88      |               | ug/L |   | 55   | 47 - 118    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-474714/2-A

Matrix: Water

Analysis Batch: 474898

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                       | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------------------------|-------------|------------|---------------|------|---|------|-------------|
| Anthracene                    | 100         | 72.14      |               | ug/L |   | 72   | 49 - 127    |
| Benzo[a]anthracene            | 100         | 70.89      |               | ug/L |   | 71   | 49 - 126    |
| Benzo[a]pyrene                | 100         | 78.41      |               | ug/L |   | 78   | 44 - 133    |
| Benzo[b]fluoranthene          | 100         | 78.06      |               | ug/L |   | 78   | 44 - 136    |
| Benzo[g,h,i]perylene          | 100         | 88.71      |               | ug/L |   | 89   | 42 - 135    |
| Benzo[k]fluoranthene          | 100         | 72.85      |               | ug/L |   | 73   | 49 - 134    |
| Benzyl alcohol                | 100         | 55.66      |               | ug/L |   | 56   | 46 - 123    |
| Bis(2-chloroethoxy)methane    | 100         | 64.78      |               | ug/L |   | 65   | 44 - 126    |
| Bis(2-chloroethyl)ether       | 100         | 53.42      |               | ug/L |   | 53   | 41 - 116    |
| bis (2-chloroisopropyl) ether | 100         | 47.75      |               | ug/L |   | 48   | 36 - 115    |
| Bis(2-ethylhexyl) phthalate   | 100         | 61.89      |               | ug/L |   | 62   | 46 - 138    |
| Butyl benzyl phthalate        | 100         | 67.75      |               | ug/L |   | 68   | 47 - 133    |
| Chrysene                      | 100         | 74.38      |               | ug/L |   | 74   | 50 - 128    |
| Dibenz(a,h)anthracene         | 100         | 89.90      |               | ug/L |   | 90   | 36 - 146    |
| Dibenzofuran                  | 100         | 62.18      |               | ug/L |   | 62   | 44 - 114    |
| Diethyl phthalate             | 100         | 65.14      |               | ug/L |   | 65   | 43 - 135    |
| Dimethyl phthalate            | 100         | 69.72      |               | ug/L |   | 70   | 46 - 129    |
| Di-n-butyl phthalate          | 100         | 67.92      |               | ug/L |   | 68   | 49 - 138    |
| Di-n-octyl phthalate          | 100         | 57.16      |               | ug/L |   | 57   | 33 - 148    |
| Diphenylamine                 | 85.0        | 63.76      |               | ug/L |   | 75   | 43 - 132    |
| Fluoranthene                  | 100         | 73.86      |               | ug/L |   | 74   | 49 - 132    |
| Fluorene                      | 100         | 63.17      |               | ug/L |   | 63   | 46 - 118    |
| Hexachlorobenzene             | 100         | 73.40      |               | ug/L |   | 73   | 42 - 134    |
| Hexachlorobutadiene           | 100         | 48.88      |               | ug/L |   | 49   | 29 - 110    |
| Hexachlorocyclopentadiene     | 100         | 34.71      |               | ug/L |   | 35   | 10 - 110    |
| Hexachloroethane              | 100         | 36.26      |               | ug/L |   | 36   | 25 - 110    |
| Indeno[1,2,3-cd]pyrene        | 100         | 88.99      |               | ug/L |   | 89   | 36 - 149    |
| Isophorone                    | 100         | 64.97      |               | ug/L |   | 65   | 46 - 126    |
| Nitrobenzene                  | 100         | 66.80      |               | ug/L |   | 67   | 42 - 123    |
| N-Nitrosodimethylamine        | 100         | 50.07      |               | ug/L |   | 50   | 37 - 110    |
| N-Nitrosodi-n-propylamine     | 100         | 56.91      |               | ug/L |   | 57   | 44 - 124    |
| N-Nitrosodiphenylamine        | 100         | 74.86      |               | ug/L |   | 75   | 43 - 132    |
| Pentachlorophenol             | 200         | 98.77      |               | ug/L |   | 49   | 28 - 142    |
| Phenanthrene                  | 100         | 71.23      |               | ug/L |   | 71   | 48 - 126    |
| Phenol                        | 100         | 42.19      |               | ug/L |   | 42   | 29 - 110    |
| Pyrene                        | 100         | 71.82      |               | ug/L |   | 72   | 45 - 134    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 2-Fluorophenol (Surr)       | 50            |               | 21 - 110 |
| Phenol-d5 (Surr)            | 42            |               | 21 - 110 |
| Nitrobenzene-d5 (Surr)      | 69            |               | 39 - 140 |
| 2-Fluorobiphenyl (Surr)     | 66            |               | 33 - 126 |
| 2,4,6-Tribromophenol (Surr) | 80            |               | 20 - 144 |
| Terphenyl-d14 (Surr)        | 74            |               | 13 - 150 |



# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-474714/2-A

Matrix: Water

Analysis Batch: 475609

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------------------------|-------------|------------|---------------|------|---|------|-------------|
| 1,2,4,5-Tetrachlorobenzene             | 100         | 52.35      |               | ug/L |   | 52   | 35 - 110    |
| 1,3,5-Trinitrobenzene                  | 51.2        | 37.86      |               | ug/L |   | 74   | 26 - 150    |
| 1,3-Dinitrobenzene                     | 100         | 65.98      |               | ug/L |   | 66   | 36 - 147    |
| 1,4-Naphthoquinone                     | 51.2        | 32.97      |               | ug/L |   | 64   | 38 - 137    |
| 1,4-Phenylenediamine                   | 51.2        | <10.0      | *-            | ug/L |   | 1    | 20 - 120    |
| 1-Naphthylamine                        | 51.2        | 11.40      |               | ug/L |   | 22   | 10 - 110    |
| 2,3,4,6-Tetrachlorophenol              | 100         | 71.67      |               | ug/L |   | 72   | 32 - 142    |
| 2,4,5-Trichlorophenol                  | 100         | 73.62      |               | ug/L |   | 74   | 39 - 136    |
| 2,4,6-Trichlorophenol                  | 100         | 72.10      |               | ug/L |   | 72   | 35 - 141    |
| 2,4-Dichlorophenol                     | 100         | 68.84      |               | ug/L |   | 69   | 44 - 131    |
| 2,4-Dimethylphenol                     | 100         | 71.66      |               | ug/L |   | 72   | 30 - 128    |
| 2,4-Dinitrophenol                      | 200         | 124.4      |               | ug/L |   | 62   | 10 - 150    |
| 2,4-Dinitrotoluene                     | 100         | 67.50      |               | ug/L |   | 67   | 48 - 136    |
| 2,6-Dichlorophenol                     | 100         | 68.72      |               | ug/L |   | 69   | 41 - 131    |
| 2,6-Dinitrotoluene                     | 100         | 69.58      |               | ug/L |   | 70   | 49 - 135    |
| 2-Acetylaminofluorene                  | 51.2        | 41.34      |               | ug/L |   | 81   | 37 - 149    |
| 2-Chloronaphthalene                    | 100         | 54.97      |               | ug/L |   | 55   | 33 - 112    |
| 2-Chlorophenol                         | 100         | 57.16      |               | ug/L |   | 57   | 43 - 119    |
| 2-Methylnaphthalene                    | 100         | 53.27      |               | ug/L |   | 53   | 35 - 110    |
| 2-Methylphenol                         | 100         | 59.88      |               | ug/L |   | 60   | 47 - 114    |
| 2-Naphthylamine                        | 51.2        | 25.20      |               | ug/L |   | 49   | 18 - 111    |
| 2-Nitroaniline                         | 100         | 70.22      |               | ug/L |   | 70   | 48 - 135    |
| 2-Nitrophenol                          | 100         | 64.49      |               | ug/L |   | 64   | 36 - 144    |
| 3,3'-Dimethylbenzidine                 | 51.2        | 13.11      |               | ug/L |   | 26   | 10 - 147    |
| 3-Methylcholanthrene                   | 51.2        | 46.30      |               | ug/L |   | 90   | 13 - 140    |
| 3-Nitroaniline                         | 100         | 68.15      |               | ug/L |   | 68   | 38 - 142    |
| 4,6-Dinitro-2-methylphenol             | 200         | 155.7      |               | ug/L |   | 78   | 22 - 150    |
| 4-Aminobiphenyl                        | 51.2        | 28.77      |               | ug/L |   | 56   | 23 - 123    |
| 4-Bromophenyl phenyl ether             | 100         | 70.55      |               | ug/L |   | 71   | 41 - 131    |
| 4-Chloro-3-methylphenol                | 100         | 71.18      |               | ug/L |   | 71   | 51 - 132    |
| 4-Chloroaniline                        | 100         | 73.59      |               | ug/L |   | 74   | 13 - 143    |
| 4-Chlorophenyl phenyl ether            | 100         | 64.42      |               | ug/L |   | 64   | 44 - 118    |
| 4-Methylphenol (and/or 3-Methylphenol) | 100         | 61.29      |               | ug/L |   | 61   | 45 - 114    |
| 4-Nitroaniline                         | 100         | 68.47      |               | ug/L |   | 68   | 33 - 141    |
| 4-Nitrophenol                          | 200         | 88.04      |               | ug/L |   | 44   | 22 - 110    |
| 5-Nitro-o-toluidine                    | 51.2        | 40.21      |               | ug/L |   | 79   | 43 - 139    |
| 7,12-Dimethylbenz(a)anthracene         | 51.2        | 36.72      |               | ug/L |   | 72   | 47 - 129    |
| Acenaphthene                           | 100         | 61.08      |               | ug/L |   | 61   | 38 - 118    |
| Acenaphthylene                         | 100         | 62.29      |               | ug/L |   | 62   | 39 - 115    |
| Acetophenone                           | 100         | 61.81      |               | ug/L |   | 62   | 47 - 118    |
| Anthracene                             | 100         | 73.48      |               | ug/L |   | 73   | 49 - 127    |
| Benzo[a]anthracene                     | 100         | 77.30      |               | ug/L |   | 77   | 49 - 126    |
| Benzo[a]pyrene                         | 100         | 60.25      |               | ug/L |   | 60   | 44 - 133    |
| Benzo[b]fluoranthene                   | 100         | 63.94      |               | ug/L |   | 64   | 44 - 136    |
| Benzo[g,h,i]perylene                   | 100         | 77.83      |               | ug/L |   | 78   | 42 - 135    |
| Benzo[k]fluoranthene                   | 100         | 76.70      |               | ug/L |   | 77   | 49 - 134    |
| Benzyl alcohol                         | 100         | 65.64      |               | ug/L |   | 66   | 46 - 123    |
| Bis(2-chloroethoxy)methane             | 100         | 66.54      |               | ug/L |   | 67   | 44 - 126    |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-474714/2-A  
Matrix: Water  
Analysis Batch: 475609

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474714

| Analyte                          | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------------------------|-------------|------------|---------------|------|---|------|-------------|
| Bis(2-chloroethyl)ether          | 100         | 54.05      |               | ug/L |   | 54   | 41 - 116    |
| bis (2-chloroisopropyl) ether    | 100         | 54.91      |               | ug/L |   | 55   | 36 - 115    |
| Bis(2-ethylhexyl) phthalate      | 100         | 77.44      |               | ug/L |   | 77   | 46 - 138    |
| Butyl benzyl phthalate           | 100         | 74.98      |               | ug/L |   | 75   | 47 - 133    |
| Chlorobenzilate                  | 51.2        | 47.01      |               | ug/L |   | 92   | 39 - 145    |
| Chrysene                         | 100         | 69.21      |               | ug/L |   | 69   | 50 - 128    |
| Diallate                         | 44.8        | 36.79      |               | ug/L |   | 82   | 40 - 135    |
| Dibenz(a,h)anthracene            | 100         | 78.67      |               | ug/L |   | 79   | 36 - 146    |
| Dibenzofuran                     | 100         | 62.45      |               | ug/L |   | 62   | 44 - 114    |
| Diethyl phthalate                | 100         | 71.52      |               | ug/L |   | 72   | 43 - 135    |
| Dimethoate                       | 44.8        | 40.27      |               | ug/L |   | 90   | 31 - 150    |
| Dimethyl phthalate               | 100         | 70.76      |               | ug/L |   | 71   | 46 - 129    |
| Di-n-butyl phthalate             | 100         | 72.79      |               | ug/L |   | 73   | 49 - 138    |
| Di-n-octyl phthalate             | 100         | 81.87      |               | ug/L |   | 82   | 33 - 148    |
| Dinoseb                          | 51.2        | 38.07      |               | ug/L |   | 74   | 22 - 150    |
| Diphenylamine                    | 85.0        | 60.24      |               | ug/L |   | 71   | 43 - 132    |
| Disulfoton                       | 44.8        | 31.92      |               | ug/L |   | 71   | 27 - 138    |
| Ethyl methanesulfonate           | 51.2        | 27.81      |               | ug/L |   | 54   | 44 - 110    |
| Ethyl parathion                  | 44.8        | 35.29      |               | ug/L |   | 79   | 52 - 141    |
| Famphur                          | 44.8        | 73.98      | *+            | ug/L |   | 165  | 67 - 150    |
| Fluoranthene                     | 100         | 73.99      |               | ug/L |   | 74   | 49 - 132    |
| Fluorene                         | 100         | 64.82      |               | ug/L |   | 65   | 46 - 118    |
| Hexachlorobenzene                | 100         | 72.01      |               | ug/L |   | 72   | 42 - 134    |
| Hexachlorobutadiene              | 100         | 44.78      |               | ug/L |   | 45   | 29 - 110    |
| Hexachlorocyclopentadiene        | 100         | 37.88      |               | ug/L |   | 38   | 10 - 110    |
| Hexachloroethane                 | 100         | 36.62      |               | ug/L |   | 37   | 25 - 110    |
| Hexachloropropene                | 51.2        | 6.685      | J             | ug/L |   | 13   | 10 - 110    |
| Indeno[1,2,3-cd]pyrene           | 100         | 80.54      |               | ug/L |   | 81   | 36 - 149    |
| Isodrin                          | 51.2        | 36.83      |               | ug/L |   | 72   | 50 - 122    |
| Isophorone                       | 100         | 66.61      |               | ug/L |   | 67   | 46 - 126    |
| Isosafrole                       | 51.2        | 27.97      |               | ug/L |   | 55   | 10 - 129    |
| Kepone                           | 44.8        | 37.87      |               | ug/L |   | 85   | 10 - 150    |
| Methapyrilene                    | 44.8        | 10.21      |               | ug/L |   | 23   | 10 - 110    |
| Methyl methanesulfonate          | 51.2        | 16.68      |               | ug/L |   | 33   | 16 - 110    |
| Methyl parathion                 | 44.8        | 37.31      |               | ug/L |   | 83   | 49 - 150    |
| Nitrobenzene                     | 100         | 61.53      |               | ug/L |   | 62   | 42 - 123    |
| N-Nitrosodiethylamine            | 51.2        | 29.68      |               | ug/L |   | 58   | 51 - 116    |
| N-Nitrosodimethylamine           | 100         | 46.97      |               | ug/L |   | 47   | 37 - 110    |
| N-Nitrosodi-n-butylamine         | 51.2        | 38.90      |               | ug/L |   | 76   | 49 - 135    |
| N-Nitrosodi-n-propylamine        | 100         | 66.73      |               | ug/L |   | 67   | 44 - 124    |
| N-Nitrosodiphenylamine           | 100         | 71.81      |               | ug/L |   | 72   | 43 - 132    |
| N-Nitrosomethylethylamine        | 51.2        | 27.67      |               | ug/L |   | 54   | 43 - 114    |
| N-Nitrosopiperidine              | 51.2        | 35.30      |               | ug/L |   | 69   | 50 - 120    |
| N-Nitrosopyrrolidine             | 51.2        | 36.32      |               | ug/L |   | 71   | 47 - 129    |
| o,o',o"-Triethylphosphorothioate | 44.8        | 26.84      |               | ug/L |   | 60   | 34 - 125    |
| o-Toluidine                      | 51.2        | 23.71      |               | ug/L |   | 46   | 19 - 128    |
| p-Dimethylamino azobenzene       | 51.2        | 40.94      |               | ug/L |   | 80   | 45 - 133    |
| Pentachlorobenzene               | 51.2        | 28.47      |               | ug/L |   | 56   | 27 - 112    |
| Pentachloronitrobenzene          | 51.2        | 39.82      |               | ug/L |   | 78   | 45 - 132    |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-474714/2-A

Matrix: Water

Analysis Batch: 475609

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 474714

| Analyte           | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-------------------|-------------|------------|---------------|------|---|------|-------------|
| Pentachlorophenol | 200         | 145.9      |               | ug/L |   | 73   | 28 - 142    |
| Phenacetin        | 51.2        | 40.59      |               | ug/L |   | 79   | 51 - 139    |
| Phenanthrene      | 100         | 70.56      |               | ug/L |   | 71   | 48 - 126    |
| Phenol            | 100         | 38.92      |               | ug/L |   | 39   | 29 - 110    |
| Phorate           | 44.8        | 33.06      |               | ug/L |   | 74   | 21 - 147    |
| Pronamide         | 51.2        | 44.51      |               | ug/L |   | 87   | 52 - 135    |
| Pyrene            | 100         | 84.50      |               | ug/L |   | 85   | 45 - 134    |
| Safrole           | 44.8        | 25.28      |               | ug/L |   | 56   | 26 - 117    |
| Thionazin         | 44.8        | 33.58      |               | ug/L |   | 75   | 48 - 135    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 2-Fluorophenol (Surr)       | 46            |               | 21 - 110 |
| Phenol-d5 (Surr)            | 42            |               | 21 - 110 |
| Nitrobenzene-d5 (Surr)      | 66            |               | 39 - 140 |
| 2-Fluorobiphenyl (Surr)     | 62            |               | 33 - 126 |
| 2,4,6-Tribromophenol (Surr) | 82            |               | 20 - 144 |
| Terphenyl-d14 (Surr)        | 93            |               | 13 - 150 |

Lab Sample ID: LCSD 310-474714/3-A

Matrix: Water

Analysis Batch: 474898

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                                | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------------------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| 1,2,4,5-Tetrachlorobenzene             | 100         | 57.13       |                | ug/L |   | 57   | 35 - 110    | 10  | 35        |
| 1,3-Dinitrobenzene                     | 100         | 79.73       |                | ug/L |   | 80   | 36 - 147    | 4   | 35        |
| 2,3,4,6-Tetrachlorophenol              | 100         | 79.03       |                | ug/L |   | 79   | 32 - 142    | 12  | 35        |
| 2,4,5-Trichlorophenol                  | 100         | 83.43       |                | ug/L |   | 83   | 39 - 136    | 6   | 35        |
| 2,4,6-Trichlorophenol                  | 100         | 86.44       |                | ug/L |   | 86   | 35 - 141    | 6   | 35        |
| 2,4-Dichlorophenol                     | 100         | 77.53       |                | ug/L |   | 78   | 44 - 131    | 7   | 35        |
| 2,4-Dimethylphenol                     | 100         | 74.76       |                | ug/L |   | 75   | 30 - 128    | 5   | 35        |
| 2,4-Dinitrophenol                      | 200         | 94.15       |                | ug/L |   | 47   | 10 - 150    | 13  | 35        |
| 2,4-Dinitrotoluene                     | 100         | 78.03       |                | ug/L |   | 78   | 48 - 136    | 3   | 35        |
| 2,6-Dichlorophenol                     | 100         | 77.59       |                | ug/L |   | 78   | 41 - 131    | 6   | 35        |
| 2,6-Dinitrotoluene                     | 100         | 82.20       |                | ug/L |   | 82   | 49 - 135    | 3   | 35        |
| 2-Chloronaphthalene                    | 100         | 69.77       |                | ug/L |   | 70   | 33 - 112    | 15  | 35        |
| 2-Chlorophenol                         | 100         | 63.03       |                | ug/L |   | 63   | 43 - 119    | 10  | 35        |
| 2-Methylnaphthalene                    | 100         | 56.01       |                | ug/L |   | 56   | 35 - 110    | 8   | 35        |
| 2-Methylphenol                         | 100         | 65.48       |                | ug/L |   | 65   | 47 - 114    | 12  | 35        |
| 2-Nitroaniline                         | 100         | 83.30       |                | ug/L |   | 83   | 48 - 135    | 8   | 35        |
| 2-Nitrophenol                          | 100         | 85.79       |                | ug/L |   | 86   | 36 - 144    | 7   | 35        |
| 3-Nitroaniline                         | 100         | 82.76       |                | ug/L |   | 83   | 38 - 142    | 3   | 35        |
| 4,6-Dinitro-2-methylphenol             | 200         | 155.4       |                | ug/L |   | 78   | 22 - 150    | 4   | 35        |
| 4-Bromophenyl phenyl ether             | 100         | 78.85       |                | ug/L |   | 79   | 41 - 131    | 9   | 35        |
| 4-Chloro-3-methylphenol                | 100         | 74.65       |                | ug/L |   | 75   | 51 - 132    | 6   | 35        |
| 4-Chloroaniline                        | 100         | 70.02       |                | ug/L |   | 70   | 13 - 143    | 10  | 35        |
| 4-Chlorophenyl phenyl ether            | 100         | 65.05       |                | ug/L |   | 65   | 44 - 118    | 5   | 35        |
| 4-Methylphenol (and/or 3-Methylphenol) | 100         | 63.75       |                | ug/L |   | 64   | 45 - 114    | 12  | 35        |
| 4-Nitroaniline                         | 100         | 74.79       |                | ug/L |   | 75   | 33 - 141    | 11  | 35        |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-474714/3-A

Matrix: Water

Analysis Batch: 474898

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                       | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|-------------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| 4-Nitrophenol                 | 200         | 92.55       |                | ug/L |   | 46   | 22 - 110    | 7   | 35        |
| Acenaphthene                  | 100         | 64.96       |                | ug/L |   | 65   | 38 - 118    | 5   | 35        |
| Acenaphthylene                | 100         | 66.83       |                | ug/L |   | 67   | 39 - 115    | 7   | 35        |
| Acetophenone                  | 100         | 60.00       |                | ug/L |   | 60   | 47 - 118    | 9   | 35        |
| Anthracene                    | 100         | 78.12       |                | ug/L |   | 78   | 49 - 127    | 8   | 35        |
| Benzo[a]anthracene            | 100         | 73.98       |                | ug/L |   | 74   | 49 - 126    | 4   | 35        |
| Benzo[a]pyrene                | 100         | 80.50       |                | ug/L |   | 80   | 44 - 133    | 3   | 35        |
| Benzo[b]fluoranthene          | 100         | 80.10       |                | ug/L |   | 80   | 44 - 136    | 3   | 35        |
| Benzo[g,h,i]perylene          | 100         | 90.97       |                | ug/L |   | 91   | 42 - 135    | 3   | 35        |
| Benzo[k]fluoranthene          | 100         | 74.53       |                | ug/L |   | 75   | 49 - 134    | 2   | 35        |
| Benzyl alcohol                | 100         | 66.01       |                | ug/L |   | 66   | 46 - 123    | 17  | 35        |
| Bis(2-chloroethoxy)methane    | 100         | 71.60       |                | ug/L |   | 72   | 44 - 126    | 10  | 35        |
| Bis(2-chloroethyl)ether       | 100         | 57.91       |                | ug/L |   | 58   | 41 - 116    | 8   | 35        |
| bis (2-chloroisopropyl) ether | 100         | 52.29       |                | ug/L |   | 52   | 36 - 115    | 9   | 35        |
| Bis(2-ethylhexyl) phthalate   | 100         | 64.53       |                | ug/L |   | 65   | 46 - 138    | 4   | 35        |
| Butyl benzyl phthalate        | 100         | 70.53       |                | ug/L |   | 71   | 47 - 133    | 4   | 35        |
| Chrysene                      | 100         | 79.40       |                | ug/L |   | 79   | 50 - 128    | 7   | 35        |
| Dibenz(a,h)anthracene         | 100         | 93.67       |                | ug/L |   | 94   | 36 - 146    | 4   | 35        |
| Dibenzofuran                  | 100         | 65.45       |                | ug/L |   | 65   | 44 - 114    | 5   | 35        |
| Diethyl phthalate             | 100         | 67.83       |                | ug/L |   | 68   | 43 - 135    | 4   | 35        |
| Dimethyl phthalate            | 100         | 73.20       |                | ug/L |   | 73   | 46 - 129    | 5   | 35        |
| Di-n-butyl phthalate          | 100         | 71.83       |                | ug/L |   | 72   | 49 - 138    | 6   | 35        |
| Di-n-octyl phthalate          | 100         | 60.63       |                | ug/L |   | 61   | 33 - 148    | 6   | 35        |
| Diphenylamine                 | 85.0        | 69.67       |                | ug/L |   | 82   | 43 - 132    | 9   | 35        |
| Fluoranthene                  | 100         | 76.20       |                | ug/L |   | 76   | 49 - 132    | 3   | 35        |
| Fluorene                      | 100         | 65.09       |                | ug/L |   | 65   | 46 - 118    | 3   | 35        |
| Hexachlorobenzene             | 100         | 83.15       |                | ug/L |   | 83   | 42 - 134    | 12  | 35        |
| Hexachlorobutadiene           | 100         | 56.29       |                | ug/L |   | 56   | 29 - 110    | 14  | 35        |
| Hexachlorocyclopentadiene     | 100         | 39.27       |                | ug/L |   | 39   | 10 - 110    | 12  | 35        |
| Hexachloroethane              | 100         | 42.66       |                | ug/L |   | 43   | 25 - 110    | 16  | 35        |
| Indeno[1,2,3-cd]pyrene        | 100         | 91.01       |                | ug/L |   | 91   | 36 - 149    | 2   | 35        |
| Isophorone                    | 100         | 70.52       |                | ug/L |   | 71   | 46 - 126    | 8   | 35        |
| Nitrobenzene                  | 100         | 71.41       |                | ug/L |   | 71   | 42 - 123    | 7   | 35        |
| N-Nitrosodimethylamine        | 100         | 54.10       |                | ug/L |   | 54   | 37 - 110    | 8   | 35        |
| N-Nitrosodi-n-propylamine     | 100         | 62.88       |                | ug/L |   | 63   | 44 - 124    | 10  | 35        |
| N-Nitrosodiphenylamine        | 100         | 81.80       |                | ug/L |   | 82   | 43 - 132    | 9   | 35        |
| Pentachlorophenol             | 200         | 98.40       |                | ug/L |   | 49   | 28 - 142    | 0   | 35        |
| Phenanthrene                  | 100         | 77.72       |                | ug/L |   | 78   | 48 - 126    | 9   | 35        |
| Phenol                        | 100         | 49.03       |                | ug/L |   | 49   | 29 - 110    | 15  | 35        |
| Pyrene                        | 100         | 76.86       |                | ug/L |   | 77   | 45 - 134    | 7   | 35        |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | LCSD Limits |
|-----------------------------|----------------|----------------|-------------|
| 2-Fluorophenol (Surr)       | 58             |                | 21 - 110    |
| Phenol-d5 (Surr)            | 48             |                | 21 - 110    |
| Nitrobenzene-d5 (Surr)      | 74             |                | 39 - 140    |
| 2-Fluorobiphenyl (Surr)     | 71             |                | 33 - 126    |
| 2,4,6-Tribromophenol (Surr) | 86             |                | 20 - 144    |
| Terphenyl-d14 (Surr)        | 79             |                | 13 - 150    |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 H MSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-474714/3-A

Matrix: Water

Analysis Batch: 475609

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                                | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------------------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| 1,2,4,5-Tetrachlorobenzene             | 100         | 57.82       |                | ug/L |   | 58   | 35 - 110    | 10  | 35        |
| 1,3,5-Trinitrobenzene                  | 51.2        | 38.75       |                | ug/L |   | 76   | 26 - 150    | 2   | 29        |
| 1,3-Dinitrobenzene                     | 100         | 71.58       |                | ug/L |   | 72   | 36 - 147    | 8   | 35        |
| 1,4-Naphthoquinone                     | 51.2        | 34.62       |                | ug/L |   | 68   | 38 - 137    | 5   | 27        |
| 1,4-Phenylenediamine                   | 51.2        | <10.0       | *-             | ug/L |   | 1    | 20 - 120    | 18  | 35        |
| 1-Naphthylamine                        | 51.2        | 9.895       | J              | ug/L |   | 19   | 10 - 110    | 14  | 35        |
| 2,3,4,6-Tetrachlorophenol              | 100         | 76.76       |                | ug/L |   | 77   | 32 - 142    | 7   | 35        |
| 2,4,5-Trichlorophenol                  | 100         | 77.51       |                | ug/L |   | 78   | 39 - 136    | 5   | 35        |
| 2,4,6-Trichlorophenol                  | 100         | 76.67       |                | ug/L |   | 77   | 35 - 141    | 6   | 35        |
| 2,4-Dichlorophenol                     | 100         | 74.17       |                | ug/L |   | 74   | 44 - 131    | 7   | 35        |
| 2,4-Dimethylphenol                     | 100         | 74.47       |                | ug/L |   | 74   | 30 - 128    | 4   | 35        |
| 2,4-Dinitrophenol                      | 200         | 135.3       |                | ug/L |   | 68   | 10 - 150    | 8   | 35        |
| 2,4-Dinitrotoluene                     | 100         | 71.09       |                | ug/L |   | 71   | 48 - 136    | 5   | 35        |
| 2,6-Dichlorophenol                     | 100         | 73.40       |                | ug/L |   | 73   | 41 - 131    | 7   | 35        |
| 2,6-Dinitrotoluene                     | 100         | 72.86       |                | ug/L |   | 73   | 49 - 135    | 5   | 35        |
| 2-Acetylaminofluorene                  | 51.2        | 39.51       |                | ug/L |   | 77   | 37 - 149    | 5   | 26        |
| 2-Chloronaphthalene                    | 100         | 59.13       |                | ug/L |   | 59   | 33 - 112    | 7   | 35        |
| 2-Chlorophenol                         | 100         | 63.09       |                | ug/L |   | 63   | 43 - 119    | 10  | 35        |
| 2-Methylnaphthalene                    | 100         | 57.93       |                | ug/L |   | 58   | 35 - 110    | 8   | 35        |
| 2-Methylphenol                         | 100         | 68.89       |                | ug/L |   | 69   | 47 - 114    | 14  | 35        |
| 2-Naphthylamine                        | 51.2        | 24.43       |                | ug/L |   | 48   | 18 - 111    | 3   | 35        |
| 2-Nitroaniline                         | 100         | 74.62       |                | ug/L |   | 75   | 48 - 135    | 6   | 35        |
| 2-Nitrophenol                          | 100         | 71.83       |                | ug/L |   | 72   | 36 - 144    | 11  | 35        |
| 3,3'-Dimethylbenzidine                 | 51.2        | 13.80       |                | ug/L |   | 27   | 10 - 147    | 5   | 35        |
| 3-Methylcholanthrene                   | 51.2        | 43.93       |                | ug/L |   | 86   | 13 - 140    | 5   | 35        |
| 3-Nitroaniline                         | 100         | 72.50       |                | ug/L |   | 72   | 38 - 142    | 6   | 35        |
| 4,6-Dinitro-2-methylphenol             | 200         | 159.0       |                | ug/L |   | 79   | 22 - 150    | 2   | 35        |
| 4-Aminobiphenyl                        | 51.2        | 30.63       |                | ug/L |   | 60   | 23 - 123    | 6   | 35        |
| 4-Bromophenyl phenyl ether             | 100         | 73.40       |                | ug/L |   | 73   | 41 - 131    | 4   | 35        |
| 4-Chloro-3-methylphenol                | 100         | 77.18       |                | ug/L |   | 77   | 51 - 132    | 8   | 35        |
| 4-Chloroaniline                        | 100         | 67.55       |                | ug/L |   | 68   | 13 - 143    | 9   | 35        |
| 4-Chlorophenyl phenyl ether            | 100         | 68.08       |                | ug/L |   | 68   | 44 - 118    | 6   | 35        |
| 4-Methylphenol (and/or 3-Methylphenol) | 100         | 65.66       |                | ug/L |   | 66   | 45 - 114    | 7   | 35        |
| 4-Nitroaniline                         | 100         | 71.01       |                | ug/L |   | 71   | 33 - 141    | 4   | 35        |
| 4-Nitrophenol                          | 200         | 89.16       |                | ug/L |   | 45   | 22 - 110    | 1   | 35        |
| 5-Nitro-o-toluidine                    | 51.2        | 38.51       |                | ug/L |   | 75   | 43 - 139    | 4   | 32        |
| 7,12-Dimethylbenz(a)anthracene         | 51.2        | 36.06       |                | ug/L |   | 70   | 47 - 129    | 2   | 29        |
| Acenaphthene                           | 100         | 67.28       |                | ug/L |   | 67   | 38 - 118    | 10  | 35        |
| Acenaphthylene                         | 100         | 65.19       |                | ug/L |   | 65   | 39 - 115    | 5   | 35        |
| Acetophenone                           | 100         | 66.07       |                | ug/L |   | 66   | 47 - 118    | 7   | 35        |
| Anthracene                             | 100         | 77.36       |                | ug/L |   | 77   | 49 - 127    | 5   | 35        |
| Benzo[a]anthracene                     | 100         | 75.33       |                | ug/L |   | 75   | 49 - 126    | 3   | 35        |
| Benzo[a]pyrene                         | 100         | 61.37       |                | ug/L |   | 61   | 44 - 133    | 2   | 35        |
| Benzo[b]fluoranthene                   | 100         | 67.69       |                | ug/L |   | 68   | 44 - 136    | 6   | 35        |
| Benzo[g,h,i]perylene                   | 100         | 74.76       |                | ug/L |   | 75   | 42 - 135    | 4   | 35        |
| Benzo[k]fluoranthene                   | 100         | 85.24       |                | ug/L |   | 85   | 49 - 134    | 11  | 35        |
| Benzyl alcohol                         | 100         | 68.45       |                | ug/L |   | 68   | 46 - 123    | 4   | 35        |
| Bis(2-chloroethoxy)methane             | 100         | 70.41       |                | ug/L |   | 70   | 44 - 126    | 6   | 35        |

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-474714/3-A

Matrix: Water

Analysis Batch: 475609

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 474714

| Analyte                          | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| Bis(2-chloroethyl)ether          | 100         | 58.02       |                | ug/L |   | 58   | 41 - 116    | 7   | 35        |
| bis (2-chloroisopropyl) ether    | 100         | 59.59       |                | ug/L |   | 60   | 36 - 115    | 8   | 35        |
| Bis(2-ethylhexyl) phthalate      | 100         | 67.91       |                | ug/L |   | 68   | 46 - 138    | 13  | 35        |
| Butyl benzyl phthalate           | 100         | 73.14       |                | ug/L |   | 73   | 47 - 133    | 2   | 35        |
| Chlorobenzilate                  | 51.2        | 46.05       |                | ug/L |   | 90   | 39 - 145    | 2   | 28        |
| Chrysene                         | 100         | 73.96       |                | ug/L |   | 74   | 50 - 128    | 7   | 35        |
| Diallate                         | 44.8        | 37.21       |                | ug/L |   | 83   | 40 - 135    | 1   | 29        |
| Dibenz(a,h)anthracene            | 100         | 75.70       |                | ug/L |   | 76   | 36 - 146    | 4   | 35        |
| Dibenzofuran                     | 100         | 65.79       |                | ug/L |   | 66   | 44 - 114    | 5   | 35        |
| Diethyl phthalate                | 100         | 76.06       |                | ug/L |   | 76   | 43 - 135    | 6   | 35        |
| Dimethoate                       | 44.8        | 39.45       |                | ug/L |   | 88   | 31 - 150    | 2   | 35        |
| Dimethyl phthalate               | 100         | 73.53       |                | ug/L |   | 74   | 46 - 129    | 4   | 35        |
| Di-n-butyl phthalate             | 100         | 71.52       |                | ug/L |   | 72   | 49 - 138    | 2   | 35        |
| Di-n-octyl phthalate             | 100         | 81.91       |                | ug/L |   | 82   | 33 - 148    | 0   | 35        |
| Dinoseb                          | 51.2        | 38.49       |                | ug/L |   | 75   | 22 - 150    | 1   | 35        |
| Diphenylamine                    | 85.0        | 64.68       |                | ug/L |   | 76   | 43 - 132    | 7   | 35        |
| Disulfoton                       | 44.8        | 32.07       |                | ug/L |   | 72   | 27 - 138    | 0   | 32        |
| Ethyl methanesulfonate           | 51.2        | 29.44       |                | ug/L |   | 58   | 44 - 110    | 6   | 30        |
| Ethyl parathion                  | 44.8        | 35.34       |                | ug/L |   | 79   | 52 - 141    | 0   | 30        |
| Famphur                          | 44.8        | 69.93       | *+             | ug/L |   | 156  | 67 - 150    | 6   | 28        |
| Fluoranthene                     | 100         | 76.07       |                | ug/L |   | 76   | 49 - 132    | 3   | 35        |
| Fluorene                         | 100         | 70.40       |                | ug/L |   | 70   | 46 - 118    | 8   | 35        |
| Hexachlorobenzene                | 100         | 73.42       |                | ug/L |   | 73   | 42 - 134    | 2   | 35        |
| Hexachlorobutadiene              | 100         | 51.10       |                | ug/L |   | 51   | 29 - 110    | 13  | 35        |
| Hexachlorocyclopentadiene        | 100         | 41.06       |                | ug/L |   | 41   | 10 - 110    | 8   | 35        |
| Hexachloroethane                 | 100         | 42.43       |                | ug/L |   | 42   | 25 - 110    | 15  | 35        |
| Hexachloropropene                | 51.2        | 6.460       | J              | ug/L |   | 13   | 10 - 110    | 3   | 35        |
| Indeno[1,2,3-cd]pyrene           | 100         | 68.39       |                | ug/L |   | 68   | 36 - 149    | 16  | 35        |
| Isodrin                          | 51.2        | 37.32       |                | ug/L |   | 73   | 50 - 122    | 1   | 28        |
| Isophorone                       | 100         | 70.18       |                | ug/L |   | 70   | 46 - 126    | 5   | 35        |
| Isosafrole                       | 51.2        | 31.46       |                | ug/L |   | 61   | 10 - 129    | 12  | 35        |
| Kepone                           | 44.8        | 38.70       |                | ug/L |   | 86   | 10 - 150    | 2   | 35        |
| Methapyrilene                    | 44.8        | 11.30       |                | ug/L |   | 25   | 10 - 110    | 10  | 35        |
| Methyl methanesulfonate          | 51.2        | 18.67       |                | ug/L |   | 36   | 16 - 110    | 11  | 28        |
| Methyl parathion                 | 44.8        | 37.71       |                | ug/L |   | 84   | 49 - 150    | 1   | 29        |
| Nitrobenzene                     | 100         | 64.34       |                | ug/L |   | 64   | 42 - 123    | 4   | 35        |
| N-Nitrosodiethylamine            | 51.2        | 34.65       |                | ug/L |   | 68   | 51 - 116    | 15  | 27        |
| N-Nitrosodimethylamine           | 100         | 55.17       |                | ug/L |   | 55   | 37 - 110    | 16  | 35        |
| N-Nitrosodi-n-butylamine         | 51.2        | 38.98       |                | ug/L |   | 76   | 49 - 135    | 0   | 28        |
| N-Nitrosodi-n-propylamine        | 100         | 70.12       |                | ug/L |   | 70   | 44 - 124    | 5   | 35        |
| N-Nitrosodiphenylamine           | 100         | 74.96       |                | ug/L |   | 75   | 43 - 132    | 4   | 35        |
| N-Nitrosomethylethylamine        | 51.2        | 31.98       |                | ug/L |   | 62   | 43 - 114    | 14  | 29        |
| N-Nitrosopiperidine              | 51.2        | 39.49       |                | ug/L |   | 77   | 50 - 120    | 11  | 26        |
| N-Nitrosopyrrolidine             | 51.2        | 39.43       |                | ug/L |   | 77   | 47 - 129    | 8   | 31        |
| o,o',o"-Triethylphosphorothioate | 44.8        | 27.37       |                | ug/L |   | 61   | 34 - 125    | 2   | 33        |
| o-Toluidine                      | 51.2        | 27.54       |                | ug/L |   | 54   | 19 - 128    | 15  | 35        |
| p-Dimethylamino azobenzene       | 51.2        | 39.77       |                | ug/L |   | 78   | 45 - 133    | 3   | 31        |
| Pentachlorobenzene               | 51.2        | 31.42       |                | ug/L |   | 61   | 27 - 112    | 10  | 35        |
| Pentachloronitrobenzene          | 51.2        | 38.59       |                | ug/L |   | 75   | 45 - 132    | 3   | 29        |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-474714/3-A

Matrix: Water

Analysis Batch: 475609

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 474714

| Analyte           | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|-------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| Pentachlorophenol | 200         | 152.8       |                | ug/L |   | 76   | 28 - 142    | 5   | 35        |
| Phenacetin        | 51.2        | 40.02       |                | ug/L |   | 78   | 51 - 139    | 1   | 29        |
| Phenanthrene      | 100         | 74.18       |                | ug/L |   | 74   | 48 - 126    | 5   | 35        |
| Phenol            | 100         | 44.83       |                | ug/L |   | 45   | 29 - 110    | 14  | 35        |
| Phorate           | 44.8        | 32.38       |                | ug/L |   | 72   | 21 - 147    | 2   | 35        |
| Pronamide         | 51.2        | 43.30       |                | ug/L |   | 85   | 52 - 135    | 3   | 28        |
| Pyrene            | 100         | 86.14       |                | ug/L |   | 86   | 45 - 134    | 2   | 35        |
| Safrole           | 44.8        | 25.73       |                | ug/L |   | 57   | 26 - 117    | 2   | 35        |
| Thionazin         | 44.8        | 31.49       |                | ug/L |   | 70   | 48 - 135    | 6   | 30        |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 2-Fluorophenol (Surr)       | 53             |                | 21 - 110 |
| Phenol-d5 (Surr)            | 48             |                | 21 - 110 |
| Nitrobenzene-d5 (Surr)      | 70             |                | 39 - 140 |
| 2-Fluorobiphenyl (Surr)     | 66             |                | 33 - 126 |
| 2,4,6-Tribromophenol (Surr) | 80             |                | 20 - 144 |
| Terphenyl-d14 (Surr)        | 96             |                | 13 - 150 |

## Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-682334/32

Matrix: Water

Analysis Batch: 682334

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte               | MB Result    | MB Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------|--------------|--------------|----------|-------|------|---|----------|----------------|---------|
| Methane               | <1.00        |              | 1.00     | 0.174 | ug/L |   |          | 11/29/25 19:12 | 1       |
| Surrogate             | MB %Recovery | MB Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 1,1,1-Trifluoroethane | 104          |              | 60 - 140 |       |      |   |          | 11/29/25 19:12 | 1       |

Lab Sample ID: LCS 240-682334/33

Matrix: Water

Analysis Batch: 682334

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

|                       |           |           | Spike    | LCS    | LCS       | %Rec |   |      |          |
|-----------------------|-----------|-----------|----------|--------|-----------|------|---|------|----------|
| Analyte               |           |           | Added    | Result | Qualifier | Unit | D | %Rec | Limits   |
| Methane               |           |           | 284      | 301.3  |           | ug/L |   | 106  | 80 - 120 |
|                       |           |           | LCS      | LCS    |           |      |   |      |          |
| Surrogate             | %Recovery | Qualifier | Limits   |        |           |      |   |      |          |
| 1,1,1-Trifluoroethane | 103       |           | 60 - 140 |        |           |      |   |      |          |

Lab Sample ID: LCSD 240-682334/34

Matrix: Water

Analysis Batch: 682334

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| Methane | 284         | 300.9       |                | ug/L |   | 106  | 80 - 120    | 0   | 35        |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCSD 240-682334/34  
Matrix: Water  
Analysis Batch: 682334

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

|                       | LCSD      | LCSD      |          |
|-----------------------|-----------|-----------|----------|
| Surrogate             | %Recovery | Qualifier | Limits   |
| 1,1,1-Trifluoroethane | 102       |           | 60 - 140 |

## Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 310-474862/14  
Matrix: Water  
Analysis Batch: 474862

Client Sample ID: Method Blank  
Prep Type: Total/NA

| Analyte      | MB     | MB        | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|------|------|------|---|----------|----------------|---------|
|              | Result | Qualifier |      |      |      |   |          |                |         |
| Acetonitrile | <10.0  |           | 10.0 | 2.60 | mg/L |   |          | 11/25/25 21:28 | 1       |
| Isobutanol   | <10.0  |           | 10.0 | 2.40 | mg/L |   |          | 11/25/25 21:28 | 1       |

Lab Sample ID: LCS 310-474862/15  
Matrix: Water  
Analysis Batch: 474862

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

| Analyte      | Spike | LCS    | LCS       | Unit | D | %Rec   | %Rec     |
|--------------|-------|--------|-----------|------|---|--------|----------|
|              | Added | Result | Qualifier |      |   | Limits |          |
| Acetonitrile | 89.7  | 79.59  |           | mg/L |   | 89     | 67 - 131 |

## Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LB 310-473959/1-E  
Matrix: Water  
Analysis Batch: 475239

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 474794

| Analyte               | LB      | LB        | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
|                       | Result  | Qualifier |        |         |      |   |                |                |         |
| 4,4'-DDD              | <0.0926 |           | 0.0926 | 0.0231  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| 4,4'-DDE              | <0.0926 |           | 0.0926 | 0.0278  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| 4,4'-DDT              | <0.0926 |           | 0.0926 | 0.0185  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Aldrin                | <0.0926 |           | 0.0926 | 0.0204  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| alpha-BHC             | <0.0926 |           | 0.0926 | 0.00926 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| beta-BHC              | <0.0926 |           | 0.0926 | 0.0389  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Chlordane (technical) | <1.85   |           | 1.85   | 0.361   | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| delta-BHC             | <0.0926 |           | 0.0926 | 0.0296  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Dieldrin              | <0.0926 |           | 0.0926 | 0.0194  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Endosulfan I          | <0.0926 |           | 0.0926 | 0.0259  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Endosulfan II         | <0.0926 |           | 0.0926 | 0.0241  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Endosulfan sulfate    | <0.0926 |           | 0.0926 | 0.0167  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Endrin                | <0.0926 |           | 0.0926 | 0.0259  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Endrin aldehyde       | <0.0926 |           | 0.0926 | 0.0250  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| gamma-BHC (Lindane)   | <0.0926 |           | 0.0926 | 0.00926 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Heptachlor            | <0.0926 |           | 0.0926 | 0.0213  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Heptachlor epoxide    | <0.0926 |           | 0.0926 | 0.0296  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Methoxychlor          | <0.0926 |           | 0.0926 | 0.0296  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Toxaphene             | <1.85   |           | 1.85   | 0.926   | ug/L |   | 11/25/25 11:59 | 12/02/25 11:53 | 1       |

| Surrogate                     | LB        | LB        | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
|                               | %Recovery | Qualifier |          |                |                |         |
| DCB Decachlorobiphenyl (Surr) | 50        |           | 10 - 150 | 11/25/25 11:59 | 12/02/25 11:53 | 1       |
| Tetrachloro-m-xylene          | 70        |           | 17 - 150 | 11/25/25 11:59 | 12/02/25 11:53 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-474794/1-A

Matrix: Water

Analysis Batch: 475239

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 474794

| Analyte               | MB Result | MB Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|-----------|--------------|--------|---------|------|---|----------------|----------------|---------|
| 4,4'-DDD              | <0.0986   |              | 0.0986 | 0.0246  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| 4,4'-DDE              | <0.0986   |              | 0.0986 | 0.0296  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| 4,4'-DDT              | <0.0986   |              | 0.0986 | 0.0197  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Aldrin                | <0.0986   |              | 0.0986 | 0.0217  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| alpha-BHC             | <0.0986   |              | 0.0986 | 0.00986 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| beta-BHC              | <0.0986   |              | 0.0986 | 0.0414  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Chlordane (technical) | <1.97     |              | 1.97   | 0.385   | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| delta-BHC             | <0.0986   |              | 0.0986 | 0.0315  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Dieldrin              | <0.0986   |              | 0.0986 | 0.0207  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Endosulfan I          | <0.0986   |              | 0.0986 | 0.0276  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Endosulfan II         | <0.0986   |              | 0.0986 | 0.0256  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Endosulfan sulfate    | <0.0986   |              | 0.0986 | 0.0177  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Endrin                | <0.0986   |              | 0.0986 | 0.0276  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Endrin aldehyde       | <0.0986   |              | 0.0986 | 0.0266  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| gamma-BHC (Lindane)   | <0.0986   |              | 0.0986 | 0.00986 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Heptachlor            | <0.0986   |              | 0.0986 | 0.0227  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Heptachlor epoxide    | <0.0986   |              | 0.0986 | 0.0315  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Methoxychlor          | <0.0986   |              | 0.0986 | 0.0315  | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Toxaphene             | <1.97     |              | 1.97   | 0.986   | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |

| Surrogate                     | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|--------------|--------------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 41           |              | 10 - 150 | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| Tetrachloro-m-xylene          | 65           |              | 17 - 150 | 11/25/25 11:59 | 12/02/25 11:25 | 1       |

Lab Sample ID: LCS 310-474794/2-A

Matrix: Water

Analysis Batch: 475239

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 474794

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits   |
|---------------------|-------------|------------|---------------|------|---|------|----------|
| 4,4'-DDD            | 2.77        | 2.122      |               | ug/L |   | 77   | 28 - 150 |
| 4,4'-DDE            | 2.77        | 1.948      |               | ug/L |   | 70   | 10 - 150 |
| 4,4'-DDT            | 2.77        | 1.807      |               | ug/L |   | 65   | 10 - 150 |
| Aldrin              | 2.77        | 1.549      |               | ug/L |   | 56   | 10 - 146 |
| alpha-BHC           | 2.77        | 2.027      |               | ug/L |   | 73   | 57 - 149 |
| beta-BHC            | 2.77        | 1.802      |               | ug/L |   | 65   | 53 - 145 |
| delta-BHC           | 2.77        | 1.826      |               | ug/L |   | 66   | 49 - 148 |
| Dieldrin            | 2.77        | 1.999      |               | ug/L |   | 72   | 43 - 150 |
| Endosulfan I        | 2.77        | 1.578      |               | ug/L |   | 57   | 26 - 133 |
| Endosulfan II       | 2.77        | 1.749      |               | ug/L |   | 63   | 38 - 139 |
| Endosulfan sulfate  | 2.77        | 2.060      |               | ug/L |   | 74   | 54 - 150 |
| Endrin              | 2.77        | 2.153      |               | ug/L |   | 78   | 41 - 150 |
| Endrin aldehyde     | 2.77        | 1.814      |               | ug/L |   | 65   | 42 - 147 |
| gamma-BHC (Lindane) | 2.77        | 2.022      |               | ug/L |   | 73   | 57 - 150 |
| Heptachlor          | 2.77        | 1.650      |               | ug/L |   | 60   | 16 - 135 |
| Heptachlor epoxide  | 2.77        | 1.933      |               | ug/L |   | 70   | 49 - 150 |
| Methoxychlor        | 2.77        | 2.171      |               | ug/L |   | 78   | 16 - 150 |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 310-474794/2-A  
Matrix: Water  
Analysis Batch: 475239

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474794

|                               | LCS       | LCS       |          |
|-------------------------------|-----------|-----------|----------|
| Surrogate                     | %Recovery | Qualifier | Limits   |
| DCB Decachlorobiphenyl (Surr) | 45        |           | 10 - 150 |
| Tetrachloro-m-xylene          | 64        |           | 17 - 150 |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: LB 310-473822/1-E  
Matrix: Water  
Analysis Batch: 475468

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 474794

| Analyte  | LB     | LB        |      |       |      |   |                |                |         |
|----------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
|          | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
| PCB-1016 | <1.88  |           | 1.88 | 0.772 | ug/L |   | 11/25/25 11:59 | 12/03/25 19:40 | 1       |
| PCB-1221 | <1.88  |           | 1.88 | 0.772 | ug/L |   | 11/25/25 11:59 | 12/03/25 19:40 | 1       |
| PCB-1232 | <1.88  |           | 1.88 | 0.772 | ug/L |   | 11/25/25 11:59 | 12/03/25 19:40 | 1       |
| PCB-1242 | <1.88  |           | 1.88 | 0.772 | ug/L |   | 11/25/25 11:59 | 12/03/25 19:40 | 1       |
| PCB-1248 | <1.88  |           | 1.88 | 0.649 | ug/L |   | 11/25/25 11:59 | 12/03/25 19:40 | 1       |
| PCB-1254 | <1.88  |           | 1.88 | 0.649 | ug/L |   | 11/25/25 11:59 | 12/03/25 19:40 | 1       |
| PCB-1260 | <1.88  |           | 1.88 | 0.649 | ug/L |   | 11/25/25 11:59 | 12/03/25 19:40 | 1       |

|                               | LB        | LB        |          |                |                |         |  |  |  |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|--|--|--|
| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |  |  |  |
| DCB Decachlorobiphenyl (Surr) | 65        |           | 10 - 150 | 11/25/25 11:59 | 12/03/25 19:40 | 1       |  |  |  |
| Tetrachloro-m-xylene          | 62        |           | 17 - 150 | 11/25/25 11:59 | 12/03/25 19:40 | 1       |  |  |  |

Lab Sample ID: MB 310-474794/1-A  
Matrix: Water  
Analysis Batch: 475240

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 474794

| Analyte  | MB     | MB        |      |       |      |   |                |                |         |
|----------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
|          | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
| PCB-1016 | <1.97  |           | 1.97 | 0.808 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| PCB-1221 | <1.97  |           | 1.97 | 0.808 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| PCB-1232 | <1.97  |           | 1.97 | 0.808 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| PCB-1242 | <1.97  |           | 1.97 | 0.808 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| PCB-1248 | <1.97  |           | 1.97 | 0.680 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| PCB-1254 | <1.97  |           | 1.97 | 0.680 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |
| PCB-1260 | <1.97  |           | 1.97 | 0.680 | ug/L |   | 11/25/25 11:59 | 12/02/25 11:25 | 1       |

|                               | MB        | MB        |          |                |                |         |  |  |  |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|--|--|--|
| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |  |  |  |
| DCB Decachlorobiphenyl (Surr) | 41        |           | 10 - 150 | 11/25/25 11:59 | 12/02/25 11:25 | 1       |  |  |  |
| Tetrachloro-m-xylene          | 64        |           | 17 - 150 | 11/25/25 11:59 | 12/02/25 11:25 | 1       |  |  |  |

Lab Sample ID: LCS 310-474794/10-A  
Matrix: Water  
Analysis Batch: 475468

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474794

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|------|---|------|-------------|
| PCB-1016 | 27.7        | 24.78      |               | ug/L |   | 89   | 25 - 150    |

|                               | LCS       | LCS       |          |
|-------------------------------|-----------|-----------|----------|
| Surrogate                     | %Recovery | Qualifier | Limits   |
| DCB Decachlorobiphenyl (Surr) | 45        |           | 10 - 150 |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 310-474794/10-A  
Matrix: Water  
Analysis Batch: 475468

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474794

|                      | LCS       | LCS       |          |
|----------------------|-----------|-----------|----------|
| Surrogate            | %Recovery | Qualifier | Limits   |
| Tetrachloro-m-xylene | 72        |           | 17 - 150 |

## Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 500-844545/1-A  
Matrix: Water  
Analysis Batch: 844705

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 844545

| Analyte           | MB        | MB        | RL       | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------|-----------|-----------|----------|-------|------|---|----------------|----------------|---------|
|                   | Result    | Qualifier |          |       |      |   |                |                |         |
| 2,4-D             | <1.00     |           | 1.00     | 0.126 | ug/L |   | 11/24/25 07:50 | 11/24/25 16:59 | 1       |
| Silvex (2,4,5-TP) | <1.00     |           | 1.00     | 0.105 | ug/L |   | 11/24/25 07:50 | 11/24/25 16:59 | 1       |
| 2,4,5-T           | <1.00     |           | 1.00     | 0.140 | ug/L |   | 11/24/25 07:50 | 11/24/25 16:59 | 1       |
| Surrogate         | MB        | MB        | Limits   |       |      |   | Prepared       | Analyzed       | Dil Fac |
|                   | %Recovery | Qualifier |          |       |      |   |                |                |         |
| DCAA              | 78        |           | 25 - 130 |       |      |   | 11/24/25 07:50 | 11/24/25 16:59 | 1       |

Lab Sample ID: LCS 500-844545/2-A  
Matrix: Water  
Analysis Batch: 844705

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 844545

| Analyte           | Spike     | LCS       | LCS       | Unit | D | %Rec | %Rec     |
|-------------------|-----------|-----------|-----------|------|---|------|----------|
|                   | Added     | Result    | Qualifier |      |   |      | Limits   |
| 2,4-D             | 10.0      | 9.461     |           | ug/L |   | 95   | 30 - 115 |
| Silvex (2,4,5-TP) | 2.50      | 2.936     | *+        | ug/L |   | 117  | 32 - 115 |
| 2,4,5-T           | 2.53      | 2.712     |           | ug/L |   | 107  | 30 - 115 |
| Surrogate         | LCS       | LCS       | Limits    |      |   |      |          |
|                   | %Recovery | Qualifier |           |      |   |      |          |
| DCAA              | 107       |           | 25 - 130  |      |   |      |          |

Lab Sample ID: LCSD 500-844545/3-A  
Matrix: Water  
Analysis Batch: 844705

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 844545

| Analyte           | Spike     | LCSD      | LCSD      | Unit | D | %Rec | %Rec     | RPD   |
|-------------------|-----------|-----------|-----------|------|---|------|----------|-------|
|                   | Added     | Result    | Qualifier |      |   |      | Limits   | Limit |
| 2,4-D             | 10.0      | 9.485     |           | ug/L |   | 95   | 30 - 115 | 0 20  |
| Silvex (2,4,5-TP) | 2.50      | 2.964     | *+        | ug/L |   | 119  | 32 - 115 | 1 20  |
| 2,4,5-T           | 2.53      | 2.602     |           | ug/L |   | 103  | 30 - 115 | 4 20  |
| Surrogate         | LCSD      | LCSD      | Limits    |      |   |      |          |       |
|                   | %Recovery | Qualifier |           |      |   |      |          |       |
| DCAA              | 96        |           | 25 - 130  |      |   |      |          |       |

## Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-474442/3  
Matrix: Water  
Analysis Batch: 474442

Client Sample ID: Method Blank  
Prep Type: Total/NA

| Analyte | MB     | MB        | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|------|-------|------|---|----------|----------------|---------|
|         | Result | Qualifier |      |       |      |   |          |                |         |
| Sulfate | <1.00  |           | 1.00 | 0.420 | mg/L |   |          | 11/19/25 11:51 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 310-474442/4  
Matrix: Water  
Analysis Batch: 474442

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Sulfate | 10.0        | 9.525      |               | mg/L |   | 95   | 90 - 110    |

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-474499/1-A  
Matrix: Water  
Analysis Batch: 475619

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 474499

| Analyte   | MB Result | MB Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | <0.00200  |              | 0.00200  | 0.00100  | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Barium    | <0.00200  |              | 0.00200  | 0.000660 | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Beryllium | <0.00100  |              | 0.00100  | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Cadmium   | <0.000200 |              | 0.000200 | 0.000100 | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Cobalt    | <0.000500 |              | 0.000500 | 0.000170 | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Copper    | <0.00500  |              | 0.00500  | 0.00320  | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Lead      | <0.000500 |              | 0.000500 | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Nickel    | <0.00500  |              | 0.00500  | 0.00230  | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Selenium  | <0.00500  |              | 0.00500  | 0.00140  | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Silver    | <0.00100  |              | 0.00100  | 0.000500 | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Thallium  | <0.00100  |              | 0.00100  | 0.000570 | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Vanadium  | <0.00500  |              | 0.00500  | 0.00170  | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Tin       | <0.00500  |              | 0.00500  | 0.00250  | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |
| Iron      | <0.100    |              | 0.100    | 0.0500   | mg/L |   | 11/24/25 08:30 | 12/04/25 19:27 | 1       |

Lab Sample ID: MB 310-474499/1-A  
Matrix: Water  
Analysis Batch: 475744

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 474499

| Analyte   | MB Result | MB Qualifier | RL      | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|---------|----------|------|---|----------------|----------------|---------|
| Arsenic   | <0.00200  |              | 0.00200 | 0.000530 | mg/L |   | 11/24/25 08:30 | 12/05/25 16:07 | 1       |
| Chromium  | <0.00500  |              | 0.00500 | 0.00180  | mg/L |   | 11/24/25 08:30 | 12/05/25 16:07 | 1       |
| Nickel    | <0.00500  |              | 0.00500 | 0.00230  | mg/L |   | 11/24/25 08:30 | 12/05/25 16:07 | 1       |
| Zinc      | <0.0200   |              | 0.0200  | 0.0130   | mg/L |   | 11/24/25 08:30 | 12/05/25 16:07 | 1       |
| Manganese | <0.0100   |              | 0.0100  | 0.00360  | mg/L |   | 11/24/25 08:30 | 12/05/25 16:07 | 1       |

Lab Sample ID: MB 310-474499/1-A  
Matrix: Water  
Analysis Batch: 475751

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 474499

| Analyte | MB Result | MB Qualifier | RL      | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|---------|----------|------|---|----------------|----------------|---------|
| Arsenic | <0.00200  |              | 0.00200 | 0.000530 | mg/L |   | 11/24/25 08:30 | 12/06/25 15:09 | 1       |
| Zinc    | <0.0200   |              | 0.0200  | 0.0130   | mg/L |   | 11/24/25 08:30 | 12/06/25 15:09 | 1       |

Lab Sample ID: LCS 310-474499/2-A  
Matrix: Water  
Analysis Batch: 475619

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474499

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|------|---|------|-------------|
| Antimony | 0.200       | 0.1939     |               | mg/L |   | 97   | 80 - 120    |
| Barium   | 0.100       | 0.08477    |               | mg/L |   | 85   | 80 - 120    |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-474499/2-A  
Matrix: Water  
Analysis Batch: 475619

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474499

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------|-------------|------------|---------------|------|---|------|-------------|
| Beryllium | 0.100       | 0.08747    |               | mg/L |   | 87   | 80 - 120    |
| Cadmium   | 0.100       | 0.08566    |               | mg/L |   | 86   | 80 - 120    |
| Cobalt    | 0.100       | 0.08945    |               | mg/L |   | 89   | 80 - 120    |
| Copper    | 0.200       | 0.1968     |               | mg/L |   | 98   | 80 - 120    |
| Lead      | 0.200       | 0.1824     |               | mg/L |   | 91   | 80 - 120    |
| Nickel    | 0.200       | 0.1651     |               | mg/L |   | 83   | 80 - 120    |
| Selenium  | 0.400       | 0.3392     |               | mg/L |   | 85   | 80 - 120    |
| Silver    | 0.100       | 0.1117     |               | mg/L |   | 112  | 80 - 120    |
| Thallium  | 0.100       | 0.08470    |               | mg/L |   | 85   | 80 - 120    |
| Vanadium  | 0.100       | 0.08932    |               | mg/L |   | 89   | 80 - 120    |
| Tin       | 0.200       | 0.1864     |               | mg/L |   | 93   | 80 - 120    |
| Iron      | 0.200       | 0.1949     |               | mg/L |   | 97   | 80 - 120    |

Lab Sample ID: LCS 310-474499/2-A  
Matrix: Water  
Analysis Batch: 475744

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474499

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------|-------------|------------|---------------|------|---|------|-------------|
| Arsenic   | 0.200       | 0.1591     |               | mg/L |   | 80   | 80 - 120    |
| Chromium  | 0.100       | 0.09064    |               | mg/L |   | 91   | 80 - 120    |
| Nickel    | 0.200       | 0.1703     |               | mg/L |   | 85   | 80 - 120    |
| Zinc      | 0.200       | 0.1620     |               | mg/L |   | 81   | 80 - 120    |
| Manganese | 0.100       | 0.07958    |               | mg/L |   | 80   | 80 - 120    |

Lab Sample ID: LCS 310-474499/2-A  
Matrix: Water  
Analysis Batch: 475751

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474499

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Arsenic | 0.200       | 0.1910     |               | mg/L |   | 96   | 80 - 120    |
| Zinc    | 0.200       | 0.1816     |               | mg/L |   | 91   | 80 - 120    |

Lab Sample ID: MB 310-474500/1-A  
Matrix: Water  
Analysis Batch: 475370

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 474500

| Analyte   | MB Result | MB Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|----------|----------|------|---|----------------|----------------|---------|
| Antimony  | <0.00200  |              | 0.00200  | 0.00100  | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Arsenic   | <0.00200  |              | 0.00200  | 0.000530 | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Barium    | <0.00200  |              | 0.00200  | 0.000660 | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Beryllium | <0.00100  |              | 0.00100  | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Cadmium   | <0.000200 |              | 0.000200 | 0.000100 | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Chromium  | <0.00500  |              | 0.00500  | 0.00180  | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Cobalt    | <0.000500 |              | 0.000500 | 0.000170 | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Copper    | <0.00500  |              | 0.00500  | 0.00320  | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Lead      | <0.000500 |              | 0.000500 | 0.000330 | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Nickel    | <0.00500  |              | 0.00500  | 0.00230  | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Selenium  | <0.00500  |              | 0.00500  | 0.00140  | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Silver    | <0.00100  |              | 0.00100  | 0.000500 | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-474500/1-A  
Matrix: Water  
Analysis Batch: 475370

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 474500

| Analyte  | MB Result | MB Qualifier | RL      | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|--------------|---------|----------|------|---|----------------|----------------|---------|
| Thallium | <0.00100  | ^1+          | 0.00100 | 0.000570 | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Vanadium | <0.00500  |              | 0.00500 | 0.00170  | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |
| Zinc     | <0.0200   |              | 0.0200  | 0.0130   | mg/L |   | 11/24/25 08:30 | 12/02/25 18:31 | 1       |

Lab Sample ID: LCS 310-474500/2-A  
Matrix: Water  
Analysis Batch: 475370

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474500

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------|-------------|------------|---------------|------|---|------|-------------|
| Antimony  | 0.200       | 0.2059     |               | mg/L |   | 103  | 80 - 120    |
| Arsenic   | 0.200       | 0.1740     |               | mg/L |   | 87   | 80 - 120    |
| Barium    | 0.100       | 0.08944    |               | mg/L |   | 89   | 80 - 120    |
| Beryllium | 0.100       | 0.09182    |               | mg/L |   | 92   | 80 - 120    |
| Cadmium   | 0.100       | 0.08508    |               | mg/L |   | 85   | 80 - 120    |
| Chromium  | 0.100       | 0.08488    |               | mg/L |   | 85   | 80 - 120    |
| Cobalt    | 0.100       | 0.09208    |               | mg/L |   | 92   | 80 - 120    |
| Copper    | 0.200       | 0.1785     |               | mg/L |   | 89   | 80 - 120    |
| Lead      | 0.200       | 0.1865     |               | mg/L |   | 93   | 80 - 120    |
| Nickel    | 0.200       | 0.1769     |               | mg/L |   | 88   | 80 - 120    |
| Selenium  | 0.400       | 0.3375     |               | mg/L |   | 84   | 80 - 120    |
| Silver    | 0.100       | 0.1148     |               | mg/L |   | 115  | 80 - 120    |
| Thallium  | 0.100       | 0.09029    | ^1+           | mg/L |   | 90   | 80 - 120    |
| Vanadium  | 0.100       | 0.08606    |               | mg/L |   | 86   | 80 - 120    |
| Zinc      | 0.200       | 0.1600     |               | mg/L |   | 80   | 80 - 120    |

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-474984/1-A  
Matrix: Water  
Analysis Batch: 475188

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 474984

| Analyte | MB Result | MB Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|----------|----------|------|---|----------------|----------------|---------|
| Mercury | <0.000200 |              | 0.000200 | 0.000110 | mg/L |   | 11/26/25 13:30 | 12/01/25 09:09 | 1       |

Lab Sample ID: LCS 310-474984/2-A  
Matrix: Water  
Analysis Batch: 475188

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474984

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Mercury | 0.00167     | 0.001597   |               | mg/L |   | 96   | 80 - 120    |

## Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 310-474978/1-A  
Matrix: Water  
Analysis Batch: 475065

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 474978

| Analyte        | MB Result | MB Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|--------------|--------|---------|------|---|----------------|----------------|---------|
| Cyanide, Total | <0.0100   |              | 0.0100 | 0.00350 | mg/L |   | 11/26/25 10:29 | 11/26/25 18:28 | 1       |

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: LCS 310-474978/2-A  
Matrix: Water  
Analysis Batch: 475065

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 474978

| Analyte        | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------------|-------------|------------|---------------|------|---|------|-------------|
| Cyanide, Total | 0.200       | 0.1908     |               | mg/L |   | 95   | 90 - 110    |

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-844987/1-A  
Matrix: Water  
Analysis Batch: 844989

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 844987

| Analyte | MB Result | MB Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Sulfide | <1.00     |              | 1.00 | 0.231 | mg/L |   | 11/25/25 18:00 | 11/25/25 23:33 | 1       |

Lab Sample ID: LCS 500-844987/2-A  
Matrix: Water  
Analysis Batch: 844989

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 844987

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Sulfide | 3.32        | 3.711      |               | mg/L |   | 112  | 80 - 120    |

## Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-474366/1  
Matrix: Water  
Analysis Batch: 474366

Client Sample ID: Method Blank  
Prep Type: Total/NA

| Analyte                | MB Result | MB Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|-----------|--------------|------|------|------|---|----------|----------------|---------|
| Total Suspended Solids | <5.00     |              | 5.00 | 3.50 | mg/L |   |          | 11/21/25 07:02 | 1       |

Lab Sample ID: LCS 310-474366/2  
Matrix: Water  
Analysis Batch: 474366

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

| Analyte                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|------------------------|-------------|------------|---------------|------|---|------|-------------|
| Total Suspended Solids | 100         | 115.0      |               | mg/L |   | 115  | 82 - 117    |



# QC Association Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## GC/MS VOA

### Analysis Batch: 474409

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-1     | MW-2               | Total/NA  | Groundwater | 8260D  |            |
| 310-321076-2     | MW-3               | Total/NA  | Groundwater | 8260D  |            |
| 310-321076-3     | MW-5               | Total/NA  | Groundwater | 8260D  |            |
| 310-321076-4     | PZ-2B              | Total/NA  | Groundwater | 8260D  |            |
| 310-321076-5     | MW-D               | Total/NA  | Groundwater | 8260D  |            |
| 310-321076-6     | Trip Blank 1       | Total/NA  | Trip Blank  | 8260D  |            |
| 310-321076-7     | Trip Blank 2       | Total/NA  | Trip Blank  | 8260D  |            |
| MB 310-474409/6  | Method Blank       | Total/NA  | Water       | 8260D  |            |
| LCS 310-474409/7 | Lab Control Sample | Total/NA  | Water       | 8260D  |            |
| LCS 310-474409/8 | Lab Control Sample | Total/NA  | Water       | 8260D  |            |

## GC/MS Semi VOA

### Prep Batch: 474714

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix      | Method | Prep Batch |
|---------------------|------------------------|-----------|-------------|--------|------------|
| 310-321076-2        | MW-3                   | Total/NA  | Groundwater | 3510C  |            |
| MB 310-474714/1-A   | Method Blank           | Total/NA  | Water       | 3510C  |            |
| LCS 310-474714/2-A  | Lab Control Sample     | Total/NA  | Water       | 3510C  |            |
| LCSD 310-474714/3-A | Lab Control Sample Dup | Total/NA  | Water       | 3510C  |            |

### Analysis Batch: 474898

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix      | Method | Prep Batch |
|---------------------|------------------------|-----------|-------------|--------|------------|
| 310-321076-2        | MW-3                   | Total/NA  | Groundwater | 8270E  | 474714     |
| MB 310-474714/1-A   | Method Blank           | Total/NA  | Water       | 8270E  | 474714     |
| LCS 310-474714/2-A  | Lab Control Sample     | Total/NA  | Water       | 8270E  | 474714     |
| LCSD 310-474714/3-A | Lab Control Sample Dup | Total/NA  | Water       | 8270E  | 474714     |

### Analysis Batch: 475609

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix      | Method | Prep Batch |
|---------------------|------------------------|-----------|-------------|--------|------------|
| 310-321076-2        | MW-3                   | Total/NA  | Groundwater | 8270E  | 474714     |
| MB 310-474714/1-A   | Method Blank           | Total/NA  | Water       | 8270E  | 474714     |
| LCS 310-474714/2-A  | Lab Control Sample     | Total/NA  | Water       | 8270E  | 474714     |
| LCSD 310-474714/3-A | Lab Control Sample Dup | Total/NA  | Water       | 8270E  | 474714     |

## GC VOA

### Analysis Batch: 682334

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix      | Method  | Prep Batch |
|--------------------|------------------------|-----------|-------------|---------|------------|
| 310-321076-2       | MW-3                   | Total/NA  | Groundwater | RSK-175 |            |
| MB 240-682334/32   | Method Blank           | Total/NA  | Water       | RSK-175 |            |
| LCS 240-682334/33  | Lab Control Sample     | Total/NA  | Water       | RSK-175 |            |
| LCSD 240-682334/34 | Lab Control Sample Dup | Total/NA  | Water       | RSK-175 |            |

## GC Semi VOA

### Leach Batch: 473822

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| LB 310-473822/1-E | Method Blank     | Total/NA  | Water  | 1311   |            |

### Leach Batch: 473959

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| LB 310-473959/1-E | Method Blank     | Total/NA  | Water  | 1311   |            |

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# QC Association Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## GC Semi VOA

### Prep Batch: 474794

| Lab Sample ID       | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|---------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2        | MW-3               | Total/NA  | Groundwater | 3511   |            |
| LB 310-473822/1-E   | Method Blank       | Total/NA  | Water       | 3511   | 473822     |
| LB 310-473959/1-E   | Method Blank       | Total/NA  | Water       | 3511   | 473959     |
| MB 310-474794/1-A   | Method Blank       | Total/NA  | Water       | 3511   |            |
| LCS 310-474794/10-A | Lab Control Sample | Total/NA  | Water       | 3511   |            |
| LCS 310-474794/2-A  | Lab Control Sample | Total/NA  | Water       | 3511   |            |

### Analysis Batch: 474862

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|-------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2      | MW-3               | Total/NA  | Groundwater | 8015C  |            |
| MB 310-474862/14  | Method Blank       | Total/NA  | Water       | 8015C  |            |
| LCS 310-474862/15 | Lab Control Sample | Total/NA  | Water       | 8015C  |            |

### Analysis Batch: 475239

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| LB 310-473959/1-E  | Method Blank       | Total/NA  | Water  | 8081B  | 474794     |
| MB 310-474794/1-A  | Method Blank       | Total/NA  | Water  | 8081B  | 474794     |
| LCS 310-474794/2-A | Lab Control Sample | Total/NA  | Water  | 8081B  | 474794     |

### Analysis Batch: 475240

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| MB 310-474794/1-A | Method Blank     | Total/NA  | Water  | 8082A  | 474794     |

### Analysis Batch: 475467

| Lab Sample ID | Client Sample ID | Prep Type | Matrix      | Method | Prep Batch |
|---------------|------------------|-----------|-------------|--------|------------|
| 310-321076-2  | MW-3             | Total/NA  | Groundwater | 8081B  | 474794     |

### Analysis Batch: 475468

| Lab Sample ID       | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|---------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2        | MW-3               | Total/NA  | Groundwater | 8082A  | 474794     |
| LB 310-473822/1-E   | Method Blank       | Total/NA  | Water       | 8082A  | 474794     |
| LCS 310-474794/10-A | Lab Control Sample | Total/NA  | Water       | 8082A  | 474794     |

### Prep Batch: 844545

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix      | Method | Prep Batch |
|---------------------|------------------------|-----------|-------------|--------|------------|
| 310-321076-2        | MW-3                   | Total/NA  | Groundwater | 8151A  |            |
| MB 500-844545/1-A   | Method Blank           | Total/NA  | Water       | 8151A  |            |
| LCS 500-844545/2-A  | Lab Control Sample     | Total/NA  | Water       | 8151A  |            |
| LCSD 500-844545/3-A | Lab Control Sample Dup | Total/NA  | Water       | 8151A  |            |

### Analysis Batch: 844705

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix      | Method | Prep Batch |
|---------------------|------------------------|-----------|-------------|--------|------------|
| 310-321076-2        | MW-3                   | Total/NA  | Groundwater | 8151A  | 844545     |
| MB 500-844545/1-A   | Method Blank           | Total/NA  | Water       | 8151A  | 844545     |
| LCS 500-844545/2-A  | Lab Control Sample     | Total/NA  | Water       | 8151A  | 844545     |
| LCSD 500-844545/3-A | Lab Control Sample Dup | Total/NA  | Water       | 8151A  | 844545     |

# QC Association Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## HPLC/IC

### Analysis Batch: 474442

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2     | MW-3               | Total/NA  | Groundwater | 9056A  |            |
| 310-321076-2     | MW-3               | Total/NA  | Groundwater | 9056A  |            |
| MB 310-474442/3  | Method Blank       | Total/NA  | Water       | 9056A  |            |
| LCS 310-474442/4 | Lab Control Sample | Total/NA  | Water       | 9056A  |            |

## Metals

### Prep Batch: 474499

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-1       | MW-2               | Total/NA  | Groundwater | 3005A  |            |
| 310-321076-2       | MW-3               | Total/NA  | Groundwater | 3005A  |            |
| 310-321076-3       | MW-5               | Total/NA  | Groundwater | 3005A  |            |
| MB 310-474499/1-A  | Method Blank       | Total/NA  | Water       | 3005A  |            |
| LCS 310-474499/2-A | Lab Control Sample | Total/NA  | Water       | 3005A  |            |

### Prep Batch: 474500

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-4       | PZ-2B              | Total/NA  | Groundwater | 3005A  |            |
| 310-321076-5       | MW-D               | Total/NA  | Groundwater | 3005A  |            |
| MB 310-474500/1-A  | Method Blank       | Total/NA  | Water       | 3005A  |            |
| LCS 310-474500/2-A | Lab Control Sample | Total/NA  | Water       | 3005A  |            |

### Prep Batch: 474984

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2       | MW-3               | Total/NA  | Groundwater | 7470A  |            |
| MB 310-474984/1-A  | Method Blank       | Total/NA  | Water       | 7470A  |            |
| LCS 310-474984/2-A | Lab Control Sample | Total/NA  | Water       | 7470A  |            |

### Analysis Batch: 475188

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2       | MW-3               | Total/NA  | Groundwater | 7470A  | 474984     |
| MB 310-474984/1-A  | Method Blank       | Total/NA  | Water       | 7470A  | 474984     |
| LCS 310-474984/2-A | Lab Control Sample | Total/NA  | Water       | 7470A  | 474984     |

### Analysis Batch: 475370

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-4       | PZ-2B              | Total/NA  | Groundwater | 6020B  | 474500     |
| 310-321076-5       | MW-D               | Total/NA  | Groundwater | 6020B  | 474500     |
| MB 310-474500/1-A  | Method Blank       | Total/NA  | Water       | 6020B  | 474500     |
| LCS 310-474500/2-A | Lab Control Sample | Total/NA  | Water       | 6020B  | 474500     |

### Analysis Batch: 475619

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-1       | MW-2               | Total/NA  | Groundwater | 6020B  | 474499     |
| 310-321076-2       | MW-3               | Total/NA  | Groundwater | 6020B  | 474499     |
| 310-321076-3       | MW-5               | Total/NA  | Groundwater | 6020B  | 474499     |
| MB 310-474499/1-A  | Method Blank       | Total/NA  | Water       | 6020B  | 474499     |
| LCS 310-474499/2-A | Lab Control Sample | Total/NA  | Water       | 6020B  | 474499     |

# QC Association Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Metals

### Analysis Batch: 475744

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-1       | MW-2               | Total/NA  | Groundwater | 6020B  | 474499     |
| 310-321076-2       | MW-3               | Total/NA  | Groundwater | 6020B  | 474499     |
| 310-321076-3       | MW-5               | Total/NA  | Groundwater | 6020B  | 474499     |
| MB 310-474499/1-A  | Method Blank       | Total/NA  | Water       | 6020B  | 474499     |
| LCS 310-474499/2-A | Lab Control Sample | Total/NA  | Water       | 6020B  | 474499     |

### Analysis Batch: 475751

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-3       | MW-5               | Total/NA  | Groundwater | 6020B  | 474499     |
| MB 310-474499/1-A  | Method Blank       | Total/NA  | Water       | 6020B  | 474499     |
| LCS 310-474499/2-A | Lab Control Sample | Total/NA  | Water       | 6020B  | 474499     |

## General Chemistry

### Analysis Batch: 474366

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix      | Method    | Prep Batch |
|------------------|--------------------|-----------|-------------|-----------|------------|
| 310-321076-1     | MW-2               | Total/NA  | Groundwater | I-3765-85 |            |
| 310-321076-2     | MW-3               | Total/NA  | Groundwater | I-3765-85 |            |
| 310-321076-3     | MW-5               | Total/NA  | Groundwater | I-3765-85 |            |
| 310-321076-4     | PZ-2B              | Total/NA  | Groundwater | I-3765-85 |            |
| 310-321076-5     | MW-D               | Total/NA  | Groundwater | I-3765-85 |            |
| MB 310-474366/1  | Method Blank       | Total/NA  | Water       | I-3765-85 |            |
| LCS 310-474366/2 | Lab Control Sample | Total/NA  | Water       | I-3765-85 |            |

### Prep Batch: 474978

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2       | MW-3               | Total/NA  | Groundwater | 9012B  |            |
| MB 310-474978/1-A  | Method Blank       | Total/NA  | Water       | 9012B  |            |
| LCS 310-474978/2-A | Lab Control Sample | Total/NA  | Water       | 9012B  |            |

### Analysis Batch: 475065

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2       | MW-3               | Total/NA  | Groundwater | 9012B  | 474978     |
| MB 310-474978/1-A  | Method Blank       | Total/NA  | Water       | 9012B  | 474978     |
| LCS 310-474978/2-A | Lab Control Sample | Total/NA  | Water       | 9012B  | 474978     |

### Prep Batch: 844987

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2       | MW-3               | Total/NA  | Groundwater | 9030B  |            |
| MB 500-844987/1-A  | Method Blank       | Total/NA  | Water       | 9030B  |            |
| LCS 500-844987/2-A | Lab Control Sample | Total/NA  | Water       | 9030B  |            |

### Analysis Batch: 844989

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|--------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2       | MW-3               | Total/NA  | Groundwater | 9034   | 844987     |
| MB 500-844987/1-A  | Method Blank       | Total/NA  | Water       | 9034   | 844987     |
| LCS 500-844987/2-A | Lab Control Sample | Total/NA  | Water       | 9034   | 844987     |

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Client Sample ID: MW-2

Date Collected: 11/18/25 16:04

Date Received: 11/20/25 16:15

## Lab Sample ID: 310-321076-1

Matrix: Groundwater

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 474409       | WSE8    | EET CF | 11/21/25 18:45       |
| Total/NA  | Prep       | 3005A        |     |                 | 474499       | RLT9    | EET CF | 11/24/25 08:30       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 475619       | NFT2    | EET CF | 12/04/25 20:29       |
| Total/NA  | Prep       | 3005A        |     |                 | 474499       | RLT9    | EET CF | 11/24/25 08:30       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 475744       | ZRI4    | EET CF | 12/05/25 16:47       |
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 474366       | DGU1    | EET CF | 11/21/25 07:02       |

## Client Sample ID: MW-3

Date Collected: 11/18/25 13:40

Date Received: 11/20/25 16:15

## Lab Sample ID: 310-321076-2

Matrix: Groundwater

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab     | Prepared or Analyzed                         |
|-----------|------------|--------------|-----|-----------------|--------------|---------|---------|----------------------------------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 474409       | WSE8    | EET CF  | 11/21/25 19:07                               |
| Total/NA  | Prep       | 3510C        |     |                 | 474714       | J5BR    | EET CF  | 11/25/25 07:09                               |
| Total/NA  | Analysis   | 8270E        |     | 1               | 475609       | D2YP    | EET CF  | 12/05/25 14:52                               |
| Total/NA  | Prep       | 3510C        |     |                 | 474714       | J5BR    | EET CF  | 11/25/25 07:09                               |
| Total/NA  | Analysis   | 8270E        |     | 1               | 474898       | V7YZ    | EET CF  | 11/26/25 15:04                               |
| Total/NA  | Analysis   | RSK-175      |     | 1               | 682334       | JBN     | EET CLE | 11/29/25 21:10                               |
| Total/NA  | Analysis   | 8015C        |     | 1               | 474862       | BW2O    | EET CF  | 11/26/25 04:52                               |
| Total/NA  | Prep       | 3511         |     |                 | 474794       | BW2O    | EET CF  | 11/25/25 11:59                               |
| Total/NA  | Analysis   | 8081B        |     | 1               | 475467       | BW2O    | EET CF  | 12/03/25 21:19                               |
| Total/NA  | Prep       | 3511         |     |                 | 474794       | BW2O    | EET CF  | 11/25/25 11:59                               |
| Total/NA  | Analysis   | 8082A        |     | 1               | 475468       | BW2O    | EET CF  | 12/03/25 21:19                               |
| Total/NA  | Prep       | 8151A        |     |                 | 844545       | DAK     | EET CHI | 11/24/25 07:50                               |
| Total/NA  | Analysis   | 8151A        |     | 1               | 844705       | H7CM    | EET CHI | 11/24/25 18:28                               |
| Total/NA  | Analysis   | 9056A        |     | 1               | 474442       | HE7K    | EET CF  | 11/21/25 10:21                               |
| Total/NA  | Analysis   | 9056A        |     | 1               | 474442       | HE7K    | EET CF  | 11/21/25 12:44                               |
| Total/NA  | Prep       | 3005A        |     |                 | 474499       | RLT9    | EET CF  | 11/24/25 08:30                               |
| Total/NA  | Analysis   | 6020B        |     | 1               | 475619       | NFT2    | EET CF  | 12/04/25 20:32                               |
| Total/NA  | Prep       | 3005A        |     |                 | 474499       | RLT9    | EET CF  | 11/24/25 08:30                               |
| Total/NA  | Analysis   | 6020B        |     | 1               | 475744       | ZRI4    | EET CF  | 12/05/25 16:49                               |
| Total/NA  | Prep       | 7470A        |     |                 | 474984       | RLT9    | EET CF  | 11/26/25 13:30                               |
| Total/NA  | Analysis   | 7470A        |     | 1               | 475188       | RLT9    | EET CF  | 12/01/25 10:06                               |
| Total/NA  | Prep       | 9012B        |     |                 | 474978       | ENB7    | EET CF  | 11/26/25 10:29                               |
| Total/NA  | Analysis   | 9012B        |     | 1               | 475065       | ZJX4    | EET CF  | 11/26/25 19:09                               |
| Total/NA  | Prep       | 9030B        |     |                 | 844987       | CLB     | EET CHI | 11/25/25 18:03 - 11/25/25 18:05 <sup>1</sup> |
| Total/NA  | Analysis   | 9034         |     | 1               | 844989       | CLB     | EET CHI | 11/25/25 23:42 - 11/25/25 23:47 <sup>1</sup> |
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 474366       | DGU1    | EET CF  | 11/21/25 07:02                               |

Eurofins Cedar Falls

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: MW-5**

**Date Collected: 11/18/25 14:44**

**Date Received: 11/20/25 16:15**

**Lab Sample ID: 310-321076-3**

**Matrix: Groundwater**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 474409       | WSE8    | EET CF | 11/21/25 19:30       |
| Total/NA  | Prep       | 3005A        |     |                 | 474499       | RLT9    | EET CF | 11/24/25 08:30       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 475619       | NFT2    | EET CF | 12/04/25 20:35       |
| Total/NA  | Prep       | 3005A        |     |                 | 474499       | RLT9    | EET CF | 11/24/25 08:30       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 475744       | ZRI4    | EET CF | 12/05/25 16:58       |
| Total/NA  | Prep       | 3005A        |     |                 | 474499       | RLT9    | EET CF | 11/24/25 08:30       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 475751       | NFT2    | EET CF | 12/06/25 15:46       |
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 474366       | DGU1    | EET CF | 11/21/25 07:02       |

**Client Sample ID: PZ-2B**

**Date Collected: 11/18/25 16:44**

**Date Received: 11/20/25 16:15**

**Lab Sample ID: 310-321076-4**

**Matrix: Groundwater**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 474409       | WSE8    | EET CF | 11/21/25 19:53       |
| Total/NA  | Prep       | 3005A        |     |                 | 474500       | RLT9    | EET CF | 11/24/25 08:30       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 475370       | NFT2    | EET CF | 12/02/25 19:27       |
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 474366       | DGU1    | EET CF | 11/21/25 07:02       |

**Client Sample ID: MW-D**

**Date Collected: 11/18/25 14:44**

**Date Received: 11/20/25 16:15**

**Lab Sample ID: 310-321076-5**

**Matrix: Groundwater**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 474409       | WSE8    | EET CF | 11/21/25 20:15       |
| Total/NA  | Prep       | 3005A        |     |                 | 474500       | RLT9    | EET CF | 11/24/25 08:30       |
| Total/NA  | Analysis   | 6020B        |     | 1               | 475370       | NFT2    | EET CF | 12/02/25 19:30       |
| Total/NA  | Analysis   | I-3765-85    |     | 1               | 474366       | DGU1    | EET CF | 11/21/25 07:02       |

**Client Sample ID: Trip Blank 1**

**Date Collected: 11/18/25 00:00**

**Date Received: 11/20/25 16:15**

**Lab Sample ID: 310-321076-6**

**Matrix: Trip Blank**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 474409       | WSE8    | EET CF | 11/21/25 15:45       |

**Client Sample ID: Trip Blank 2**

**Date Collected: 11/18/25 00:00**

**Date Received: 11/20/25 16:15**

**Lab Sample ID: 310-321076-7**

**Matrix: Trip Blank**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 474409       | WSE8    | EET CF | 11/21/25 16:07       |

<sup>1</sup> This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

**Laboratory References:**  
EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401  
EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200  
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

|    |
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# Accreditation/Certification Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

## Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority                                                                                                                                                                                             | Program     | Identification Number | Expiration Date        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|------------------------|
| Iowa                                                                                                                                                                                                  | State       | 007                   | 12-01-25 *             |
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. |             |                       |                        |
| Analysis Method                                                                                                                                                                                       | Prep Method | Matrix                | Analyte                |
| 8260D                                                                                                                                                                                                 |             | Groundwater           | 1,2,4-Trichlorobenzene |
| 8260D                                                                                                                                                                                                 |             | Groundwater           | Allyl chloride         |
| 8260D                                                                                                                                                                                                 |             | Groundwater           | Ethyl methacrylate     |

## Laboratory: Eurofins Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority                                                                                                                                                                                             | Program     | Identification Number | Expiration Date |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|-----------------|
| Iowa                                                                                                                                                                                                  | State       | 082                   | 05-01-26        |
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. |             |                       |                 |
| Analysis Method                                                                                                                                                                                       | Prep Method | Matrix                | Analyte         |
| 8151A                                                                                                                                                                                                 | 8151A       | Groundwater           | 2,4,5-T         |

## Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

| Authority          | Program             | Identification Number | Expiration Date |
|--------------------|---------------------|-----------------------|-----------------|
| Connecticut        | State               | PH-0806               | 09-30-26        |
| Georgia            | State               | 4062                  | 02-27-26        |
| Illinois           | NELAP               | 200004                | 08-31-26        |
| Iowa               | State               | 421                   | 06-01-27        |
| Kansas             | NELAP               | E-10336               | 01-31-26        |
| Kentucky (UST)     | State               | 112225                | 02-28-26        |
| Kentucky (WW)      | State               | KY98016               | 12-31-25        |
| Minnesota          | NELAP               | 039-999-348           | 12-31-25        |
| New Hampshire      | NELAP               | 2250                  | 09-30-26        |
| New Jersey         | NELAP               | OH001                 | 06-30-26        |
| New York           | NELAP               | 10975                 | 04-01-26        |
| North Dakota       | State               | R-244                 | 02-27-26        |
| Ohio               | State               | 8303                  | 02-27-26        |
| Ohio VAP           | State               | ORELAP 4062           | 02-28-26        |
| Oregon             | NELAP               | 4062                  | 02-27-26        |
| Pennsylvania       | NELAP               | 68-00340              | 08-31-26        |
| Texas              | NELAP               | T104704517            | 08-31-26        |
| US Fish & Wildlife | US Federal Programs | A26406                | 02-28-26        |
| USDA               | US Federal Programs | P330-18-00281         | 01-05-27        |
| Virginia           | NELAP               | 460175                | 09-30-26        |
| West Virginia DEP  | State               | 210                   | 12-31-25        |
| Wisconsin          | State               | 399167560             | 08-31-26        |

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cedar Falls

# Method Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-1  
SDG: Woodbury County Sanitary Landfill

| Method    | Method Description                                             | Protocol | Laboratory |
|-----------|----------------------------------------------------------------|----------|------------|
| 8260D     | Volatile Organic Compounds by GC/MS                            | SW846    | EET CF     |
| 8270E     | Semivolatile Organic Compounds (GC/MS)                         | SW846    | EET CF     |
| RSK-175   | Dissolved Gases (GC)                                           | RSK      | EET CLE    |
| 8015C     | Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) | SW846    | EET CF     |
| 8081B     | Organochlorine Pesticides (GC)                                 | SW846    | EET CF     |
| 8082A     | Polychlorinated Biphenyls (PCBs) by Gas Chromatography         | SW846    | EET CF     |
| 8151A     | Herbicides (GC)                                                | SW846    | EET CHI    |
| 9056A     | Anions, Ion Chromatography                                     | SW846    | EET CF     |
| 6020B     | Metals (ICP/MS)                                                | SW846    | EET CF     |
| 7470A     | Mercury (CVAA)                                                 | SW846    | EET CF     |
| 9012B     | Cyanide, Total and/or Amenable                                 | SW846    | EET CF     |
| 9034      | Sulfide, Acid soluble and Insoluble (Titrimetric)              | SW846    | EET CHI    |
| I-3765-85 | Residue, Non-filterable (TSS)                                  | USGS     | EET CF     |
| 3005A     | Preparation, Total Metals                                      | SW846    | EET CF     |
| 3510C     | Liquid-Liquid Extraction (Separatory Funnel)                   | SW846    | EET CF     |
| 3511      | Microextraction of Organic Compounds                           | SW846    | EET CF     |
| 5030B     | Purge and Trap                                                 | SW846    | EET CF     |
| 7470A     | Preparation, Mercury                                           | SW846    | EET CF     |
| 8151A     | Extraction (Herbicides)                                        | SW846    | EET CHI    |
| 9012B     | Cyanide, Total and/or Amenable, Distillation                   | SW846    | EET CF     |
| 9030B     | Sulfide, Distillation (Acid Soluble and Insoluble)             | SW846    | EET CHI    |

## Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab  
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.  
USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

## Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401  
EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200  
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396





Environment Testing  
America



310-321076 Chain of Custody

### Cooler/Sample Receipt and Temperature Log

|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                                                     |                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Client Information</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                                                     |                                                                                               |
| Client <u>ScS</u>                                                                                                                                                                                                                                                                                                                                                 |                           |                                                                     |                                                                                               |
| City/State.                                                                                                                                                                                                                                                                                                                                                       | CITY <u>W. Des Moines</u> | STATE <u>IA</u>                                                     | Project:                                                                                      |
| <b>Receipt Information</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                                                     |                                                                                               |
| Date/Time Received:                                                                                                                                                                                                                                                                                                                                               | DATE <u>11-20-25</u>      | TIME <u>1615</u>                                                    | Received By: <u>PA</u>                                                                        |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ |                           |                                                                     |                                                                                               |
| <b>Condition of Cooler/Containers</b>                                                                                                                                                                                                                                                                                                                             |                           |                                                                     |                                                                                               |
| Sample(s) received in Cooler?                                                                                                                                                                                                                                                                                                                                     |                           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID:                                                                            |
| Multiple Coolers?                                                                                                                                                                                                                                                                                                                                                 |                           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>1</u> of <u>2</u>                                                         |
| Cooler Custody Seals Present?                                                                                                                                                                                                                                                                                                                                     |                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Sample Custody Seals Present?                                                                                                                                                                                                                                                                                                                                     |                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trip Blank Present?                                                                                                                                                                                                                                                                                                                                               |                           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓                                                    |
| <u>NW-2, 3, 5</u>                                                                                                                                                                                                                                                                                                                                                 |                           |                                                                     |                                                                                               |
| <b>Temperature Record</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                                                     |                                                                                               |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE                                                                                                                                                                       |                           |                                                                     |                                                                                               |
| Thermometer ID: <u>C</u>                                                                                                                                                                                                                                                                                                                                          |                           | Correction Factor (°C): <u>0</u>                                    |                                                                                               |
| • Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                                    |                           |                                                                     |                                                                                               |
| Uncorrected Temp (°C): <u>0.3</u>                                                                                                                                                                                                                                                                                                                                 |                           | Corrected Temp (°C): <u>0.3</u>                                     |                                                                                               |
| • Sample Container Temperature                                                                                                                                                                                                                                                                                                                                    |                           |                                                                     |                                                                                               |
| Container(s) used:                                                                                                                                                                                                                                                                                                                                                | CONTAINER 1               |                                                                     | CONTAINER 2                                                                                   |
| Uncorrected Temp (°C):                                                                                                                                                                                                                                                                                                                                            |                           |                                                                     |                                                                                               |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                              |                           |                                                                     |                                                                                               |
| <b>Exceptions Noted</b>                                                                                                                                                                                                                                                                                                                                           |                           |                                                                     |                                                                                               |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                               |                           |                                                                     |                                                                                               |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                  |                           |                                                                     |                                                                                               |
| NOTE If yes, contact PM before proceeding If no, proceed with login                                                                                                                                                                                                                                                                                               |                           |                                                                     |                                                                                               |
| <b>Additional Comments</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                                                     |                                                                                               |



Environment Testing  
America

Place COC scanning label  
here

### Cooler/Sample Receipt and Temperature Log Form

|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------|------------------------|
| <b>Client Information</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                  |                        |
| Client <u>ScS</u>                                                                                                                                                                                                                                                                                                                                                 |                           |                                  |                        |
| City/State.                                                                                                                                                                                                                                                                                                                                                       | CITY <u>W. Des Moines</u> | STATE <u>IA</u>                  | Project:               |
| <b>Receipt Information</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                  |                        |
| Date/Time Received:                                                                                                                                                                                                                                                                                                                                               | DATE <u>11-20-25</u>      | TIME <u>16:15</u>                | Received By: <u>PA</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other. _____ |                           |                                  |                        |
| <b>Condition of Cooler/Containers</b>                                                                                                                                                                                                                                                                                                                             |                           |                                  |                        |
| Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID. _____                                                                                                                                                                                                                                        |                           |                                  |                        |
| Multiple Coolers? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler # <u>2</u> of <u>2</u>                                                                                                                                                                                                                                       |                           |                                  |                        |
| Cooler Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                   |                           |                                  |                        |
| Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                   |                           |                                  |                        |
| Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Which VOA samples are in cooler? ↓<br><u>The Rest</u>                                                                                                                                                                                                             |                           |                                  |                        |
| <b>Temperature Record</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                  |                        |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other _____ <input type="checkbox"/> NONE                                                                                                                                                                        |                           |                                  |                        |
| Thermometer ID. <u>C</u>                                                                                                                                                                                                                                                                                                                                          |                           | Correction Factor (°C): <u>0</u> |                        |
| • Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                                    |                           |                                  |                        |
| Uncorrected Temp (°C). <u>0.8</u>                                                                                                                                                                                                                                                                                                                                 |                           | Corrected Temp (°C): <u>0.8</u>  |                        |
| • Sample Container Temperature                                                                                                                                                                                                                                                                                                                                    |                           |                                  |                        |
| Container(s) used:                                                                                                                                                                                                                                                                                                                                                | CONTAINER 1               |                                  | CONTAINER 2            |
| Uncorrected Temp (°C).                                                                                                                                                                                                                                                                                                                                            |                           |                                  |                        |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                              |                           |                                  |                        |
| <b>Exceptions Noted</b>                                                                                                                                                                                                                                                                                                                                           |                           |                                  |                        |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                               |                           |                                  |                        |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                  |                           |                                  |                        |
| NOTE If yes, contact PM before proceeding If no, proceed with login                                                                                                                                                                                                                                                                                               |                           |                                  |                        |
| <b>Additional Comments</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                  |                        |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                        |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                        |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                        |

Chain of Custody Record



TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☒ RCRA ☐ Other

Project Manager: Nathan Oht

|                                                                                                                                                                                                                                                                                                                       |             |                                                                                                                                        |                              |                                       |            |                           |                          |                   |             |           |         |                         |                     |            |                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------------|------------|---------------------------|--------------------------|-------------------|-------------|-----------|---------|-------------------------|---------------------|------------|-------------------------------------------------------------------------------------|
| Client Contact                                                                                                                                                                                                                                                                                                        |             | Project Manager: Nathan Oht                                                                                                            |                              | Site Contact: Lab Contact: Sam Miller |            | Date: Carrier:            |                          | COC No            |             |           |         |                         |                     |            |                                                                                     |
| SCS Engineers                                                                                                                                                                                                                                                                                                         |             | Email: nohtn@scsengineers.com                                                                                                          |                              | Cell 319-331-6613                     |            |                           |                          | 1 of 2 COCs       |             |           |         |                         |                     |            |                                                                                     |
| 1690 All-State Court, Suite 100                                                                                                                                                                                                                                                                                       |             | Analysis Turnaround Time                                                                                                               |                              |                                       |            |                           |                          | Sampler           |             |           |         |                         |                     |            |                                                                                     |
| West Des Moines IA 50265                                                                                                                                                                                                                                                                                              |             | <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS                                                           |                              |                                       |            |                           |                          | For Lab Use Only: |             |           |         |                         |                     |            |                                                                                     |
| 515-631-6160                                                                                                                                                                                                                                                                                                          |             | Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day |                              |                                       |            |                           |                          | Walk-in Client    |             |           |         |                         |                     |            |                                                                                     |
| Project Name Woodbury 2nd 2025 HMSP                                                                                                                                                                                                                                                                                   |             |                                                                                                                                        |                              |                                       |            |                           |                          | Lab Sampling      |             |           |         |                         |                     |            |                                                                                     |
| Site Woodbury County Sanitary Landfill                                                                                                                                                                                                                                                                                |             |                                                                                                                                        |                              |                                       |            |                           |                          | Job / SDG No      |             |           |         |                         |                     |            |                                                                                     |
| P O # 27223172.26                                                                                                                                                                                                                                                                                                     |             |                                                                                                                                        |                              |                                       |            |                           |                          |                   |             |           |         |                         |                     |            |                                                                                     |
| Sample Identification                                                                                                                                                                                                                                                                                                 | Sample Date | Sample Time                                                                                                                            | Sample Type (C=Comp, G=Grab) | Matrix                                | # of Cont. | Filtered Sample (Y / N)   | Perform MS / MSD (Y / N) | Appendix I        | Appendix II | TSS       | Sulfide | Dichlorodifluoromethane | Natural Attenuation | Trip Blank | Sample Specific Notes                                                               |
| MW-2                                                                                                                                                                                                                                                                                                                  | 11/18/25    | 16:44                                                                                                                                  | G                            | GW                                    |            |                           |                          | X                 |             | X         |         | X                       |                     |            | Natural Attenuation Parameters Dissolved Methane Iron Nitrate Manganese And Sulfate |
| MW-3                                                                                                                                                                                                                                                                                                                  | 11/19/25    | 13:40                                                                                                                                  | G                            | GW                                    |            |                           |                          | X                 |             | X         |         |                         | X                   |            |                                                                                     |
| MW-5                                                                                                                                                                                                                                                                                                                  | 11/18/25    | 14:44                                                                                                                                  | G                            | GW                                    |            |                           |                          | X                 |             | X         |         |                         |                     |            |                                                                                     |
| MW-6                                                                                                                                                                                                                                                                                                                  |             |                                                                                                                                        | G                            | GW                                    |            |                           |                          | X                 |             | X         |         |                         |                     |            |                                                                                     |
| PZ-2B                                                                                                                                                                                                                                                                                                                 | 11/18/25    | 16:44                                                                                                                                  | G                            | GW                                    |            |                           |                          | X                 |             | X         |         | X                       |                     |            |                                                                                     |
| MW-D                                                                                                                                                                                                                                                                                                                  | 11/18/25    | 14:44                                                                                                                                  | G                            | GW                                    |            |                           |                          | X                 |             | X         |         |                         |                     |            |                                                                                     |
| Trip Blank                                                                                                                                                                                                                                                                                                            |             |                                                                                                                                        |                              |                                       |            |                           |                          |                   |             |           |         |                         |                     | X          | Include trip blanks in every cooler containing VOC sample containers.               |
| Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other                                                                                                                                                                                                                                               |             |                                                                                                                                        |                              |                                       |            |                           |                          |                   |             |           |         |                         |                     |            |                                                                                     |
| Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample                                                                                                                      |             |                                                                                                                                        |                              |                                       |            |                           |                          |                   |             |           |         |                         |                     |            |                                                                                     |
| <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months |             |                                                                                                                                        |                              |                                       |            |                           |                          |                   |             |           |         |                         |                     |            |                                                                                     |
| Special Instructions/QC Requirements & Comments: Natural Attenuation Parameters Dissolved Methane Iron Nitrate, Manganese And Sulfate                                                                                                                                                                                 |             |                                                                                                                                        |                              |                                       |            |                           |                          |                   |             |           |         |                         |                     |            |                                                                                     |
| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                        |             | Custody Seal No                                                                                                                        |                              |                                       |            |                           |                          |                   |             |           |         |                         |                     |            |                                                                                     |
| Relinquished by Michael Morgan                                                                                                                                                                                                                                                                                        |             | Company SCS Engineers                                                                                                                  |                              | Date/Time 11/26/25                    |            | Received by               |                          | Company           |             | Date/Time |         |                         |                     |            |                                                                                     |
| Relinquished by                                                                                                                                                                                                                                                                                                       |             | Company                                                                                                                                |                              | Date/Time                             |            | Received by               |                          | Company           |             | Date/Time |         |                         |                     |            |                                                                                     |
| Relinquished by                                                                                                                                                                                                                                                                                                       |             | Company                                                                                                                                |                              | Date/Time                             |            | Received in Laboratory by |                          | Company           |             | Date/Time |         | 11-28-25 1615           |                     |            |                                                                                     |

3019 Venture Way  
Cedar Falls, IA 50613  
Phone: 319-277-2401 Fax: 319-277-2425



## Environment Testing

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|                                                                                                                                                                 |  |                                    |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------|--|
| Eurofins - Cleveland Sample Receipt Form/Narrative                                                                                                              |  | Login # _____                      |  |
| Barberton Facility                                                                                                                                              |  | Client <u>Envirocare</u>           |  |
| Cooler Received on <u>11/23/25</u>                                                                                                                              |  | Site Name <u>1123/25</u>           |  |
| FedEx 1st Gld Exp <u>11/23/25</u> UPS FAX Waypoint Client Drop Off Eurofins Courier Other <u>V. Roosa</u>                                                       |  | Cooler unpacked by <u>V. Roosa</u> |  |
| Receipt After-hour Drop-off Date/Time _____ Storage Location _____                                                                                              |  |                                    |  |
| Eurofins Cooler # <u>22</u> Foam Box Client Cooler Box Other _____                                                                                              |  |                                    |  |
| Packing material used: <u>Bubble Wrap</u> Foam Plastic Bag None Other _____                                                                                     |  |                                    |  |
| COOLANT: <u>Water</u> <u>Ice</u> Blue Ice Dry Ice Water None _____                                                                                              |  |                                    |  |
| 1 Cooler temperature upon receipt <input type="checkbox"/> See Multiple Cooler Form                                                                             |  |                                    |  |
| IR GUN # <u>17</u> (C/F) <u>0.7</u> °C Observed Cooler Temp <u>2.9</u> °C Corrected Cooler Temp <u>3.4</u> °C                                                   |  |                                    |  |
| 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                          |  |                                    |  |
| -Were the seals on the outside of the cooler(s) signed & dated? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                        |  |                                    |  |
| -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                |  |                                    |  |
| -Were tamper/custody seals intact and uncompromised? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                                   |  |                                    |  |
| 3 Shippers' packing slip attached to the cooler(s)? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                                    |  |                                    |  |
| 4 Did custody papers accompany the sample(s)? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                                          |  |                                    |  |
| 5 Were the custody papers relinquished & signed in the appropriate place? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                              |  |                                    |  |
| 6 Was/were the person(s) who collected the samples clearly identified on the COC? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                      |  |                                    |  |
| 7 Did all bottles arrive in good condition (Unbroken)? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                                 |  |                                    |  |
| 8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                   |  |                                    |  |
| 9 For each sample, does the COC specify preservatives (Y/N) # of containers (Y/N), and sample type of grab/comp (Y/N)? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u> |  |                                    |  |
| 10 Were correct bottle(s) used for the test(s) indicated? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                              |  |                                    |  |
| 11 Sufficient quantity received to perform indicated analyses? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                         |  |                                    |  |
| 12 Are these work share samples and all listed on the COC? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                             |  |                                    |  |
| 13 If yes, Questions 13-17 have been checked at the originating laboratory                                                                                      |  |                                    |  |
| 14 Were all preserved sample(s) at the correct pH upon receipt? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u> pH Strip Lot# HC567196                                 |  |                                    |  |
| 15 Were VOAAs on the COC? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                                                              |  |                                    |  |
| 16 Were air bubbles >6 mm in any VOA vials? <u>Yes</u> <u>NO</u> <u>NO</u> <u>NA</u>                                                                            |  |                                    |  |
| 17 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No                                                                                 |  |                                    |  |
| Was a LL Hg or Me Hg trip blank present? _____ Yes No                                                                                                           |  |                                    |  |
| Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____                                                                                        |  |                                    |  |
| Concerning _____                                                                                                                                                |  |                                    |  |
| 18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES <input type="checkbox"/> additional next page                                                                       |  | Labeled by: _____                  |  |
| Labels Verified by _____                                                                                                                                        |  | _____                              |  |
| 19. SAMPLE CONDITION                                                                                                                                            |  |                                    |  |
| Sample(s) _____ were received after the recommended holding time had expired.                                                                                   |  |                                    |  |
| Sample(s) _____ were received in a broken container                                                                                                             |  |                                    |  |
| Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)                                                                                         |  |                                    |  |
| 20. SAMPLE PRESERVATION                                                                                                                                         |  |                                    |  |
| Sample(s) _____ were further preserved in the laboratory                                                                                                        |  |                                    |  |
| Time preserved _____ Preservative(s) added/Lot number(s). _____                                                                                                 |  |                                    |  |
| VOA Sample Preservation - Date/Time VOAs Frozen _____                                                                                                           |  |                                    |  |



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## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-321076-1

SDG Number: Woodbury County Sanitary Landfill

**Login Number: 321076**

**List Number: 1**

**Creator: Hirsch, Preston**

**List Source: Eurofins Cedar Falls**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | N/A    |         |
| The cooler's custody seal, if present, is intact.                                        | N/A    |         |
| Sample custody seals, if present, are 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 is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   |         |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | 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   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

**Eurofins Cedar Falls**

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-321076-1  
SDG Number: Woodbury County Sanitary Landfill

**Login Number: 321076**

**List Number: 2**

**Creator: Hernandez, Stephanie**

**List Source: Eurofins Chicago**

**List Creation: 11/22/25 02:12 PM**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | True   |         |
| The cooler's custody seal, if present, is intact.                                        | True   |         |
| Sample custody seals, if present, are intact.                                            | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.           | True   |         |
| Samples were received on ice.                                                            | True   |         |
| Cooler Temperature is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   | 4.1     |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | 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   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | N/A    |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

**Eurofins Cedar Falls**



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Sean Marczewski  
SCS Engineers  
1690 All State Court  
Suite 100  
West Des Moines, Iowa 50265

Generated 11/21/2025 3:03:35 PM

## JOB DESCRIPTION

Woodbury 2nd 2025 HMSP  
Woodbury County Sanitary Landfill  
2025 Semi-Annual HMSP

## JOB NUMBER

310-321076-2

# Eurofins Cedar Falls

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



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11/21/2025 3:03:35 PM

Authorized for release by  
Samuel Miller, Project Management Assistant I  
[Samuel.Miller@et.eurofinsus.com](mailto:Samuel.Miller@et.eurofinsus.com)  
(319)595-2008

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## Case Narrative

Client: SCS Engineers  
Project: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-2

**Job ID: 310-321076-2**

**Eurofins Cedar Falls**

### **Job Narrative 310-321076-2**

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### **Receipt**

The samples were received on 11/20/2025 4:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.3°C and 0.8°C.

### **HPLC/IC**

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

Eurofins Cedar Falls

Sample Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-2  
SDG: Woodbury County Sanitary Landfill

| Lab Sample ID | Client Sample ID | Matrix      | Collected      | Received       | Sample Origin |
|---------------|------------------|-------------|----------------|----------------|---------------|
| 310-321076-2  | MW-3             | Groundwater | 11/18/25 13:40 | 11/20/25 16:15 | Iowa          |

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## Detection Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-2  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: MW-3**

**Lab Sample ID: 310-321076-2**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-2  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-3  
Date Collected: 11/18/25 13:40  
Date Received: 11/20/25 16:15

Lab Sample ID: 310-321076-2  
Matrix: Groundwater

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte      | Result | Qualifier | RL    | MDL    | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|-------|--------|------|---|----------|----------------|---------|
| Nitrate as N | <0.200 | H H3      | 0.200 | 0.0780 | mg/L |   |          | 11/21/25 10:21 | 1       |

## Definitions/Glossary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-2  
SDG: Woodbury County Sanitary Landfill

### Qualifiers

#### HPLC/IC

| Qualifier | Qualifier Description                                                                                         |
|-----------|---------------------------------------------------------------------------------------------------------------|
| H         | Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements. |
| H3        | Sample was received and analyzed past holding time. This does not meet regulatory requirements.               |

### 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                                                                                       |



# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-2  
SDG: Woodbury County Sanitary Landfill

## Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-474442/3  
Matrix: Water  
Analysis Batch: 474442

Client Sample ID: Method Blank  
Prep Type: Total/NA

| Analyte      | MB<br>Result | MB<br>Qualifier | RL    | MDL    | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------------|-----------------|-------|--------|------|---|----------|----------------|---------|
| Nitrate as N | <0.200       |                 | 0.200 | 0.0780 | mg/L |   |          | 11/19/25 11:51 | 1       |

Lab Sample ID: LCS 310-474442/4  
Matrix: Water  
Analysis Batch: 474442

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

| Analyte      | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec<br>Limits |
|--------------|----------------|---------------|------------------|------|---|------|----------------|
| Nitrate as N | 2.00           | 2.058         |                  | mg/L |   | 103  | 90 - 110       |

QC Association Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-2  
SDG: Woodbury County Sanitary Landfill

HPLC/IC

Analysis Batch: 474442

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix      | Method | Prep Batch |
|------------------|--------------------|-----------|-------------|--------|------------|
| 310-321076-2     | MW-3               | Total/NA  | Groundwater | 9056A  |            |
| MB 310-474442/3  | Method Blank       | Total/NA  | Water       | 9056A  |            |
| LCS 310-474442/4 | Lab Control Sample | Total/NA  | Water       | 9056A  |            |

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Lab Chronicle

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-2  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: MW-3**  
**Date Collected: 11/18/25 13:40**  
**Date Received: 11/20/25 16:15**

**Lab Sample ID: 310-321076-2**  
**Matrix: Groundwater**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 9056A        |     | 1               | 474442       | HE7K    | EET CF | 11/21/25 10:21       |

**Laboratory References:**  
EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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Accreditation/Certification Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-2  
SDG: Woodbury County Sanitary Landfill

Laboratory: Eurofins Cedar Falls

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Iowa      | State   | 007                   | 12-01-25        |

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## Method Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 HMSP

Job ID: 310-321076-2  
SDG: Woodbury County Sanitary Landfill

| Method | Method Description         | Protocol | Laboratory |
|--------|----------------------------|----------|------------|
| 9056A  | Anions, Ion Chromatography | SW846    | EET CF     |

### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Environment Testing  
America



310-321076 Chain of Custody

### Cooler/Sample Receipt and Temperature Log

|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                                                     |                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Client Information</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                                                     |                                                                                               |
| Client <u>ScS</u>                                                                                                                                                                                                                                                                                                                                                 |                           |                                                                     |                                                                                               |
| City/State.                                                                                                                                                                                                                                                                                                                                                       | CITY <u>W. Des Moines</u> | STATE <u>IA</u>                                                     | Project:                                                                                      |
| <b>Receipt Information</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                                                     |                                                                                               |
| Date/Time Received:                                                                                                                                                                                                                                                                                                                                               | DATE <u>11-20-25</u>      | TIME <u>1615</u>                                                    | Received By: <u>PA</u>                                                                        |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ |                           |                                                                     |                                                                                               |
| <b>Condition of Cooler/Containers</b>                                                                                                                                                                                                                                                                                                                             |                           |                                                                     |                                                                                               |
| Sample(s) received in Cooler?                                                                                                                                                                                                                                                                                                                                     |                           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID:                                                                            |
| Multiple Coolers?                                                                                                                                                                                                                                                                                                                                                 |                           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>1</u> of <u>2</u>                                                         |
| Cooler Custody Seals Present?                                                                                                                                                                                                                                                                                                                                     |                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Sample Custody Seals Present?                                                                                                                                                                                                                                                                                                                                     |                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trip Blank Present?                                                                                                                                                                                                                                                                                                                                               |                           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓                                                    |
| <u>NW-2, 3, 5</u>                                                                                                                                                                                                                                                                                                                                                 |                           |                                                                     |                                                                                               |
| <b>Temperature Record</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                                                     |                                                                                               |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE                                                                                                                                                                       |                           |                                                                     |                                                                                               |
| Thermometer ID: <u>C</u>                                                                                                                                                                                                                                                                                                                                          |                           | Correction Factor (°C): <u>0</u>                                    |                                                                                               |
| • Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                                    |                           |                                                                     |                                                                                               |
| Uncorrected Temp (°C): <u>0.3</u>                                                                                                                                                                                                                                                                                                                                 |                           | Corrected Temp (°C): <u>0.3</u>                                     |                                                                                               |
| <b>• Sample Container Temperature</b>                                                                                                                                                                                                                                                                                                                             |                           |                                                                     |                                                                                               |
| Container(s) used:                                                                                                                                                                                                                                                                                                                                                | <u>CONTAINER 1</u>        |                                                                     | <u>CONTAINER 2</u>                                                                            |
| Uncorrected Temp (°C):                                                                                                                                                                                                                                                                                                                                            |                           |                                                                     |                                                                                               |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                              |                           |                                                                     |                                                                                               |
| <b>Exceptions Noted</b>                                                                                                                                                                                                                                                                                                                                           |                           |                                                                     |                                                                                               |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                               |                           |                                                                     |                                                                                               |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                  |                           |                                                                     |                                                                                               |
| NOTE If yes, contact PM before proceeding If no, proceed with login                                                                                                                                                                                                                                                                                               |                           |                                                                     |                                                                                               |
| <b>Additional Comments</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                                                     |                                                                                               |



Environment Testing  
America

Place COC scanning label  
here

### Cooler/Sample Receipt and Temperature Log Form

|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------|------------------------|
| <b>Client Information</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                  |                        |
| Client <u>ScS</u>                                                                                                                                                                                                                                                                                                                                                 |                           |                                  |                        |
| City/State.                                                                                                                                                                                                                                                                                                                                                       | CITY <u>W. Des Moines</u> | STATE <u>IA</u>                  | Project:               |
| <b>Receipt Information</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                  |                        |
| Date/Time Received:                                                                                                                                                                                                                                                                                                                                               | DATE <u>11-20-25</u>      | TIME <u>16:15</u>                | Received By: <u>PA</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other. _____ |                           |                                  |                        |
| <b>Condition of Cooler/Containers</b>                                                                                                                                                                                                                                                                                                                             |                           |                                  |                        |
| Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID. _____                                                                                                                                                                                                                                        |                           |                                  |                        |
| Multiple Coolers? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler # <u>2</u> of <u>2</u>                                                                                                                                                                                                                                       |                           |                                  |                        |
| Cooler Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                   |                           |                                  |                        |
| Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                   |                           |                                  |                        |
| Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes. Which VOA samples are in cooler? ↓<br><u>The Rest</u>                                                                                                                                                                                                             |                           |                                  |                        |
| <b>Temperature Record</b>                                                                                                                                                                                                                                                                                                                                         |                           |                                  |                        |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other _____ <input type="checkbox"/> NONE                                                                                                                                                                        |                           |                                  |                        |
| Thermometer ID. <u>C</u>                                                                                                                                                                                                                                                                                                                                          |                           | Correction Factor (°C): <u>0</u> |                        |
| • Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                                    |                           |                                  |                        |
| Uncorrected Temp (°C). <u>0.8</u>                                                                                                                                                                                                                                                                                                                                 |                           | Corrected Temp (°C): <u>0.8</u>  |                        |
| • Sample Container Temperature                                                                                                                                                                                                                                                                                                                                    |                           |                                  |                        |
| Container(s) used:                                                                                                                                                                                                                                                                                                                                                | CONTAINER 1               |                                  | CONTAINER 2            |
| Uncorrected Temp (°C).                                                                                                                                                                                                                                                                                                                                            |                           |                                  |                        |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                              |                           |                                  |                        |
| <b>Exceptions Noted</b>                                                                                                                                                                                                                                                                                                                                           |                           |                                  |                        |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                               |                           |                                  |                        |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                  |                           |                                  |                        |
| NOTE If yes, contact PM before proceeding If no, proceed with login                                                                                                                                                                                                                                                                                               |                           |                                  |                        |
| <b>Additional Comments</b>                                                                                                                                                                                                                                                                                                                                        |                           |                                  |                        |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                        |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                        |
|                                                                                                                                                                                                                                                                                                                                                                   |                           |                                  |                        |





## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-321076-2

SDG Number: Woodbury County Sanitary Landfill

**Login Number: 321076**

**List Source: Eurofins Cedar Falls**

**List Number: 1**

**Creator: Hirsch, Preston**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | N/A    |         |
| The cooler's custody seal, if present, is intact.                                        | N/A    |         |
| Sample custody seals, if present, are 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 is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   |         |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | 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   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

**Eurofins Cedar Falls**

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Sean Marczewski  
SCS Engineers  
1690 All State Court  
Suite 100  
West Des Moines, Iowa 50265

Generated 12/2/2025 1:18:02 AM

## JOB DESCRIPTION

Woodbury 2nd 2025 Bracketing  
Woodbury County Sanitary Landfill

## JOB NUMBER

310-321077-1

# Eurofins Cedar Falls

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



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12/2/2025 1:18:02 AM

Authorized for release by  
Samuel Miller, Project Management Assistant I  
[Samuel.Miller@et.eurofinsus.com](mailto:Samuel.Miller@et.eurofinsus.com)  
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## Case Narrative

Client: SCS Engineers  
Project: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1

**Job ID: 310-321077-1**

**Eurofins Cedar Falls**

### **Job Narrative 310-321077-1**

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### **Receipt**

The samples were received on 11/20/2025 4:15 PM. 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 0.2°C.

### **GC/MS VOA**

Method 8260D: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: PZ-2A (310-321077-4).

Method 8260D: The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container(s): Trip Blank (310-321077-5).

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

Eurofins Cedar Falls

Sample Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

| Lab Sample ID | Client Sample ID | Matrix       | Collected      | Received       | Sample Origin |
|---------------|------------------|--------------|----------------|----------------|---------------|
| 310-321077-1  | MW-9             | Ground Water | 11/19/25 09:54 | 11/20/25 16:15 | Iowa          |
| 310-321077-2  | MW-11            | Ground Water | 11/19/25 09:06 | 11/20/25 16:15 | Iowa          |
| 310-321077-3  | MW-12            | Ground Water | 11/19/25 08:38 | 11/20/25 16:15 | Iowa          |
| 310-321077-4  | PZ-2A            | Ground Water | 11/19/25 10:53 | 11/20/25 16:15 | Iowa          |
| 310-321077-5  | Trip Blank       | Ground Water | 11/19/25 00:00 | 11/20/25 16:15 | Iowa          |

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

# Detection Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-9

Lab Sample ID: 310-321077-1

| Analyte           | Result | Qualifier | RL   | MDL   | Unit | Dil Fac | D | Method | Prep Type |
|-------------------|--------|-----------|------|-------|------|---------|---|--------|-----------|
| Trichloroethene   | 7.10   |           | 1.00 | 0.350 | ug/L | 1       |   | 8260D  | Total/NA  |
| Tetrachloroethene | 0.825  | J         | 1.00 | 0.480 | ug/L | 1       |   | 8260D  | Total/NA  |

Client Sample ID: MW-11

Lab Sample ID: 310-321077-2

No Detections.

Client Sample ID: MW-12

Lab Sample ID: 310-321077-3

No Detections.

Client Sample ID: PZ-2A

Lab Sample ID: 310-321077-4

No Detections.

Client Sample ID: Trip Blank

Lab Sample ID: 310-321077-5

No Detections.

# Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

Client Sample ID: MW-9

Lab Sample ID: 310-321077-1

Date Collected: 11/19/25 09:54

Matrix: Ground Water

Date Received: 11/20/25 16:15

## Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | 7.10      |           | 1.00     | 0.350 | ug/L |   |          | 11/26/25 19:52 | 1       |
| Tetrachloroethene           | 0.825     | J         | 1.00     | 0.480 | ug/L |   |          | 11/26/25 19:52 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 88        |           | 80 - 120 |       |      |   |          | 11/26/25 19:52 | 1       |
| Dibromofluoromethane (Surr) | 115       |           | 76 - 130 |       |      |   |          | 11/26/25 19:52 | 1       |
| Toluene-d8 (Surr)           | 96        |           | 80 - 120 |       |      |   |          | 11/26/25 19:52 | 1       |



## Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: MW-11**

**Lab Sample ID: 310-321077-2**

**Date Collected: 11/19/25 09:06**

**Matrix: Ground Water**

**Date Received: 11/20/25 16:15**

### Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00     |           | 1.00     | 0.350 | ug/L |   |          | 11/26/25 20:14 | 1       |
| Tetrachloroethene           | <1.00     |           | 1.00     | 0.480 | ug/L |   |          | 11/26/25 20:14 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 83        |           | 80 - 120 |       |      |   |          | 11/26/25 20:14 | 1       |
| Dibromofluoromethane (Surr) | 113       |           | 76 - 130 |       |      |   |          | 11/26/25 20:14 | 1       |
| Toluene-d8 (Surr)           | 99        |           | 80 - 120 |       |      |   |          | 11/26/25 20:14 | 1       |

## Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: MW-12**

**Lab Sample ID: 310-321077-3**

**Date Collected: 11/19/25 08:38**

**Matrix: Ground Water**

**Date Received: 11/20/25 16:15**

### Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00     |           | 1.00     | 0.350 | ug/L |   |          | 11/26/25 20:35 | 1       |
| Tetrachloroethene           | <1.00     |           | 1.00     | 0.480 | ug/L |   |          | 11/26/25 20:35 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 83        |           | 80 - 120 |       |      |   |          | 11/26/25 20:35 | 1       |
| Dibromofluoromethane (Surr) | 109       |           | 76 - 130 |       |      |   |          | 11/26/25 20:35 | 1       |
| Toluene-d8 (Surr)           | 96        |           | 80 - 120 |       |      |   |          | 11/26/25 20:35 | 1       |

## Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: PZ-2A**

**Lab Sample ID: 310-321077-4**

**Date Collected: 11/19/25 10:53**

**Matrix: Ground Water**

**Date Received: 11/20/25 16:15**

### Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00     |           | 1.00     | 0.350 | ug/L |   |          | 11/26/25 20:57 | 1       |
| Tetrachloroethene           | <1.00     |           | 1.00     | 0.480 | ug/L |   |          | 11/26/25 20:57 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 85        |           | 80 - 120 |       |      |   |          | 11/26/25 20:57 | 1       |
| Dibromofluoromethane (Surr) | 109       |           | 76 - 130 |       |      |   |          | 11/26/25 20:57 | 1       |
| Toluene-d8 (Surr)           | 94        |           | 80 - 120 |       |      |   |          | 11/26/25 20:57 | 1       |

## Client Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

**Client Sample ID: Trip Blank**

**Lab Sample ID: 310-321077-5**

**Date Collected: 11/19/25 00:00**

**Matrix: Ground Water**

**Date Received: 11/20/25 16:15**

### Method: SW846 8260D - Volatile Organic Compounds by GC/MS

| Analyte                     | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00     |           | 1.00     | 0.350 | ug/L |   |          | 11/27/25 01:38 | 1       |
| Tetrachloroethene           | <1.00     |           | 1.00     | 0.480 | ug/L |   |          | 11/27/25 01:38 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 90        |           | 80 - 120 |       |      |   |          | 11/27/25 01:38 | 1       |
| Dibromofluoromethane (Surr) | 111       |           | 76 - 130 |       |      |   |          | 11/27/25 01:38 | 1       |
| Toluene-d8 (Surr)           | 99        |           | 80 - 120 |       |      |   |          | 11/27/25 01:38 | 1       |

## Definitions/Glossary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

### Qualifiers

#### GC/MS VOA

| 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                                                                                       |

## Surrogate Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

### Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) |                  |                 |
|---------------|------------------|------------------------------------------------|------------------|-----------------|
|               |                  | BFB<br>(80-120)                                | DBFM<br>(76-130) | TOL<br>(80-120) |
| 310-321077-1  | MW-9             | 88                                             | 115              | 96              |
| 310-321077-2  | MW-11            | 83                                             | 113              | 99              |
| 310-321077-3  | MW-12            | 83                                             | 109              | 96              |
| 310-321077-4  | PZ-2A            | 85                                             | 109              | 94              |
| 310-321077-5  | Trip Blank       | 90                                             | 111              | 99              |

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)  
DBFM = Dibromofluoromethane (Surr)  
TOL = Toluene-d8 (Surr)

### Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID    | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                  |                 |
|------------------|--------------------|------------------------------------------------|------------------|-----------------|
|                  |                    | BFB<br>(80-120)                                | DBFM<br>(76-130) | TOL<br>(80-120) |
| LCS 310-475037/7 | Lab Control Sample | 103                                            | 99               | 101             |
| LCS 310-475039/7 | Lab Control Sample | 99                                             | 101              | 96              |
| MB 310-475037/6  | Method Blank       | 93                                             | 103              | 103             |
| MB 310-475039/6  | Method Blank       | 87                                             | 106              | 95              |

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)  
DBFM = Dibromofluoromethane (Surr)  
TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

## Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-475037/6

Matrix: Water

Analysis Batch: 475037

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result    | MB Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00        |              | 1.00     | 0.350 | ug/L |   |          | 11/26/25 14:04 | 1       |
| Tetrachloroethene           | <1.00        |              | 1.00     | 0.480 | ug/L |   |          | 11/26/25 14:04 | 1       |
| Surrogate                   | MB %Recovery | MB Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 93           |              | 80 - 120 |       |      |   |          | 11/26/25 14:04 | 1       |
| Dibromofluoromethane (Surr) | 103          |              | 76 - 130 |       |      |   |          | 11/26/25 14:04 | 1       |
| Toluene-d8 (Surr)           | 103          |              | 80 - 120 |       |      |   |          | 11/26/25 14:04 | 1       |

Lab Sample ID: LCS 310-475037/7

Matrix: Water

Analysis Batch: 475037

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added   | LCS Result    | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|---------------|---------------|---------------|------|---|------|-------------|
| Trichloroethene             | 20.0          | 17.48         |               | ug/L |   | 87   | 70 - 128    |
| Tetrachloroethene           | 20.0          | 18.15         |               | ug/L |   | 91   | 70 - 128    |
| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits        |      |   |      |             |
| 4-Bromofluorobenzene (Surr) | 103           |               | 80 - 120      |      |   |      |             |
| Dibromofluoromethane (Surr) | 99            |               | 76 - 130      |      |   |      |             |
| Toluene-d8 (Surr)           | 101           |               | 80 - 120      |      |   |      |             |

Lab Sample ID: MB 310-475039/6

Matrix: Water

Analysis Batch: 475039

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result    | MB Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|-------|------|---|----------|----------------|---------|
| Trichloroethene             | <1.00        |              | 1.00     | 0.350 | ug/L |   |          | 11/27/25 00:33 | 1       |
| Tetrachloroethene           | <1.00        |              | 1.00     | 0.480 | ug/L |   |          | 11/27/25 00:33 | 1       |
| Surrogate                   | MB %Recovery | MB Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 87           |              | 80 - 120 |       |      |   |          | 11/27/25 00:33 | 1       |
| Dibromofluoromethane (Surr) | 106          |              | 76 - 130 |       |      |   |          | 11/27/25 00:33 | 1       |
| Toluene-d8 (Surr)           | 95           |              | 80 - 120 |       |      |   |          | 11/27/25 00:33 | 1       |

Lab Sample ID: LCS 310-475039/7

Matrix: Water

Analysis Batch: 475039

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added   | LCS Result    | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------|---------------|---------------|---------------|------|---|------|-------------|
| Trichloroethene             | 20.0          | 19.29         |               | ug/L |   | 96   | 70 - 128    |
| Tetrachloroethene           | 20.0          | 19.24         |               | ug/L |   | 96   | 70 - 128    |
| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits        |      |   |      |             |
| 4-Bromofluorobenzene (Surr) | 99            |               | 80 - 120      |      |   |      |             |
| Dibromofluoromethane (Surr) | 101           |               | 76 - 130      |      |   |      |             |
| Toluene-d8 (Surr)           | 96            |               | 80 - 120      |      |   |      |             |

Eurofins Cedar Falls

## QC Association Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

### GC/MS VOA

#### Analysis Batch: 475037

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|--------|------------|
| 310-321077-1     | MW-9               | Total/NA  | Ground Water | 8260D  |            |
| 310-321077-2     | MW-11              | Total/NA  | Ground Water | 8260D  |            |
| 310-321077-3     | MW-12              | Total/NA  | Ground Water | 8260D  |            |
| 310-321077-4     | PZ-2A              | Total/NA  | Ground Water | 8260D  |            |
| MB 310-475037/6  | Method Blank       | Total/NA  | Water        | 8260D  |            |
| LCS 310-475037/7 | Lab Control Sample | Total/NA  | Water        | 8260D  |            |

#### Analysis Batch: 475039

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix       | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|--------|------------|
| 310-321077-5     | Trip Blank         | Total/NA  | Ground Water | 8260D  |            |
| MB 310-475039/6  | Method Blank       | Total/NA  | Water        | 8260D  |            |
| LCS 310-475039/7 | Lab Control Sample | Total/NA  | Water        | 8260D  |            |



# Lab Chronicle

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

## Client Sample ID: MW-9

Date Collected: 11/19/25 09:54

Date Received: 11/20/25 16:15

## Lab Sample ID: 310-321077-1

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 475037       | MZR8    | EET CF | 11/26/25 19:52       |

## Client Sample ID: MW-11

Date Collected: 11/19/25 09:06

Date Received: 11/20/25 16:15

## Lab Sample ID: 310-321077-2

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 475037       | MZR8    | EET CF | 11/26/25 20:14       |

## Client Sample ID: MW-12

Date Collected: 11/19/25 08:38

Date Received: 11/20/25 16:15

## Lab Sample ID: 310-321077-3

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 475037       | MZR8    | EET CF | 11/26/25 20:35       |

## Client Sample ID: PZ-2A

Date Collected: 11/19/25 10:53

Date Received: 11/20/25 16:15

## Lab Sample ID: 310-321077-4

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 475037       | MZR8    | EET CF | 11/26/25 20:57       |

## Client Sample ID: Trip Blank

Date Collected: 11/19/25 00:00

Date Received: 11/20/25 16:15

## Lab Sample ID: 310-321077-5

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab    | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA  | Analysis   | 8260D        |     | 1               | 475039       | MZR8    | EET CF | 11/27/25 01:38       |

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: SCS Engineers  
Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1  
SDG: Woodbury County Sanitary Landfill

Laboratory: Eurofins Cedar Falls

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Iowa      | State   | 007                   | 12-01-25        |

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

## Method Summary

Client: SCS Engineers

Project/Site: Woodbury 2nd 2025 Bracketing

Job ID: 310-321077-1

SDG: Woodbury County Sanitary Landfill

| Method | Method Description                  | Protocol | Laboratory |
|--------|-------------------------------------|----------|------------|
| 8260D  | Volatile Organic Compounds by GC/MS | SW846    | EET CF     |
| 5030B  | Purge and Trap                      | SW846    | EET CF     |

### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Environment Testing  
America



310-321077 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

|                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                                     |                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Client Information</b>                                                                                                                                                                                                                                                                                                                                        |                      |                                                                     |                                                                                               |
| Client. <u>SCS</u>                                                                                                                                                                                                                                                                                                                                               |                      |                                                                     |                                                                                               |
| City/State.                                                                                                                                                                                                                                                                                                                                                      | CITY                 | STATE                                                               | Project                                                                                       |
| <b>Receipt Information</b>                                                                                                                                                                                                                                                                                                                                       |                      |                                                                     |                                                                                               |
| Date/Time Received:                                                                                                                                                                                                                                                                                                                                              | DATE <u>11/20/15</u> | TIME <u>1615</u>                                                    | Received By. <u>[Signature]</u>                                                               |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee<br><input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other _____ |                      |                                                                     |                                                                                               |
| <b>Condition of Cooler/Containers</b>                                                                                                                                                                                                                                                                                                                            |                      |                                                                     |                                                                                               |
| Sample(s) received in Cooler?                                                                                                                                                                                                                                                                                                                                    |                      | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID.                                                                            |
| Multiple Coolers?                                                                                                                                                                                                                                                                                                                                                |                      | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Cooler # _____ of _____                                                               |
| Cooler Custody Seals Present?                                                                                                                                                                                                                                                                                                                                    |                      | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Sample Custody Seals Present?                                                                                                                                                                                                                                                                                                                                    |                      | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trip Blank Present?                                                                                                                                                                                                                                                                                                                                              |                      | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓                                                    |
| <u>All</u>                                                                                                                                                                                                                                                                                                                                                       |                      |                                                                     |                                                                                               |
| <b>Temperature Record</b>                                                                                                                                                                                                                                                                                                                                        |                      |                                                                     |                                                                                               |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE                                                                                                                                                                      |                      |                                                                     |                                                                                               |
| Thermometer ID. <u>B3</u>                                                                                                                                                                                                                                                                                                                                        |                      | Correction Factor (°C): <u>5</u>                                    |                                                                                               |
| • <b>Temp Blank Temperature</b> – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature                                                                                                                                                                                                                            |                      |                                                                     |                                                                                               |
| Uncorrected Temp (°C). <u>0.2</u>                                                                                                                                                                                                                                                                                                                                |                      | Corrected Temp (°C) <u>0.2</u>                                      |                                                                                               |
| • <b>Sample Container Temperature</b>                                                                                                                                                                                                                                                                                                                            |                      |                                                                     |                                                                                               |
| Container(s) used:                                                                                                                                                                                                                                                                                                                                               | <u>CONTAINER 1</u>   |                                                                     | <u>CONTAINER 2</u>                                                                            |
| Uncorrected Temp (°C):                                                                                                                                                                                                                                                                                                                                           |                      |                                                                     |                                                                                               |
| Corrected Temp (°C):                                                                                                                                                                                                                                                                                                                                             |                      |                                                                     |                                                                                               |
| <b>Exceptions Noted</b>                                                                                                                                                                                                                                                                                                                                          |                      |                                                                     |                                                                                               |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                              |                      |                                                                     |                                                                                               |
| 2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                 |                      |                                                                     |                                                                                               |
| NOTE If yes, contact PM before proceeding If no, proceed with login                                                                                                                                                                                                                                                                                              |                      |                                                                     |                                                                                               |
| <b>Additional Comments</b>                                                                                                                                                                                                                                                                                                                                       |                      |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                                     |                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                                     |                                                                                               |

| Project Manager: Nathan Ohrt<br>Email: nohrt@scsengineers.com<br>Cell: 319-331-6613                                                                                                                                                                |          | Client Contact<br>SCS Engineers<br>1690 All-State Court, Suite 100<br>West Des Moines, IA 50265<br>515-631-6160 |   | Site Contact:<br>Lab Contact: Sam Miller |  | Date:<br>Carrier:              |  | COC No<br>2 of 2 COCs |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------|---|------------------------------------------|--|--------------------------------|--|-----------------------|--|
| Analysis Turnaround Time<br><input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS<br>Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day |          | Sample Date                                                                                                     |   | Sample Time                              |  | Sample Type<br>(C=Comp G=Grab) |  | # of Cont.            |  |
| Sample Identification                                                                                                                                                                                                                              |          | Sample Date                                                                                                     |   | Sample Time                              |  | Sample Type<br>(C=Comp G=Grab) |  | # of Cont.            |  |
| MW-9                                                                                                                                                                                                                                               | 11/19/25 | 9:54                                                                                                            | G | GW                                       |  |                                |  |                       |  |
| MW-11                                                                                                                                                                                                                                              | 11/19/25 | 9:06                                                                                                            | G | GW                                       |  |                                |  |                       |  |
| MW-12                                                                                                                                                                                                                                              | 11/19/25 | 8:38                                                                                                            | G | GW                                       |  |                                |  |                       |  |
| PZ-2A                                                                                                                                                                                                                                              | 11/19/25 | 10:53                                                                                                           | G | GW                                       |  |                                |  |                       |  |
| Trip Blank                                                                                                                                                                                                                                         |          |                                                                                                                 |   |                                          |  |                                |  |                       |  |
| Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other                                                                                                                                                                            |          |                                                                                                                 |   |                                          |  |                                |  |                       |  |
| Possible Hazard Identification:<br>Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample                                                |          |                                                                                                                 |   |                                          |  |                                |  |                       |  |
| Special Instructions/QC Requirements & Comments:                                                                                                                                                                                                   |          |                                                                                                                 |   |                                          |  |                                |  |                       |  |
| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                     |          | Custody Seal No                                                                                                 |   | Received by                              |  | Cooler Temp (°C)               |  | Obs'd                 |  |
| Relinquished by: Michael Morgan                                                                                                                                                                                                                    |          | Company: SCS Engineers                                                                                          |   | Date/Time: 11/20/25                      |  | Company                        |  | Therm ID No           |  |
| Relinquished by                                                                                                                                                                                                                                    |          | Company                                                                                                         |   | Date/Time                                |  | Company                        |  | Date/Time             |  |
| Relinquished by                                                                                                                                                                                                                                    |          | Company                                                                                                         |   | Date/Time                                |  | Company                        |  | Date/Time             |  |

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-321077-1

SDG Number: Woodbury County Sanitary Landfill

Login Number: 321077

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Robison, Jessie

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | N/A    |         |
| The cooler's custody seal, if present, is intact.                                        | N/A    |         |
| Sample custody seals, if present, are 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 is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   |         |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)            | 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   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |



## Appendix B-2

### Data Validation

Completed by: Nathan Ohrt  
Date of Sampling: 6/19/2025  
Lab Report Date: 8/21/2025  
Site Name: Woodbury County Sanitary Landfill  
Project Type: 1<sup>st</sup> 2025 HMSP  
Lab Report Number: 310-309320

OK NO N/A NOTES

### Sample Collection and Sample Handling

|                  |   |   |  |                                                                                                                                                                                                                                                |
|------------------|---|---|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chain of Custody | X |   |  |                                                                                                                                                                                                                                                |
| Temperature      | X |   |  |                                                                                                                                                                                                                                                |
| Preservation     |   | X |  | The pH of MW-8 was outside the required criteria when verified by the laboratory; the sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples. |
| Condition        | X |   |  |                                                                                                                                                                                                                                                |
| Case Narrative   | X |   |  | The report being provided is a revision of the original report sent on 7/2/2025. The report was revised due to an updated analyte list for sample MW-2.                                                                                        |
| Holding Times    | X |   |  |                                                                                                                                                                                                                                                |

### Analytical Sensitivity and Blanks

|                         |   |  |  |                |
|-------------------------|---|--|--|----------------|
| Method Blank Detections | X |  |  | No detections. |
| Trip Blank Detections   | X |  |  | No detections. |

### Accuracy

|                            |   |   |  |                                                                                                                                                                                                                                                                                                                                       |
|----------------------------|---|---|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ICV/CCV                    |   | X |  | The continuing calibration verification (CCV) associated with batch 310-458497 recovered above the upper control limit for Trichlorofluoromethane and Dichlorodifluoromethane; the samples associated with this CCV were non-detect for the affected analytes so the data was reported.                                               |
| LCS/LCSD                   |   | X |  | The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for preparation batch 500-823279 and analytical batch 500-823371 recovered outside control limits for Silvex (2,4,5-TP); this analyte was biased high in the LCS/LCSD and was not detected in the associated samples so the data was reported. |
| MS/MSD                     | X |   |  |                                                                                                                                                                                                                                                                                                                                       |
| Surrogates (organics only) | X |   |  |                                                                                                                                                                                                                                                                                                                                       |
| Other QA QC samples        | X |   |  |                                                                                                                                                                                                                                                                                                                                       |

### Precision

|                   |   |  |   |  |
|-------------------|---|--|---|--|
| QA/QC Sample RPDs | X |  |   |  |
| Field Duplicates  |   |  | X |  |



Completed by: Nathan Ohrt  
Date of Sampling: 6/19/2025  
Lab Report Date: 8/21/2025  
Site Name: Woodbury County Sanitary Landfill  
Project Type: HMSP - 1<sup>st</sup> 2025 HMSP  
Lab Report Number: 310-309488

OK NO N/A NOTES

### Sample Collection and Sample Handling

Chain of Custody

Temperature

Preservation

Condition

Case Narrative

Holding Times

|   |  |  |                                                                                                                                                                   |
|---|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X |  |  |                                                                                                                                                                   |
| X |  |  |                                                                                                                                                                   |
| X |  |  |                                                                                                                                                                   |
| X |  |  |                                                                                                                                                                   |
| X |  |  | The report being provided is a revision of the original report sent on 7/8/2025. The report was revised due to an updated analyte list for samples MW-5 and MW-8. |
| X |  |  |                                                                                                                                                                   |

### Analytical Sensitivity and Blanks

Method Blank Detections

Trip Blank Detections

|   |  |  |                |
|---|--|--|----------------|
| X |  |  | No detections. |
| X |  |  | No detections. |

### Accuracy

ICV/CCV

LCS/LCSD

MS/MSD

Surrogates (organics only)

Other QA QC samples

|   |  |  |  |
|---|--|--|--|
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |

### Precision

QA/QC Sample RPDs

Field Duplicates

|   |  |  |                                                                             |
|---|--|--|-----------------------------------------------------------------------------|
| X |  |  |                                                                             |
| X |  |  | Sample MW-5 and duplicate sample MW-D had <50% RPD for analyzed parameters. |

Completed by: Nathan Ohrt  
Date of Sampling: 6/20/2025  
Lab Report Date: 7/7/2025  
Site Name: Woodbury County Sanitary Landfill  
Project Type: HMSP - 1<sup>st</sup> 2025 Bracketing  
Lab Report Number: 310-309489

OK NO N/A NOTES

### Sample Collection and Sample Handling

|                  |   |   |  |                                                                                                                                                                                                                                                 |
|------------------|---|---|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chain of Custody | X |   |  |                                                                                                                                                                                                                                                 |
| Temperature      | X |   |  |                                                                                                                                                                                                                                                 |
| Preservation     |   | X |  | The pH of MW-12 was outside the required criteria when verified by the laboratory; the sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples. |
| Condition        | X |   |  |                                                                                                                                                                                                                                                 |
| Case Narrative   | X |   |  |                                                                                                                                                                                                                                                 |
| Holding Times    | X |   |  |                                                                                                                                                                                                                                                 |

### Analytical Sensitivity and Blanks

|                         |   |  |  |                |
|-------------------------|---|--|--|----------------|
| Method Blank Detections | X |  |  | No detections. |
| Trip Blank Detections   | X |  |  | No detections. |

### Accuracy

|                            |   |   |  |                                                                                                                                                    |
|----------------------------|---|---|--|----------------------------------------------------------------------------------------------------------------------------------------------------|
| ICV/CCV                    | X |   |  |                                                                                                                                                    |
| LCS/LCSD                   | X |   |  |                                                                                                                                                    |
| MS/MSD                     | X |   |  |                                                                                                                                                    |
| Surrogates (organics only) |   | X |  | Surrogate recovery for MW-12 was outside the upper control limit; the sample did not contain any target analytes so re-analysis was not performed. |
| Other QA QC samples        | X |   |  |                                                                                                                                                    |

### Precision

|                   |   |  |   |  |
|-------------------|---|--|---|--|
| QA/QC Sample RPDs | X |  |   |  |
| Field Duplicates  |   |  | X |  |

Completed by: Nathan Ohrt  
Date of Sampling: 7/9/2025  
Lab Report Date: 8/4/2025  
Site Name: Woodbury County Sanitary Landfill  
Project Type: PZ-2B July 2025 Resample  
Lab Report Number: 310-310779

OK NO N/A NOTES

### Sample Collection and Sample Handling

Chain of Custody  
Temperature  
Preservation  
Condition  
Case Narrative  
Holding Times

|   |  |  |  |
|---|--|--|--|
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |

### Analytical Sensitivity and Blanks

Method Blank Detections

|   |  |   |                                                                                                                                                                                                                                                                                |
|---|--|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X |  |   | The DCAA surrogate recovery for the Method Blank (MB) associated with a preparation batch and an analytical batch was outside the lower control limits; the associated samples were re-prepared outside holding time and MB is within control limits so the data was reported. |
|   |  | X |                                                                                                                                                                                                                                                                                |

Trip Blank Detections

### Accuracy

ICV/CCV

|   |  |  |                                                                                                                                                                                                                                                                                                                                                                          |
|---|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X |  |  | The continuing calibration verification (CCV) associated with multiple batches recovered above the upper control limits for multiple parameters; the samples associated with this CCV were non-detect for the affected analyte, or the laboratory control sample (LCS) associated with this CCV passed CCV criteria for the affected analytes, so the data was reported. |
|---|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

LCS/LCSD

|   |  |  |                                                                                                                                                                                                   |
|---|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X |  |  | The laboratory control sample (LCS) recovered outside control limits for 2,4-D, Silvex (2,4,5-TP), and 2,4,5-T; the associated sample(s) was re-prepared and/or re-analyzed outside holding time. |
|---|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

MS/MSD

|   |  |  |                                                                                                                                                                                                                      |
|---|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X |  |  | Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with a preparation batch; the LCS was performed in duplicate to provide precision data for this batch. |
|---|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Surrogates (organics only)

|  |   |  |                                                                                                                                     |
|--|---|--|-------------------------------------------------------------------------------------------------------------------------------------|
|  | X |  | Surrogate recovery for PZ-2B was outside control limits; re-analysis was performed outside of holding time with acceptable results. |
|--|---|--|-------------------------------------------------------------------------------------------------------------------------------------|

Other QA QC samples

|   |  |  |  |
|---|--|--|--|
| X |  |  |  |
|---|--|--|--|

### Precision

QA/QC Sample RPDs

|   |  |  |  |
|---|--|--|--|
| X |  |  |  |
|---|--|--|--|

Field Duplicates

|  |  |   |  |
|--|--|---|--|
|  |  | X |  |
|--|--|---|--|

Completed by: Nathan Ohrt  
Date of Sampling: 7/9/2025  
Lab Report Date: 8/4/2025  
Site Name: Woodbury County Sanitary Landfill  
Project Type: MW-2, MW-8, and PZ-2A August 2025 Resample  
Lab Report Number: 310-310779

OK NO N/A NOTES

#### Sample Collection and Sample Handling

Chain of Custody  
Temperature  
Preservation  
Condition  
Case Narrative  
Holding Times

|   |  |  |  |
|---|--|--|--|
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |

#### Analytical Sensitivity and Blanks

Method Blank Detections  
Trip Blank Detections

|   |  |   |               |
|---|--|---|---------------|
| X |  |   | No detections |
|   |  | X |               |

#### Accuracy

ICV/CCV

|  |   |  |                                                                                                                                                                                                                                                                                                                                                                        |
|--|---|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | X |  | The continuing calibration verification (CCV) associated with multiple batches recovered above the upper control limits for multiple parameters; the samples associated with the CCV were non-detect for the affected analyte or the laboratory control sample (LCS) associated with this CCV passed CCV criteria for the affected analytes, so the data was reported. |
|--|---|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

LCS/LCSD

|  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--|---|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | X |  | The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for a preparation batch and an analytical batch recovered outside control limits for Methapyrilene.<br><br>The LCS and LCSD for a preparation batch and analytical batch recovered outside control limits for Famphur; this analyte was biased high in the LCS and not detected in the associated samples so the data was reported. |
|--|---|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

MS/MSD  
Surrogates (organics only)  
Other QA QC samples

|   |  |  |  |
|---|--|--|--|
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |

#### Precision

QA/QC Sample RPDs  
Field Duplicates

|   |  |   |  |
|---|--|---|--|
| X |  |   |  |
|   |  | X |  |

Completed by: Nathan Ohrt  
Date of Sampling: 11/18/2025  
Lab Report Date: 12/11/2025  
Site Name: Woodbury County Sanitary Landfill  
Project Type: 2<sup>nd</sup> 2025 HMSP  
Lab Report Number: 310-321076-1

OK NO N/A NOTES

### Sample Collection and Sample Handling

Chain of Custody

Temperature

Preservation

Condition

Case Narrative

Holding Times

### Analytical Sensitivity and Blanks

Method Blank Detections

Trip Blank Detections

### Accuracy

ICV/CCV

LCS/LCSD

MS/MSD

Surrogates (organics only)

Other QA QC samples

### Precision

QA/QC Sample RPDs

Field Duplicates

|   |  |  |                                                                                                                                                                            |
|---|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X |  |  |                                                                                                                                                                            |
| X |  |  |                                                                                                                                                                            |
| X |  |  |                                                                                                                                                                            |
| X |  |  | The method requirement for no headspace was not met in the sample container for Trip Blank 2                                                                               |
| X |  |  | The report being provided is a revision of the original report sent on 12/10/2025. The report is being revised due to an updated analyte list for MW-3 per client request. |
| X |  |  |                                                                                                                                                                            |

|   |  |  |               |
|---|--|--|---------------|
| X |  |  | No detections |
| X |  |  | No detections |

|   |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---|---|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | X |  | The ICV calibration verification (ICV) or continuing calibration verification (CCV) associated with multiple batches recovered above the upper control limits for multiple parameters; the samples associated with the CCV were non-detect for the affected analyte or the laboratory control sample (LCS) associated with this CCV passed CCV criteria for the affected analytes, so the data was reported.                                                                                                                                                                                                                                                                                                                                            |
|   | X |  | The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for a preparation batch and an analytical batch recovered outside control limits for Methapyrilene.<br><br>The LCS and LCSD for a preparation batch and analytical batch recovered outside control limits for Famphur, Silvex (2,4,5-TP), and 2,4,5-T; these analytes were biased high in the LCS and not detected in the associated samples so the data was reported.<br><br>The LCS/LCSD for a preparation batch and analytical batch recovered outside control limits for p-Phenylamine diamine; p-Phenylamine diamine has been identified as a poor performing analyte when analyzed using this method so reextraction/re-analysis was not performed. |
| X |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| X |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| X |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|   |  |  |                                                                             |
|---|--|--|-----------------------------------------------------------------------------|
| X |  |  |                                                                             |
| X |  |  | Sample MW-5 and duplicate sample MW-D had <50% RPD for analyzed parameters. |

Completed by: Nathan Ohrt  
 Date of Sampling: 11/18/2025  
 Lab Report Date: 11/21/2025  
 Site Name: Woodbury County Sanitary Landfill  
 Project Type: Natural Attenuation  
 Lab Report Number: 310-321076-2

OK NO N/A NOTES

### Sample Collection and Sample Handling

Chain of Custody

Temperature

Preservation

Condition

Case Narrative

Holding Times

### Analytical Sensitivity and Blanks

Method Blank Detections

Trip Blank Detections

### Accuracy

ICV/CCV

LCS/LCSD

MS/MSD

Surrogates (organics only)

Other QA QC samples

### Precision

QA/QC Sample RPDs

Field Duplicates

|   |  |  |  |
|---|--|--|--|
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |

|   |  |   |                |
|---|--|---|----------------|
| X |  |   | No detections. |
|   |  | X |                |

|   |  |  |  |
|---|--|--|--|
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |

|   |  |   |  |
|---|--|---|--|
| X |  |   |  |
|   |  | X |  |

Completed by: Nathan Ohrt  
Date of Sampling: 11/19/2025  
Lab Report Date: 12/2/2025  
Site Name: Woodbury County Sanitary Landfill  
Project Type: 2<sup>nd</sup> 2025 Bracketing  
Lab Report Number: 310-321077

OK NO N/A NOTES

#### Sample Collection and Sample Handling

Chain of Custody

Temperature

Preservation

Condition

Case Narrative

Holding Times

|   |  |  |                                                                                                                                                                                                                               |
|---|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X |  |  |                                                                                                                                                                                                                               |
| X |  |  |                                                                                                                                                                                                                               |
| X |  |  | PZ-2A was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory; the sample was analyzed within the 7-day holding time specified for unpreserved samples. |
| X |  |  | The method requirement for no headspace was not met in the sample container for Trip Blank.                                                                                                                                   |
| X |  |  |                                                                                                                                                                                                                               |
| X |  |  |                                                                                                                                                                                                                               |

#### Analytical Sensitivity and Blanks

Method Blank Detections

Trip Blank Detections

|   |  |  |                |
|---|--|--|----------------|
| X |  |  | No detections. |
| X |  |  | No detections. |

#### Accuracy

ICV/CCV

LCS/LCSD

MS/MSD

Surrogates (organics only)

Other QA QC samples

|   |  |  |  |
|---|--|--|--|
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |
| X |  |  |  |

#### Precision

QA/QC Sample RPDs

Field Duplicates

|   |  |   |  |
|---|--|---|--|
| X |  |   |  |
|   |  | X |  |



## Appendix C-1

### Reporting Period Summary of Groundwater Chemistry



# SCS ENGINEERS

Summary of Groundwater Chemistry  
Woodbury County Sanitary Landfill - 97-SDP-02-75C

|                                             | Sample Date | MW-6 UPG  | MW-2 DNG  | MW-3 DNG | MW-5 DNG  | MW-8 DNG  | MW-9 DNG | MW-11 DNG | MW-12 DNG | MW-14 DNG | PZ-2A DNG | PZ-2B DNG |
|---------------------------------------------|-------------|-----------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|
| Total Metals Constituents                   |             |           |           |          |           |           |          |           |           |           |           |           |
| Antimony, mg/L (CAS NO - 7440-36-0)         | 6/19/2025   | 0.00113*  | < 0.002   | N/A      | 0.00132*  | 0.00119*  | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.002   |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | 0.00171*  | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.002   | N/A       |
|                                             | 11/18/2025  | N/A       | < 0.002   | 0.00327  | < 0.002   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.002   |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.002   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Arsenic, mg/L (CAS NO - 7440-38-2)          | 6/19/2025   | 0.000941* | 0.000608* | N/A      | 0.0019*   | 0.000836* | N/A      | N/A       | N/A       | N/A       | N/A       | 0.00591   |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | 0.00154*  | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | 0.00369   | N/A       |
|                                             | 11/18/2025  | N/A       | 0.000574* | 0.00824  | 0.00111*  | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | 0.00552   |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | 0.00104*  | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Barium, mg/L (CAS NO - 7440-39-3)           | 6/19/2025   | 0.522     | 0.605     | N/A      | 0.0277    | 0.98      | N/A      | N/A       | N/A       | N/A       | N/A       | 0.526     |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | 0.0277    | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | 0.241     | N/A       |
|                                             | 11/18/2025  | N/A       | 0.531     | 0.565    | 0.0261    | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | 0.555     |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | 0.0248    | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Beryllium, mg/L (CAS NO - 7440-41-7)        | 6/19/2025   | < 0.001   | < 0.001   | N/A      | < 0.001   | < 0.001   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.001   |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.001   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.001   | N/A       |
|                                             | 11/18/2025  | N/A       | < 0.001   | < 0.001  | < 0.001   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.001   |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.001   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Cadmium, mg/L (CAS NO - 7440-43-9)          | 6/19/2025   | 0.000132* | 0.000922  | N/A      | < 0.0002  | < 0.0002  | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0002  |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.0002  | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.0002  | N/A       |
|                                             | 11/18/2025  | N/A       | 0.000315  | 0.000279 | < 0.0002  | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0002  |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.0002  | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Chromium, mg/L (CAS NO - 7440-47-3)         | 6/19/2025   | < 0.005   | < 0.005   | N/A      | < 0.005   | 0.00698   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.005   | N/A       |
|                                             | 11/18/2025  | N/A       | < 0.005   | < 0.005  | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Cobalt, mg/L (CAS NO - 7440-48-4)           | 6/19/2025   | 0.00203   | 0.0006    | N/A      | 0.000232* | 0.000774  | N/A      | N/A       | N/A       | 0.00184   | N/A       | 0.000654  |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | 0.000186* | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.0005  | N/A       |
|                                             | 11/18/2025  | N/A       | 0.000896  | 0.0139   | 0.000232* | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | 0.000597  |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | 0.000233* | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Copper, mg/L (CAS NO - 7440-50-8)           | 6/19/2025   | 0.0038*   | < 0.005   | N/A      | < 0.005   | < 0.005   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.005   | N/A       |
|                                             | 11/18/2025  | N/A       | < 0.005   | 0.00377* | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Lead, mg/L (CAS NO - 7439-92-1)             | 6/19/2025   | 0.00154   | < 0.0005  | N/A      | < 0.0005  | 0.000487* | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0005  |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.0005  | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.0005  | N/A       |
|                                             | 11/18/2025  | N/A       | < 0.0005  | 0.00104  | < 0.0005  | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0005  |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.0005  | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Mercury, mg/L (CAS NO - 7439-97-6)          | 6/19/2025   | N/A       | < 0.0002  | N/A      | N/A       | < 0.0002  | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0002  |
|                                             | 11/18/2025  | N/A       | N/A       | < 0.0002 | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Nickel, mg/L (CAS NO - 7440-02-0)           | 6/19/2025   | 0.00329*  | 0.00577   | N/A      | < 0.005   | 0.00425*  | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.005   | N/A       |
|                                             | 11/18/2025  | N/A       | 0.00558   | 0.032    | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Selenium, mg/L (CAS NO - 7782-49-2)         | 6/19/2025   | 0.00636   | < 0.005   | N/A      | 0.00142*  | < 0.005   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.005   | N/A       |
|                                             | 11/18/2025  | N/A       | < 0.005   | < 0.005  | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Silver, mg/L (CAS NO - 7440-22-4)           | 6/19/2025   | < 0.001   | < 0.001   | N/A      | < 0.001   | < 0.001   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.001   |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.001   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.001   | N/A       |
|                                             | 11/18/2025  | N/A       | < 0.001   | < 0.001  | < 0.001   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.001   |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.001   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Thallium, mg/L (CAS NO - 7440-28-0)         | 6/19/2025   | < 0.001   | < 0.001   | N/A      | < 0.001   | < 0.001   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.001   |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.001   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.001   | N/A       |
|                                             | 11/18/2025  | N/A       | < 0.001   | < 0.001  | < 0.001   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.001   |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.001   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Tin, mg/L (CAS NO - 7440-31-5)              | 6/19/2025   | N/A       | < 0.005   | N/A      | N/A       | < 0.005   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 11/18/2025  | N/A       | N/A       | < 0.005  | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Vanadium, mg/L (CAS NO - 7440-62-2)         | 6/19/2025   | 0.00292*  | 0.00274*  | N/A      | < 0.005   | 0.00185*  | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.005   | N/A       |
|                                             | 11/18/2025  | N/A       | 0.00183*  | 0.00255* | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.005   |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.005   | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Zinc, mg/L (CAS NO - 7440-66-6)             | 6/19/2025   | < 0.02    | < 0.02    | N/A      | < 0.02    | < 0.02    | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.02    |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | < 0.02    | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 8/28/2025   | N/A       | N/A       | N/A      | N/A       | N/A       | N/A      | N/A       | N/A       | N/A       | < 0.02    | N/A       |
|                                             | 11/18/2025  | N/A       | < 0.02    | 0.022    | < 0.02    | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.02    |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | < 0.02    | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Total Suspended Solids, mg/L (CAS NO - TSS) | 6/19/2025   | 72        | 1.63*     | N/A      | < 2.73    | 9.75      | N/A      | N/A       | N/A       | N/A       | N/A       | 2.9       |
|                                             | 6/19/2025   | N/A       | N/A       | N/A      | 1.38*     | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 11/18/2025  | N/A       | 2.25      | 64.3     | 5.13      | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | 5.88      |
|                                             | 11/18/2025  | N/A       | N/A       | N/A      | 6.12      | N/A       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |

Note: \* indicates 'J flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

Denotes Detection.

Denotes Confirmed Outlier. Statistically Excluded.

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.

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## Summary of Groundwater Chemistry

Woodbury County Sanitary Landfil - 97-SDP-02-75C

| Appendix I VOC Constituents                          | Sample Date | MW-6 UPG | MW-2 DNG | MW-3 DNG | MW-5 DNG | MW-8 DNG | PZ-2B DNG |
|------------------------------------------------------|-------------|----------|----------|----------|----------|----------|-----------|
| 1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)  | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | < 1      | < 1       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| 1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)       | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | 0.286*   | < 1       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| 1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)   | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | < 1      | < 1       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| 1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)       | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | < 1      | < 1       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| 1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)          | 6/19/2025   | < 1      | 8.79     | N/A      | < 1      | 39.5     | 2.8       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | 4.71     | 5.27     | < 1      | N/A      | 2.8       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| 1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)          | 6/19/2025   | < 2      | < 2      | N/A      | < 2      | < 2      | < 2       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 2      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 2      | < 2      | < 2      | N/A      | < 2       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 2      | N/A      | N/A       |
| 1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)      | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | < 1      | < 1       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| 1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8) | 6/19/2025   | < 5      | < 5      | N/A      | < 5      | < 5      | < 5       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 5      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 5      | < 5      | < 5      | N/A      | < 5       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 5      | N/A      | N/A       |
| 1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)    | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | < 1      | < 1       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| 1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)         | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | < 1      | < 1       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| 1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)         | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | < 1      | < 1       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| 1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)         | 6/19/2025   | < 1      | 0.827*   | N/A      | < 1      | 1.29     | < 1       |
|                                                      | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                      | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                      | 11/18/2025  | N/A      | < 1      | 0.585*   | < 1      | N/A      | < 1       |
|                                                      | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |

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## Summary of Groundwater Chemistry

Woodbury County Sanitary Landfil - 97-SDP-02-75C

|                                                       | Sample Date | MW-6<br>UPG | MW-2<br>DNG | MW-3<br>DNG | MW-5<br>DNG | MW-8<br>DNG | PZ-2B<br>DNG |
|-------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>Appendix I VOC Constituents</b>                    |             |             |             |             |             |             |              |
| <b>1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)</b>  | 6/19/2025   | < 1         | < 1         | N/A         | < 1         | < 1         | < 1          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 1         | < 1         | < 1         | N/A         | < 1          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
| <b>2-Butanone, ug/L (CAS NO - 78-93-3)</b>            | 6/19/2025   | < 10        | < 10        | N/A         | < 10        | < 10        | < 10         |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 10        | < 10        | < 10        | N/A         | < 10         |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
| <b>2-Hexanone, ug/L (CAS NO - 591-78-6)</b>           | 6/19/2025   | < 10        | < 10        | N/A         | < 10        | < 10        | < 10         |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 10        | < 10        | < 10        | N/A         | < 10         |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
| <b>4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)</b> | 6/19/2025   | < 10        | < 10        | N/A         | < 10        | < 10        | < 10         |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 10        | < 10        | < 10        | N/A         | < 10         |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
| <b>Acetone, ug/L (CAS NO - 67-64-1)</b>               | 6/19/2025   | < 10        | < 10        | N/A         | < 10        | < 10        | < 10         |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 10        | < 10        | < 10        | N/A         | < 10         |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
| <b>Acrylonitrile, ug/L (CAS NO - 107-13-1)</b>        | 6/19/2025   | < 5         | < 5         | N/A         | < 5         | < 5         | < 5          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 5         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 5         | < 5         | < 5         | N/A         | < 5          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 5         | N/A         | N/A          |
| <b>Benzene, ug/L (CAS NO - 71-43-2)</b>               | 6/19/2025   | < 0.5       | 0.294*      | N/A         | < 0.5       | 1.51        | < 0.5        |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 0.5       | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 0.5       | 0.38*       | < 0.5       | N/A         | < 0.5        |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 0.5       | N/A         | N/A          |
| <b>Bromochloromethane, ug/L (CAS NO - 74-97-5)</b>    | 6/19/2025   | < 5         | < 5         | N/A         | < 5         | < 5         | < 5          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 5         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 5         | < 5         | < 5         | N/A         | < 5          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 5         | N/A         | N/A          |
| <b>Bromodichloromethane, ug/L (CAS NO - 75-27-4)</b>  | 6/19/2025   | < 1         | < 1         | N/A         | < 1         | < 1         | < 1          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 1         | < 1         | < 1         | N/A         | < 1          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
| <b>Bromoform, ug/L (CAS NO - 75-25-2)</b>             | 6/19/2025   | < 5         | < 5         | N/A         | < 5         | < 5         | < 5          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 5         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 5         | < 5         | < 5         | N/A         | < 5          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 5         | N/A         | N/A          |
| <b>Bromomethane, ug/L (CAS NO - 74-83-9)</b>          | 6/19/2025   | < 4         | < 4         | N/A         | < 4         | < 4         | < 4          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 4         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 4         | < 4         | < 4         | N/A         | < 4          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 4         | N/A         | N/A          |
| <b>Carbon Disulfide, ug/L (CAS NO - 75-15-0)</b>      | 6/19/2025   | < 1         | < 1         | N/A         | < 1         | < 1         | < 1          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 1         | < 1         | < 1         | N/A         | < 1          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |

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## Summary of Groundwater Chemistry

Woodbury County Sanitary Landfil - 97-SDP-02-75C

|                                                            | Sample Date | MW-6 UPG | MW-2 DNG | MW-3 DNG | MW-5 DNG | MW-8 DNG | PZ-2B DNG |
|------------------------------------------------------------|-------------|----------|----------|----------|----------|----------|-----------|
| <b>Appendix I VOC Constituents</b>                         |             |          |          |          |          |          |           |
| <b>Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)</b>       | 6/19/2025   | < 2      | < 2      | N/A      | < 2      | < 2      | < 2       |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 2      | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | < 2      | < 2      | < 2      | N/A      | < 2       |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 2      | N/A      | N/A       |
| <b>Chlorobenzene, ug/L (CAS NO - 108-90-7)</b>             | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | < 1      | < 1       |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| <b>Chlorodibromomethane, ug/L (CAS NO - 124-48-1)</b>      | 6/19/2025   | < 5      | < 5      | N/A      | < 5      | < 5      | < 5       |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 5      | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | < 5      | < 5      | < 5      | N/A      | < 5       |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 5      | N/A      | N/A       |
| <b>Chloroethane, ug/L (CAS NO - 75-00-3)</b>               | 6/19/2025   | < 4      | < 4      | N/A      | < 4      | 2.2*     | < 4       |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 4      | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | < 4      | 1.26*    | < 4      | N/A      | < 4       |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 4      | N/A      | N/A       |
| <b>Chloroform, ug/L (CAS NO - 67-66-3)</b>                 | 6/19/2025   | < 3      | < 3      | N/A      | < 3      | < 3      | < 3       |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 3      | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | < 3      | < 3      | < 3      | N/A      | < 3       |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 3      | N/A      | N/A       |
| <b>Chloromethane, ug/L (CAS NO - 74-87-3)</b>              | 6/19/2025   | < 3      | < 3      | N/A      | < 3      | < 3      | < 3       |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 3      | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | < 3      | < 3      | < 3      | N/A      | < 3       |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 3      | N/A      | N/A       |
| <b>cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)</b>    | 6/19/2025   | < 1      | 11.5     | N/A      | < 1      | 6.84     | 1.29      |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | 4.77     | 8.16     | < 1      | N/A      | 1.42      |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| <b>cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)</b> | 6/19/2025   | < 5      | < 5      | N/A      | < 5      | < 5      | < 5       |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 5      | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | < 5      | < 5      | < 5      | N/A      | < 5       |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 5      | N/A      | N/A       |
| <b>Ethylbenzene, ug/L (CAS NO - 100-41-4)</b>              | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | < 1      | < 1       |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
| <b>Iodomethane, ug/L (CAS NO - 74-88-4)</b>                | 6/19/2025   | < 10     | < 10     | N/A      | < 10     | < 10     | < 10      |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 10     | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | < 10     | < 10     | < 10     | N/A      | < 10      |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 10     | N/A      | N/A       |
| <b>Methylene Bromide, ug/L (CAS NO - 74-95-3)</b>          | 6/19/2025   | < 1      | < 1      | N/A      | < 1      | < 1      | < 1       |
|                                                            | 6/19/2025   | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |
|                                                            | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                                            | 11/18/2025  | N/A      | < 1      | < 1      | < 1      | N/A      | < 1       |
|                                                            | 11/18/2025  | N/A      | N/A      | N/A      | < 1      | N/A      | N/A       |

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## Summary of Groundwater Chemistry

Woodbury County Sanitary Landfil - 97-SDP-02-75C

|                                                       | Sample Date | MW-6<br>UPG | MW-2<br>DNG | MW-3<br>DNG | MW-5<br>DNG | MW-8<br>DNG | PZ-2B<br>DNG |
|-------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>Appendix I VOC Constituents</b>                    |             |             |             |             |             |             |              |
| Methylene Chloride, ug/L (CAS NO - 75-09-2)           | 6/19/2025   | < 5         | < 5         | N/A         | < 5         | < 5         | < 5          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 5         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 5         | < 5         | < 5         | N/A         | < 5          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 5         | N/A         | N/A          |
| Styrene, ug/L (CAS NO - 100-42-5)                     | 6/19/2025   | < 1         | < 1         | N/A         | < 1         | < 1         | < 1          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 1         | < 1         | < 1         | N/A         | < 1          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
| Tetrachloroethene, ug/L (CAS NO - 127-18-4)           | 6/19/2025   | < 1         | 5.62        | N/A         | < 1         | 1.28        | 2.44         |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | 2.69        | < 1         | < 1         | N/A         | 2.41         |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
| Toluene, ug/L (CAS NO - 108-88-3)                     | 6/19/2025   | < 1         | < 1         | N/A         | < 1         | < 1         | < 1          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 1         | < 1         | < 1         | N/A         | < 1          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
| trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)    | 6/19/2025   | < 1         | 0.683*      | N/A         | < 1         | < 1         | < 1          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 1         | < 1         | < 1         | N/A         | < 1          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
| trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6) | 6/19/2025   | < 5         | < 5         | N/A         | < 5         | < 5         | < 5          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 5         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 5         | < 5         | < 5         | N/A         | < 5          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 5         | N/A         | N/A          |
| trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6) | 6/19/2025   | < 10        | < 10        | N/A         | < 10        | < 10        | < 10         |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 10        | < 10        | < 10        | N/A         | < 10         |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
| Trichloroethene, ug/L (CAS NO - 79-01-6)              | 6/19/2025   | < 1         | 10.2        | N/A         | < 1         | 19.5        | 4.03         |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | 8.08        | 9.09        | < 1         | N/A         | 5            |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
| Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)       | 6/19/2025   | < 4         | < 4         | N/A         | < 4         | 1.22*       | < 4          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 4         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 4         | < 4         | < 4         | N/A         | < 4          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 4         | N/A         | N/A          |
| Vinyl Acetate, ug/L (CAS NO - 108-05-4)               | 6/19/2025   | < 10        | < 10        | N/A         | < 10        | < 10        | < 10         |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 10        | < 10        | < 10        | N/A         | < 10         |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 10        | N/A         | N/A          |
| Vinyl Chloride, ug/L (CAS NO - 75-01-4)               | 6/19/2025   | < 1         | 0.376*      | N/A         | < 1         | 2.09        | < 1          |
|                                                       | 6/19/2025   | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |
|                                                       | 8/28/2025   | N/A         | N/A         | N/A         | N/A         | N/A         | N/A          |
|                                                       | 11/18/2025  | N/A         | < 1         | < 1         | < 1         | N/A         | < 1          |
|                                                       | 11/18/2025  | N/A         | N/A         | N/A         | < 1         | N/A         | N/A          |

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## Summary of Groundwater Chemistry

Woodbury County Sanitary Landfil - 97-SDP-02-75C

|                                           | Sample Date | MW-6 UPG | MW-2 DNG | MW-3 DNG | MW-5 DNG | MW-8 DNG | PZ-2B DNG |
|-------------------------------------------|-------------|----------|----------|----------|----------|----------|-----------|
| Appendix I VOC Constituents               |             |          |          |          |          |          |           |
| Xylenes, total, ug/L (CAS NO - 1330-20-7) | 6/19/2025   | < 3      | < 3      | N/A      | < 3      | < 3      | < 3       |
|                                           | 6/19/2025   | N/A      | N/A      | N/A      | < 3      | N/A      | N/A       |
|                                           | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       |
|                                           | 11/18/2025  | N/A      | < 3      | < 3      | < 3      | N/A      | < 3       |
|                                           | 11/18/2025  | N/A      | N/A      | N/A      | < 3      | N/A      | N/A       |

Note: \* indicates 'J flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

|                                                    |
|----------------------------------------------------|
| Denotes Detection.                                 |
| Denotes Confirmed Outlier. Statistically Excluded. |

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.

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## Summary of Groundwater Chemistry Woodbury County Sanitary Landfill - 97-SDP-02-75C

| Other Constituents                                  | Sample Date | MW-6 UPG | MW-2 DNG | MW-3 DNG | MW-5 DNG | MW-8 DNG | MW-9 DNG | MW-11 DNG | MW-12 DNG | MW-14 DNG | PZ-2A DNG | PZ-2B DNG |
|-----------------------------------------------------|-------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| 1,1-Dichloropropene, ug/L (CAS NO - 563-58-6)       | 6/19/2025   | N/A      | < 1      | N/A      | N/A      | < 1      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 1      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 1,2,4,5-Tetrachlorobenzene, ug/L (CAS NO - 95-94-3) | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 1,2,4-Trichlorobenzene, ug/L (CAS NO - 120-82-1)    | 6/19/2025   | N/A      | < 5      | N/A      | N/A      | < 5      | N/A      | N/A       | N/A       | N/A       | N/A       | < 5       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 5      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 1,3,5-Trinitrobenzene, ug/L (CAS NO - 99-35-4)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 1,3-Dichlorobenzene, ug/L (CAS NO - 541-73-1)       | 6/19/2025   | N/A      | < 1      | N/A      | N/A      | < 1      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 1      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 1,3-Dichloropropane, ug/L (CAS NO - 142-28-9)       | 6/19/2025   | N/A      | < 1      | N/A      | N/A      | < 1      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 1      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 1,3-Dinitrobenzene, ug/L (CAS NO - 99-65-0)         | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 1,4-Naphthoquinone, ug/L (CAS NO - 130-15-4)        | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 1,4-Phenylenediamine, ug/L (CAS NO - 106-50-3)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 1-Naphthylamine, ug/L (CAS NO - 134-32-7)           | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,2-Dichloropropane, ug/L (CAS NO - 594-20-7)       | 6/19/2025   | N/A      | < 4      | N/A      | N/A      | < 4      | N/A      | N/A       | N/A       | N/A       | N/A       | < 4       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 4      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,3,4,6-Tetrachlorophenol, ug/L (CAS NO - 58-90-2)  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,4,5-T [2C], ug/L (CAS NO - 93-76-5)               | 6/19/2025   | N/A      | < 1      | N/A      | N/A      | < 1      | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.15    |
|                                                     | 11/18/2025  | N/A      | N/A      | < 0.989  | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,4,5-TP [Silvex] [2C], ug/L (CAS NO - 93-72-1)     | 6/19/2025   | N/A      | < 1      | N/A      | N/A      | < 1      | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.05    |
|                                                     | 11/18/2025  | N/A      | N/A      | < 0.989  | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,4,5-Trichlorophenol, ug/L (CAS NO - 95-95-4)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,4,6-Trichlorophenol, ug/L (CAS NO - 88-06-2)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,4-D [2C], ug/L (CAS NO - 94-75-7)                 | 6/19/2025   | N/A      | < 1      | N/A      | N/A      | 1.25     | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.6     |
|                                                     | 11/18/2025  | N/A      | N/A      | 1.02     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,4-Dichlorophenol, ug/L (CAS NO - 120-83-2)        | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,4-Dimethylphenol, ug/L (CAS NO - 105-67-9)        | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,4-Dinitrophenol, ug/L (CAS NO - 51-28-5)          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 19.6    |
|                                                     | 8/28/2025   | N/A      | < 20     | N/A      | N/A      | < 20.4   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 20     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,4-Dinitrotoluene, ug/L (CAS NO - 121-14-2)        | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,6-Dichlorophenol, ug/L (CAS NO - 87-65-0)         | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2,6-Dinitrotoluene, ug/L (CAS NO - 606-20-2)        | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2-Acetylaminofluorene, ug/L (CAS NO - 53-96-3)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 20     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2-Chloronaphthalene, ug/L (CAS NO - 91-58-7)        | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2-Chlorophenol, ug/L (CAS NO - 95-57-8)             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2-Methylnaphthalene, ug/L (CAS NO - 91-57-6)        | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2-Methylphenol, ug/L (CAS NO - 95-48-7)             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2-Naphthylamine, ug/L (CAS NO - 91-59-8)            | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2-Nitroaniline, ug/L (CAS NO - 88-74-4)             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 2-Nitrophenol, ug/L (CAS NO - 88-75-5)              | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 3,3-Dichlorobenzidine, ug/L (CAS NO - 91-94-1)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                     | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                     | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |

# SCS ENGINEERS

## Summary of Groundwater Chemistry Woodbury County Sanitary Landfill - 97-SDP-02-75C

| Other Constituents                                        | Sample Date | MW-6 UPG | MW-2 DNG | MW-3 DNG | MW-5 DNG | MW-8 DNG | MW-9 DNG | MW-11 DNG | MW-12 DNG | MW-14 DNG | PZ-2A DNG | PZ-2B DNG |
|-----------------------------------------------------------|-------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| 3,3-Dimethylbenzidine, ug/L (CAS NO - 119-93-7)           | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 3/4-Methylphenol, ug/L (CAS NO - T-34MP)                  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 3-Chloropropene, ug/L (CAS NO - 107-05-1)                 | 6/19/2025   | N/A      | < 2      | N/A      | N/A      | < 2      | N/A      | N/A       | N/A       | N/A       | N/A       | < 2       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 2      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 3-Methylcholanthrene, ug/L (CAS NO - 56-49-5)             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 3-Nitroaniline, ug/L (CAS NO - 99-09-2)                   | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4,4'-DDD, ug/L (CAS NO - 72-54-8)                         | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                           | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4,4'-DDE, ug/L (CAS NO - 72-55-9)                         | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                           | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4,4'-DDT, ug/L (CAS NO - 50-29-3)                         | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                           | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4,6-Dinitro-2-methylphenol, ug/L (CAS NO - 534-52-1)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4-Aminobiphenyl, ug/L (CAS NO - 92-67-1)                  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4-Bromophenyl phenyl ether, ug/L (CAS NO - 101-55-3)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4-Chloro-3-methylphenol, ug/L (CAS NO - 59-50-7)          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4-Chloroaniline, ug/L (CAS NO - 106-47-8)                 | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4-Chlorophenyl phenyl ether, ug/L (CAS NO - 7005-72-3)    | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4-Nitroaniline, ug/L (CAS NO - 100-01-6)                  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 4-Nitrophenol, ug/L (CAS NO - 100-02-7)                   | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 5-Nitro-o-toluidine, ug/L (CAS NO - 99-55-8)              | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| 7,12-Dimethylbenz [a] anthracene, ug/L (CAS NO - 57-97-6) | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Acenaphthene, ug/L (CAS NO - 83-32-9)                     | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Acenaphthylene, ug/L (CAS NO - 208-96-8)                  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Acetonitrile, ug/L (CAS NO - 75-05-8)                     | 6/19/2025   | N/A      | < 10000  | N/A      | N/A      | < 10000  | N/A      | N/A       | N/A       | N/A       | N/A       | < 10000   |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10000  | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Acetophenone, ug/L (CAS NO - 98-86-2)                     | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Acrolein, ug/L (CAS NO - 107-02-8)                        | 6/19/2025   | N/A      | < 10     | N/A      | N/A      | < 10     | N/A      | N/A       | N/A       | N/A       | N/A       | < 10      |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Aldrin, ug/L (CAS NO - 309-00-2)                          | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                           | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Anthracene, ug/L (CAS NO - 120-12-7)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Benzo [a] anthracene, ug/L (CAS NO - 56-55-3)             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Benzo [a] pyrene, ug/L (CAS NO - 50-32-8)                 | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Benzo [b] fluoranthene, ug/L (CAS NO - 205-99-2)          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Benzo [g,h,i] perylene, ug/L (CAS NO - 191-24-2)          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Benzo [k] fluoranthene, ug/L (CAS NO - 207-08-9)          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Benzyl alcohol, ug/L (CAS NO - 100-51-6)                  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Alpha-BHC, ug/L (CAS NO - 319-84-6)                       | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                           | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |



# SCS ENGINEERS

## Summary of Groundwater Chemistry Woodbury County Sanitary Landfill - 97-SDP-02-75C

| Other Constituents                                    | Sample Date | MW-6 UPG | MW-2 DNG | MW-3 DNG | MW-5 DNG | MW-8 DNG | MW-9 DNG | MW-11 DNG | MW-12 DNG | MW-14 DNG | PZ-2A DNG | PZ-2B DNG |
|-------------------------------------------------------|-------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| Beta-BHC, ug/L (CAS NO - 319-85-7)                    | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Delta-BHC, ug/L (CAS NO - 319-86-8)                   | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Gamma-BHC [Lindane], ug/L (CAS NO - 58-89-9)          | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Bis[2-chloroethoxy]methane, ug/L (CAS NO - 111-91-1)  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Bis[2-chloroethyl]ether, ug/L (CAS NO - 111-44-4)     | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Bis[2-chloroisopropyl]ether, ug/L (CAS NO - 108-60-1) | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Bis[2-ethylhexyl]phthalate, ug/L (CAS NO - 117-81-7)  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Butyl benzyl phthalate, ug/L (CAS NO - 85-68-7)       | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Chlordane, ug/L (CAS NO - 57-74-9)                    | 6/19/2025   | N/A      | < 1.81   | N/A      | N/A      | < 1.8    | N/A      | N/A       | N/A       | N/A       | N/A       | < 1.8     |
|                                                       | 11/18/2025  | N/A      | N/A      | < 1.81   | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Chlorobenzilate, ug/L (CAS NO - 510-15-6)             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Chloroprene, ug/L (CAS NO - 126-99-8)                 | 6/19/2025   | N/A      | < 1      | N/A      | N/A      | < 1      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 1      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Chrysene, ug/L (CAS NO - 218-01-9)                    | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Cyanide, mg/L (CAS NO - 57-12-5)                      | 6/19/2025   | N/A      | < 0.01   | N/A      | N/A      | < 0.01   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.01    |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.01   | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Diallate [cis or trans], ug/L (CAS NO - 2303-16-4)    | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Dibenz [a,h] anthracene, ug/L (CAS NO - 53-70-3)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Dibenzofuran, ug/L (CAS NO - 132-64-9)                | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Dichlorodifluoromethane, ug/L (CAS NO - 75-71-8)      | 6/19/2025   | N/A      | 1.41*    | N/A      | N/A      | 14.1     | N/A      | N/A       | N/A       | N/A       | N/A       | 3.93      |
|                                                       | 8/28/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | < 3       | N/A       |
|                                                       | 11/18/2025  | N/A      | 2.38*    | 1.02*    | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | 2.99*     |
| Dieldrin, ug/L (CAS NO - 60-57-1)                     | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Diethyl phthalate, ug/L (CAS NO - 84-66-2)            | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Dimethoate, ug/L (CAS NO - 60-51-5)                   | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Dimethyl phthalate, ug/L (CAS NO - 131-11-3)          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Dimethylaminoazobenzene, ug/L (CAS NO - 60-11-7)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Di-n-butyl phthalate, ug/L (CAS NO - 84-74-2)         | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Di-n-octyl phthalate, ug/L (CAS NO - 117-84-0)        | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 19.6    |
|                                                       | 8/28/2025   | N/A      | < 20     | N/A      | N/A      | < 20.4   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | 7.06*    | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Dinoseb, ug/L (CAS NO - 88-85-7)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Diphenylamine, ug/L (CAS NO - 122-39-4)               | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Disulfoton, ug/L (CAS NO - 298-04-4)                  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Endosulfan I, ug/L (CAS NO - 959-98-8)                | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Endosulfan II, ug/L (CAS NO - 33213-65-9)             | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Endosulfan sulfate, ug/L (CAS NO - 1031-07-8)         | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Endrin, ug/L (CAS NO - 72-20-8)                       | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Endrin aldehyde, ug/L (CAS NO - 7421-93-4)            | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Ethyl Methacrylate, ug/L (CAS NO - 97-63-2)           | 6/19/2025   | N/A      | < 2      | N/A      | N/A      | < 2      | N/A      | N/A       | N/A       | N/A       | N/A       | < 2       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 2      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |

# SCS ENGINEERS

Summary of Groundwater Chemistry  
Woodbury County Sanitary Landfill - 97-SDP-02-75C

| Other Constituents                                    | Sample Date | MW-6 UPG | MW-2 DNG | MW-3 DNG | MW-5 DNG | MW-8 DNG | MW-9 DNG | MW-11 DNG | MW-12 DNG | MW-14 DNG | PZ-2A DNG | PZ-2B DNG |
|-------------------------------------------------------|-------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| Ethyl Methanesulfonate, ug/L (CAS NO - 62-50-0)       | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Famphur, ug/L (CAS NO - 52-85-7)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Fluoranthene, ug/L (CAS NO - 206-44-0)                | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Fluorene, ug/L (CAS NO - 86-73-7)                     | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Heptachlor, ug/L (CAS NO - 76-44-8)                   | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 8/28/2025   | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Heptachlor Epoxide, ug/L (CAS NO - 1024-57-3)         | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 8/28/2025   | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Hexachlorobenzene, ug/L (CAS NO - 118-74-1)           | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Hexachlorobutadiene, ug/L (CAS NO - 87-68-3)          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Hexachlorocyclopentadiene, ug/L (CAS NO - 77-47-4)    | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Hexachloroethane, ug/L (CAS NO - 67-72-1)             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Hexachloropropene, ug/L (CAS NO - 1888-71-7)          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Indeno [1,2,3-cd] pyrene, ug/L (CAS NO - 193-39-5)    | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Isobutanol, mg/L (CAS NO - 78-83-1)                   | 6/19/2025   | N/A      | < 10     | N/A      | N/A      | < 10     | N/A      | N/A       | N/A       | N/A       | N/A       | < 10      |
|                                                       | 8/28/2025   | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Isodrin, ug/L (CAS NO - 465-73-6)                     | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Isophorone, ug/L (CAS NO - 78-59-1)                   | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Isosafrole, ug/L (CAS NO - 120-58-1)                  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Kepone, ug/L (CAS NO - 143-50-0)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Methacrylonitrile, ug/L (CAS NO - 126-98-7)           | 6/19/2025   | N/A      | < 10     | N/A      | N/A      | < 10     | N/A      | N/A       | N/A       | N/A       | N/A       | < 10      |
|                                                       | 8/28/2025   | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Methapyrilene, ug/L (CAS NO - 91-80-5)                | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Methoxychlor, ug/L (CAS NO - 72-43-5)                 | 6/19/2025   | N/A      | < 0.0907 | N/A      | N/A      | < 0.09   | N/A      | N/A       | N/A       | N/A       | N/A       | < 0.0902  |
|                                                       | 8/28/2025   | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 0.0907 | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Methyl Methacrylate, ug/L (CAS NO - 80-62-6)          | 6/19/2025   | N/A      | < 2      | N/A      | N/A      | < 2      | N/A      | N/A       | N/A       | N/A       | N/A       | < 2       |
|                                                       | 8/28/2025   | N/A      | N/A      | < 2      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 2      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Methyl Methanesulfonate, ug/L (CAS NO - 66-27-3)      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Naphthalene, ug/L (CAS NO - 91-20-3)                  | 6/19/2025   | N/A      | < 5      | N/A      | N/A      | < 5      | N/A      | N/A       | N/A       | N/A       | N/A       | < 5       |
|                                                       | 8/28/2025   | N/A      | N/A      | < 5      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 5      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Nitrobenzene, ug/L (CAS NO - 98-95-3)                 | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| N-Nitrosodiethylamine, ug/L (CAS NO - 55-18-5)        | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| N-Nitrosodimethylamine, ug/L (CAS NO - 62-75-9)       | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| N-Nitrosodi-n-butylamine, ug/L (CAS NO - 924-16-3)    | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| N-Nitrosodi-n-propylamine, ug/L (CAS NO - 621-64-7)   | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| N-Nitrosodiphenylamine, ug/L (CAS NO - 86-30-6)       | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| N-Nitrosomethylethylamine, ug/L (CAS NO - 10595-95-6) | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| N-Nitrosopiperidine, ug/L (CAS NO - 100-75-4)         | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                       | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                       | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |

# SCS ENGINEERS

Summary of Groundwater Chemistry  
Woodbury County Sanitary Landfill - 97-SDP-02-75C

| Other Constituents                                        | Sample Date | MW-6 UPG | MW-2 DNG | MW-3 DNG | MW-5 DNG | MW-8 DNG | MW-9 DNG | MW-11 DNG | MW-12 DNG | MW-14 DNG | PZ-2A DNG | PZ-2B DNG |
|-----------------------------------------------------------|-------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| N-Nitrosopyrrolidine, ug/L (CAS NO - 930-55-2)            | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| O,O,O-Triethyl Phosphorothioate, ug/L (CAS NO - 126-68-1) | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| O-Toluidine, ug/L (CAS NO - 95-53-4)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Parathion-Ethyl, ug/L (CAS NO - 56-38-2)                  | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Parathion-Methyl, ug/L (CAS NO - 298-00-0)                | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| PCB-1016, ug/L (CAS NO - 12674-11-2)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1.8     |
|                                                           | 8/28/2025   | N/A      | < 1.89   | N/A      | N/A      | < 1.87   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 1.81   | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| PCB-1221, ug/L (CAS NO - 11104-28-2)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1.8     |
|                                                           | 8/28/2025   | N/A      | < 1.89   | N/A      | N/A      | < 1.87   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 1.81   | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| PCB-1232, ug/L (CAS NO - 11141-16-5)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1.8     |
|                                                           | 8/28/2025   | N/A      | < 1.89   | N/A      | N/A      | < 1.87   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 1.81   | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| PCB-1242, ug/L (CAS NO - 53469-21-9)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1.8     |
|                                                           | 8/28/2025   | N/A      | < 1.89   | N/A      | N/A      | < 1.87   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 1.81   | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| PCB-1248, ug/L (CAS NO - 12672-29-6)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1.8     |
|                                                           | 8/28/2025   | N/A      | < 1.89   | N/A      | N/A      | < 1.87   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 1.81   | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| PCB-1254, ug/L (CAS NO - 11097-69-1)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1.8     |
|                                                           | 8/28/2025   | N/A      | < 1.89   | N/A      | N/A      | < 1.87   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 1.81   | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| PCB-1260, ug/L (CAS NO - 11096-82-5)                      | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 1.8     |
|                                                           | 8/28/2025   | N/A      | < 1.89   | N/A      | N/A      | < 1.87   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 1.81   | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Pentachlorobenzene, ug/L (CAS NO - 608-93-5)              | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Pentachloronitrobenzene, ug/L (CAS NO - 82-68-8)          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Pentachlorophenol [2C], ug/L (CAS NO - 87-86-5)           | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Phenacetin, ug/L (CAS NO - 62-44-2)                       | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Phenanthrene, ug/L (CAS NO - 85-01-8)                     | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Phenol, ug/L (CAS NO - 108-95-2)                          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Phorate, ug/L (CAS NO - 298-02-2)                         | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Pronamide, ug/L (CAS NO - 23950-58-5)                     | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Propionitrile, ug/L (CAS NO - 107-12-0)                   | 6/19/2025   | N/A      | < 10     | N/A      | N/A      | < 10     | N/A      | N/A       | N/A       | N/A       | N/A       | < 10      |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Pyrene, ug/L (CAS NO - 129-00-0)                          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Safrole, ug/L (CAS NO - 94-59-7)                          | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Sulfide, mg/L (CAS NO - 18496-25-8)                       | 6/19/2025   | < 1      | < 1      | N/A      | N/A      | < 2.5    | N/A      | N/A       | N/A       | N/A       | N/A       | < 2       |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 1      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Thionazin, ug/L (CAS NO - 297-97-2)                       | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | < 9.8     |
|                                                           | 8/28/2025   | N/A      | < 10     | N/A      | N/A      | < 10.2   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 10     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Toxaphene, ug/L (CAS NO - 8001-35-2)                      | 6/19/2025   | N/A      | < 1.81   | N/A      | N/A      | < 1.8    | N/A      | N/A       | N/A       | N/A       | N/A       | < 1.8     |
|                                                           | 8/28/2025   | N/A      | < 1.89   | N/A      | N/A      | < 1.87   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | < 1.81   | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Iron, Total, mg/L (CAS NO - 7439-89-6)                    | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | 0.492    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                                           | 11/18/2025  | N/A      | N/A      | 0.937    | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |

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## Summary of Groundwater Chemistry

Woodbury County Sanitary Landfill - 97-SDP-02-75C

| Other Constituents                          | Sample Date | MW-6 UPG | MW-2 DNG | MW-3 DNG | MW-5 DNG | MW-8 DNG | MW-9 DNG | MW-11 DNG | MW-12 DNG | MW-14 DNG | PZ-2A DNG | PZ-2B DNG |
|---------------------------------------------|-------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| Manganese, mg/L (CAS NO - 7439-96-5)        | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | 0.0522   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 11/18/2025  | N/A      | N/A      | 0.979    | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Methane, Dissolved, mg/L (CAS NO - 74-82-8) | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | 3.67     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 11/18/2025  | N/A      | N/A      | 0.661    | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Nitrate (NO3), mg/L (CAS NO - 14797-55-8)   | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | < 0.2    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 11/18/2025  | N/A      | N/A      | < 0.2    | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
| Sulfate, mg/L (CAS NO - 14808-79-8)         | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | 15.4     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 11/18/2025  | N/A      | N/A      | 29.6     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       |

Note: \* indicates 'J flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

|                                                    |
|----------------------------------------------------|
| Denotes Detection.                                 |
| Denotes Confirmed Outlier. Statistically Excluded. |

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.



## Appendix C-2

### Summary of Groundwater Chemistry – Natural Attenuation



Summary of Groundwater Chemistry  
Woodbury County Sanitary Landfil - 97-SDP-02-75C

|                                             | Sample Date | MW-6 UPG | MW-2 DNG | MW-3 DNG | MW-5 DNG | MW-8 DNG | MW-9 DNG | MW-10 DNG | MW-11 DNG | MW-12 DNG | MW-13 DNG | MW-14 DNG | PZ-2A DNG | PZ-2B DNG |
|---------------------------------------------|-------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Total Natural Attenuations Constituents     |             |          |          |          |          |          |          |           |           |           |           |           |           |           |
| Ammonia as N, mg/L (CAS NO - 7664-41-7)     | 4/9/2008    | < 1      | < 1      | < 1      | < 1      | < 1      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | < 1       |
|                                             | 9/10/2008   | < 1      | < 1      | < 1      | < 1      | 1.7      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | < 1       |
|                                             | 3/21/2009   | < 1      | < 1      | < 1      | < 1      | < 1      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | < 1       |
|                                             | 4/11/2016   | < 0.2    | < 0.2    | 0.308    | N/A      | < 0.2    | 0.264    | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/5/2016   | < 0.2    | < 0.2    | 0.488    | N/A      | < 0.2    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/6/2016   | N/A      | N/A      | N/A      | N/A      | N/A      | 0.239    | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/17/2017   | < 0.2    | < 0.2    | 0.362    | < 0.2    | < 0.2    | < 0.2    | N/A       | < 0.2     | < 0.2     | N/A       | N/A       | N/A       | < 0.2     |
|                                             | 7/18/2017   | < 0.2    | < 0.2    | 0.3      | < 0.2    | < 0.2    | < 0.2    | N/A       | < 0.2     | < 0.2     | N/A       | N/A       | N/A       | < 0.2     |
|                                             | 4/2/2018    | < 0.2    | < 0.2    | 0.196*   | < 0.2    | < 0.2    | N/A      | N/A       | < 0.2     | < 0.2     | N/A       | N/A       | N/A       | < 0.2     |
|                                             | 10/10/2018  | < 0.2    | 0.0996*  | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | < 0.2     |
|                                             | 7/31/2019   | < 0.2    | < 0.2    | 0.237    | < 0.2    | < 0.2    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | < 0.2     |
| Iron, Total, mg/L (CAS NO - 7439-89-6)      | 4/11/2016   | 1.07     | 0.282    | 9.58     | N/A      | 18.9     | 81.5     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/5/2016   | < 0.1    | 0.363    | 11.3     | N/A      | 0.122    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/6/2016   | N/A      | N/A      | N/A      | N/A      | N/A      | 1.57     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/17/2017   | < 0.5    | < 0.5    | 7.12     | < 0.5    | < 0.5    | 2.41     | N/A       | < 0.5     | 0.257*    | N/A       | N/A       | N/A       | 0.946     |
|                                             | 7/18/2017   | < 0.5    | < 0.5    | 6.47     | < 0.5    | < 0.5    | 0.601    | N/A       | < 0.5     | < 0.5     | N/A       | N/A       | N/A       | 0.917     |
|                                             | 4/2/2018    | 0.562    | < 0.5    | 4.57     | 0.2*     | < 0.5    | N/A      | N/A       | < 0.5     | < 0.5     | N/A       | N/A       | N/A       | 1.08      |
|                                             | 10/10/2018  | < 0.5    | < 0.5    | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 1.12      |
|                                             | 7/31/2019   | < 0.5    | < 0.5    | 2.08     | 0.357*   | < 0.5    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 1.16      |
|                                             | 3/17/2021   | N/A      | N/A      | 4.17     | N/A      | < 0.5    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/12/2023   | N/A      | N/A      | N/A      | N/A      | < 0.5    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 1.28      |
|                                             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | 0.492    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 11/18/2025  | N/A      | N/A      | 0.997    | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
| Manganese, mg/L (CAS NO - 7439-96-5)        | 4/11/2016   | 0.0595   | 0.887    | 0.872    | N/A      | 0.141    | 11.3     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/5/2016   | 0.0124   | 3.74     | 1.08     | N/A      | 0.013    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/6/2016   | N/A      | N/A      | N/A      | N/A      | N/A      | 0.672    | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/17/2017   | < 0.01   | 0.867    | 1.25     | 0.011    | < 0.01   | 1.16     | N/A       | < 0.01    | 0.0194    | N/A       | N/A       | N/A       | 0.6       |
|                                             | 7/18/2017   | < 0.01   | 0.0516   | 1.27     | 0.0261   | 0.0144   | 0.483    | N/A       | < 0.01    | 0.00986*  | N/A       | N/A       | N/A       | 0.563     |
|                                             | 4/2/2018    | 0.064    | 1.32     | 1.36     | 0.251    | < 0.01   | N/A      | N/A       | < 0.01    | < 0.01    | N/A       | N/A       | N/A       | 0.611     |
|                                             | 10/10/2018  | 0.00586* | 1.39     | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 0.598     |
|                                             | 7/31/2019   | 0.0129   | 0.0375   | 1.29     | 0.349    | < 0.01   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 0.657     |
|                                             | 3/17/2021   | N/A      | N/A      | 0.742    | N/A      | < 0.02   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/12/2023   | N/A      | N/A      | N/A      | N/A      | 0.0753   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 0.697     |
|                                             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | 0.0522   | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 11/18/2025  | N/A      | N/A      | 0.979    | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
| Methane, Dissolved, mg/L (CAS NO - 74-82-8) | 4/11/2016   | < 0.005  | 0.158    | 1.62     | N/A      | 5.93     | 0.279    | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/5/2016   | 0.0059   | 0.41     | 2.86     | N/A      | 33.5     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/6/2016   | N/A      | N/A      | N/A      | N/A      | N/A      | < 0.005  | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/17/2017   | 0.00554  | 0.768    | 2.71     | < 0.005  | 6.28     | 0.533    | N/A       | < 0.005   | < 0.005   | N/A       | N/A       | N/A       | 0.517     |
|                                             | 7/18/2017   | 0.00863  | 0.00917  | 2.59     | < 0.005  | 6.89     | 0.611    | N/A       | < 0.005   | < 0.005   | N/A       | N/A       | N/A       | 0.306     |
|                                             | 4/2/2018    | 0.00557  | 0.164    | 2.33     | < 0.005  | 7.11     | N/A      | N/A       | 0.00425*  | < 0.005   | N/A       | N/A       | N/A       | 0.789     |
|                                             | 10/10/2018  | 0.00359* | 0.458    | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 0.785     |
|                                             | 7/31/2019   | 0.00312  | 0.0128   | 1.16     | 0.00167  | 4.63     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 0.723     |
|                                             | 3/17/2021   | N/A      | N/A      | 1.09     | N/A      | 3.54     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/12/2023   | N/A      | N/A      | N/A      | N/A      | 4.78     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 0.467     |
|                                             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | 3.67     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 11/18/2025  | N/A      | N/A      | 0.661    | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
| Nitrate (NO3), mg/L (CAS NO - 14797-55-8)   | 4/11/2016   | 7.67     | 0.111    | 1.11     | N/A      | 0.179    | 1.64     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/17/2017   | 5.26     | 0.54     | 0.0947*  | 0.141    | 1.11     | 3.55     | N/A       | 11.7      | 19.2      | N/A       | N/A       | N/A       | 0.512     |
|                                             | 7/18/2017   | 5.5      | < 0.1    | 0.0602*  | 0.0946*  | < 0.1    | 2.66     | N/A       | 12.1      | 18.5      | N/A       | N/A       | N/A       | < 0.1     |
|                                             | 4/2/2018    | 5.67     | < 0.1    | < 0.1    | < 0.1    | < 0.1    | N/A      | N/A       | 8.42      | 16.9      | N/A       | N/A       | N/A       | < 0.1     |
|                                             | 10/10/2018  | 6.25     | < 0.1    | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 2.49      |
|                                             | 7/31/2019   | 4.87     | < 0.1    | < 0.1    | < 0.1    | 0.0849*  | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | < 0.1     |
|                                             | 3/17/2021   | N/A      | N/A      | < 0.1    | N/A      | 0.709    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/12/2023   | N/A      | N/A      | N/A      | N/A      | 0.0981*  | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | < 0.2     |
|                                             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | < 0.2    | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 11/18/2025  | N/A      | N/A      | < 0.2    | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             |             |          |          |          |          |          |          |           |           |           |           |           |           |           |
|                                             |             |          |          |          |          |          |          |           |           |           |           |           |           |           |
| Sulfate, mg/L (CAS NO - 14808-79-8)         | 4/11/2016   | 16.1     | 27.7     | 6.52     | N/A      | 14.4     | 17.5     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/5/2016   | 15.7     | 23.8     | < 5      | N/A      | 12.1     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/6/2016   | N/A      | N/A      | N/A      | N/A      | N/A      | 12.9     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/17/2017   | 15.6     | 23.2     | < 1      | 215      | 13.5     | 15.6     | N/A       | 21.2      | 18.6      | N/A       | N/A       | N/A       | 12.6      |
|                                             | 7/18/2017   | 18.8     | 25.9     | 8.41     | 199      | 15.7     | 16.9     | N/A       | 20.4      | 21.5      | N/A       | N/A       | N/A       | 12.9      |
|                                             | 4/2/2018    | 20       | 27.4     | 27.2     | 212      | 15.4     | N/A      | N/A       | 20.7      | 16.6      | N/A       | N/A       | N/A       | 2.8       |
|                                             | 10/10/2018  | 18.2     | 24.9     | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 13.5      |
|                                             | 7/31/2019   | 19.8     | 25.8     | 18.3     | 203      | 14.4     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 12.9      |
|                                             | 2/12/2020   | N/A      | N/A      | 28       | N/A      | 16.4     | N/A      | N/A       | N/A       | N/A       | 33.3      | 21.4      | N/A       | N/A       |
|                                             | 3/17/2021   | N/A      | N/A      | 14.4     | N/A      | 15.8     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 12.8      |
|                                             | 4/12/2023   | N/A      | N/A      | N/A      | N/A      | 15       | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 11.5      |
|                                             | 6/19/2025   | N/A      | N/A      | N/A      | N/A      | 15.4     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
| Total Organic Carbon, mg/L (CAS NO - TOC)   | 11/18/2025  | N/A      | N/A      | 29.6     | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/11/2016   | 0.776*   | 0.688*   | 3.81     | N/A      | 1.12     | 2.88     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/5/2016   | 1.04     | 1.11     | 4.04     | N/A      | 1.47     | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 10/6/2016   | N/A      | N/A      | N/A      | N/A      | N/A      | 1.9      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       |
|                                             | 4/17/2017   | 0.792*   | 0.856*   | 2.2      | 0.567*   | 1.2      | 1.46     | N/A       | 0.924*    | 0.837*    | N/A       | N/A       | N/A       | 0.946*    |
|                                             | 7/18/2017   | 0.791*   | 0.746*   | 1.9      | 0.839*   | 1.41     | 1.18     | N/A       | 1.38      | 0.864*    | N/A       | N/A       | N/A       | 1.07      |
|                                             | 4/2/2018    | 0.991*   | 1.04     | 1.73     | 1.38     | 1.02     | N/A      | N/A       | 1.08      | 0.729*    | N/A       | N/A       | N/A       | 0.676*    |
|                                             | 10/10/2018  | 1        | 1.36     | N/A      | N/A      | N/A      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 1.08      |
|                                             | 7/31/2019   | 0.825*   | 0.774*   | 1.87     | 0.957*   | 1.1      | N/A      | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 0.755*    |

Note: \* indicates 'J flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

|                                                    |
|----------------------------------------------------|
| Denotes Detection.                                 |
| Denotes Confirmed Outlier. Statistically Excluded. |

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.



## Appendix D

### Statistical Method and Output

# STATISTICAL METHOD AND OUTPUT

## PURPOSE

The purpose of this document is to describe the statistical evaluation of groundwater analytical data collected from the groundwater monitoring network of the closed Woodbury County Sanitary Landfill (Landfill).

## STATISTICAL METHOD

### Diagnostic and Exploratory Evaluations and Tests of Assumptions

Detection and assessment/corrective action monitoring statistical programs include diagnostic and exploratory evaluations and statistical tests of assumptions, as appropriate, including the following:

- Time Series Plots
- Shapiro-Wilk test for normality
- Ohio Environmental Protection Agency (EPA) Method for identification of outliers
- Mann-Kendall/Sen's Slope trend test

### Management of Non-Detect Data

Non-detect values in the dataset are managed using simple substitution or the Kaplan-Meier estimator. If less than 15% of the data are non-detects, simple substitution is used, where non-detect values are assigned a concentration of one-half ( $\frac{1}{2}$ ) of the practical quantification limit (PQL). If greater than 15% but less than 50% of the data are non-detects, the Kaplan-Meier estimator is used to define the distribution of the dataset. If non-detects comprise greater than 50% of the available data, non-parametric statistical methods are used.

### Management of Outliers

Background datasets are evaluated for outliers using the Ohio EPA Method included in the Sanitas™ statistical software program and described below, which includes the use of Dixon's, Rosner's, and Tukey's outlier tests, as appropriate based on the diagnostic tests, for the datasets that contain less than 75% of the measured concentrations below the PQL. Outliers are not confirmed unless a physical cause or explanation for the outlier is determined.

### Management of Data (ND data < 75%)

If less than 75% of the background dataset is below the PQL, outliers are statistically evaluated using the following guidelines.

- A parametric dataset with  $n < 20$  is evaluated with the Dixon's outlier test.
- A parametric dataset with  $n \geq 20$  is evaluated with the Rosner's outlier test.
- A non-parametric dataset is evaluated with the Tukey's outlier test.

In accordance with the Ohio EPA Method, if a statistically significant outlier is not found using the above tests, but the highest value data point exceeds the second highest data point by an order of magnitude, the highest point is considered an outlier.



### ***Management of Data (ND data $\geq$ 75%)***

If greater than or equal to 75% of the background dataset is less than the PQL, outliers are statistically evaluated using the following guidelines.

- Single detection  $\geq$  the PQL:
  - If  $\geq$  50% of the background dataset has detections  $\geq$  the method detection limit (MDL), any value  $\geq$  two times the PQL of background is considered an outlier.
  - If  $<$  50% of the background dataset has detections  $\geq$  the MDL, any value  $\geq$  the PQL of background is considered an outlier.
- Two or more detections  $\geq$  the PQL:
  - If  $\geq$  50% of the background dataset has detections  $\geq$  the MDL, any value  $\geq$  three times the PQL of background is considered an outlier.
  - If  $<$  50% of the background dataset has detections  $\geq$  the MDL, any value  $\geq$  two times the PQL of background is considered an outlier.

Confirmed outliers, if any, are shown in the Summary of Groundwater Chemistry included in the Annual Water Quality Report. Analytical data prior to 2025 is available in the 2024 Annual Water Quality Report dated February 25, 2025 (Doc #112393).

### ***Detection Monitoring Statistical Program***

The detection monitoring statistical program for the Landfill is defined by Iowa Administrative Code (IAC) 567-113.10(4)"g". Interwell prediction limits with retesting were selected as the appropriate statistical method for the determination of statistically significant increases (SSIs) over background for inorganic constituents with historical detections in background. Prediction limits are established using the process below. Data from the most recent sampling event is compared to the prediction limits for the determination of SSIs.

### ***Interwell Prediction Limits with Retesting***

- If the dataset has a normal distribution (or can be transformed to a normal distribution using Ladder of Powers), parametric interwell prediction limits are calculated if at least five datasets have been collected from the background monitoring point(s).
- If the dataset does not have a normal distribution (and cannot be transformed to a normal distribution using Ladder of Powers) or has greater than 50% non-detects, non-parametric interwell prediction limits are calculated if at least five datasets have been collected from the background monitoring point.
- If an SSI above the prediction limit is indicated, retesting samples using the 1-of-2 retesting scheme are collected prior to the next regularly scheduled sampling event with temporal sample spacing consideration to provide samples with greater independence. If the retesting results are above the prediction limit, the SSI is confirmed, and the monitoring point is placed into the assessment monitoring program. If the retesting sample concentration is below the prediction limit, the SSI is not confirmed, and the monitoring point continues in the detection monitoring program.

### ***Double Quantification Method***

The quasi-statistical "double quantification" method was used for constituents not detected in the background monitoring points. If a constituent is detected in the compliance dataset that has not been historically detected in the background dataset, that constituent is retested before the next

regularly scheduled sampling event. If the retesting results confirm the original detection with a quantifiable detection, the SSI is confirmed, and the monitoring point is placed into the assessment monitoring program.

#### **Assessment Monitoring/Corrective Action Statistical Program**

Confidence intervals or confidence bands, as appropriate, were selected as the appropriate statistical methods for comparison of the groundwater analytical data against a fixed groundwater protection standard (GWPS). The assessment/pre-corrective action monitoring statistical evaluations are performed using the most recent eight samples or all samples if less than eight samples (but at least 4) are available. The confidence intervals or confidence bands used for the assessment/corrective action monitoring statistical evaluation are established using the process below. Transformation of the distribution is not considered.

#### **Confidence Intervals or Confidence Bands**

- A parametric confidence interval around a normal mean is calculated if the dataset has a normal distribution and no statistically significant trend is present.
- A non-parametric confidence interval around a median is calculated if the dataset does not have a normal distribution and no statistically significant trend is present.
- Non-parametric confidence bands around a Theil-Sen trend line are calculated if the dataset has a statistically significant trend.

In the event that the lower confidence limit or any part of the lower confidence band, as appropriate, exceeds the GWPS, then the monitoring point is declared out of compliance, and an assessment of corrective measures (ACM) is required.

An ACM Report was submitted on June 30, 2020 (Doc #98017) and approved in permit correspondence dated July 22, 2020 (Doc #98119). The Selection of Remedy and Corrective Action Monitoring Program was submitted on November 9, 2020 and approved in permit correspondence dated November 20, 2020 (Doc #98974).

#### **Statistical Software Output**

Sanitas™ statistical software is used to perform the statistical evaluations. Graphical output for the 1<sup>st</sup> and 2<sup>nd</sup> 2025 statistical evaluations is included in Attachments A and B of this appendix, respectively.

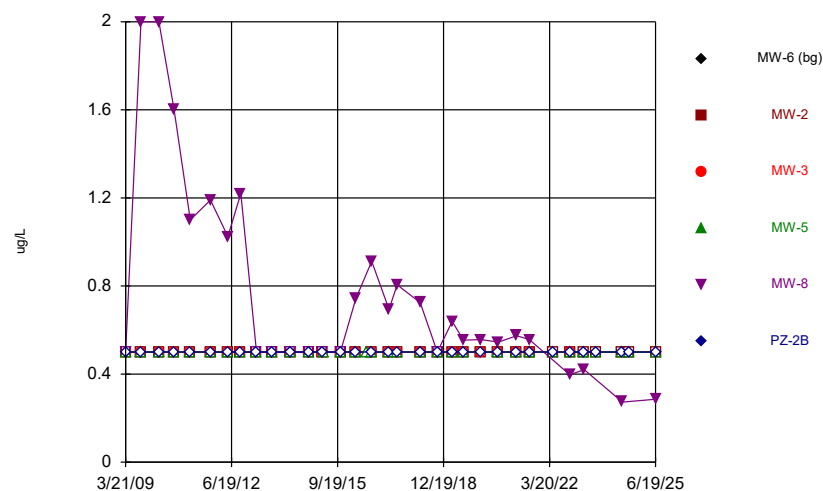


## Attachment A

1<sup>st</sup> 2025 Semi-Annual Statistical Output

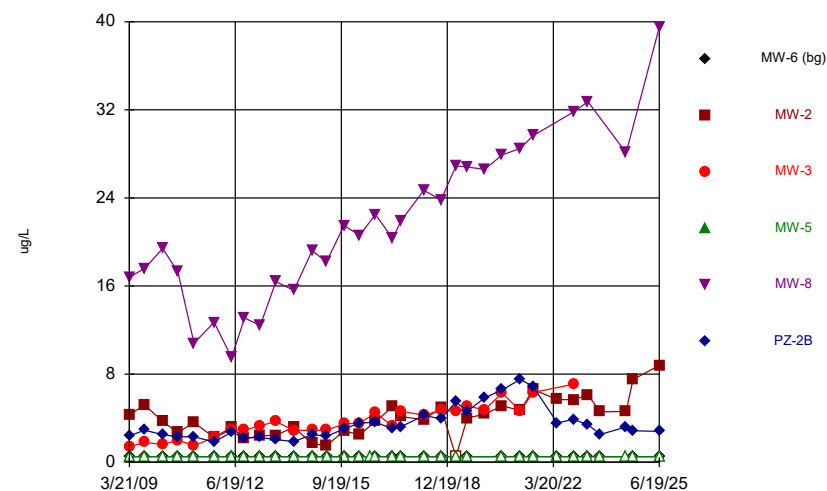
## **Time Series Plots**

### Time Series



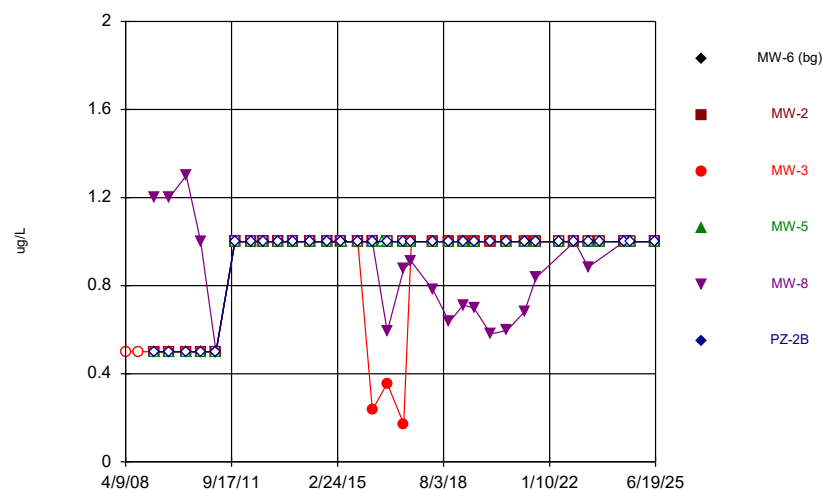
Constituent: 1,1,1-Trichloroethane Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

### Time Series



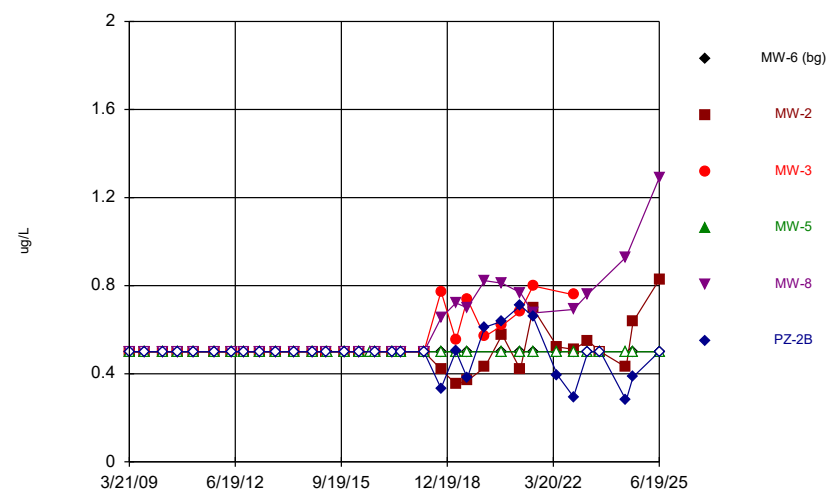
Constituent: 1,1-Dichloroethane Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

### Time Series



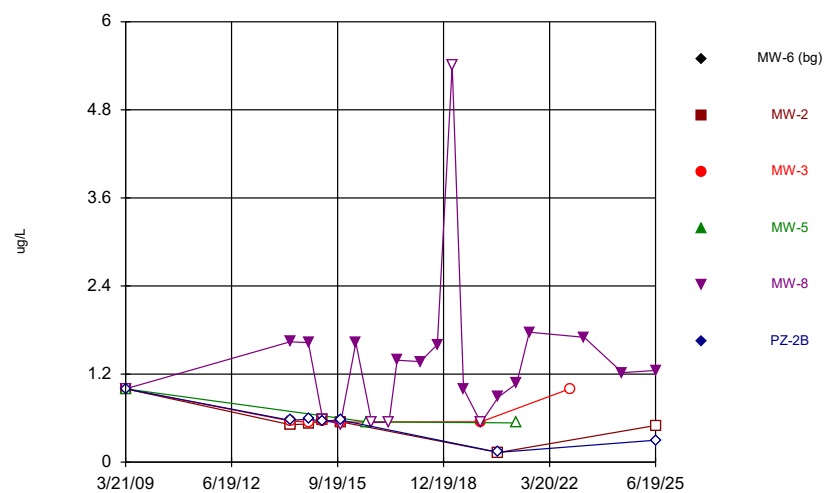
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Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

### Time Series

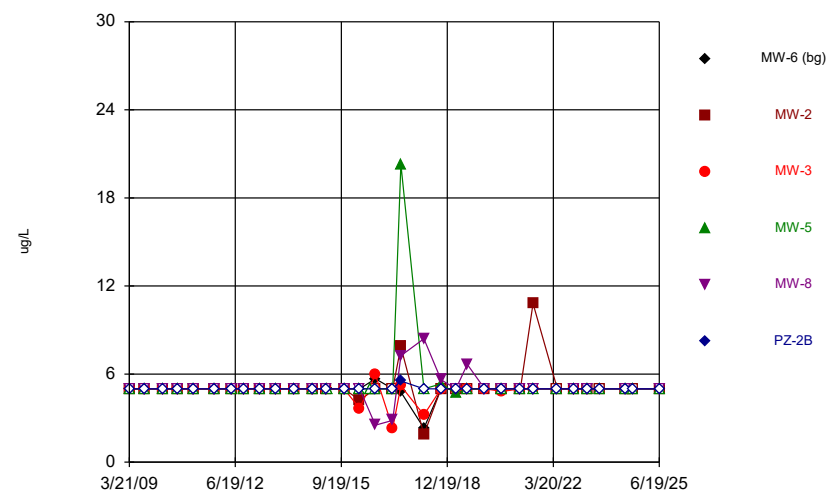


Constituent: 1,2-Dichloropropane Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

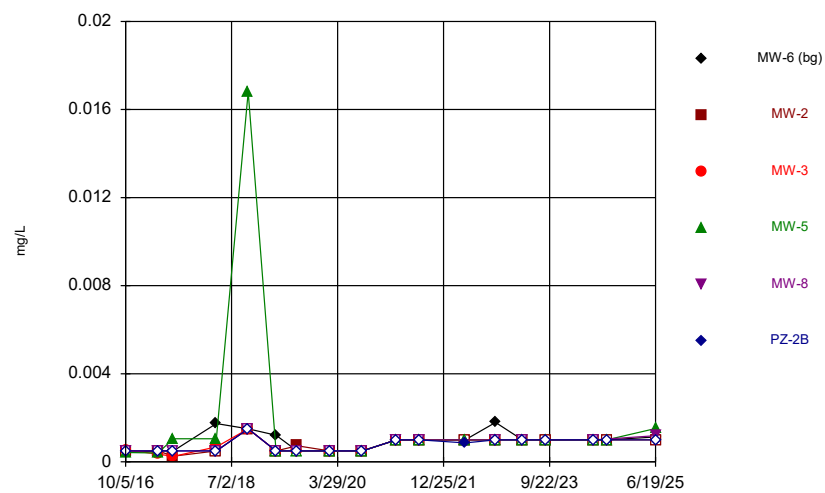
Time Series



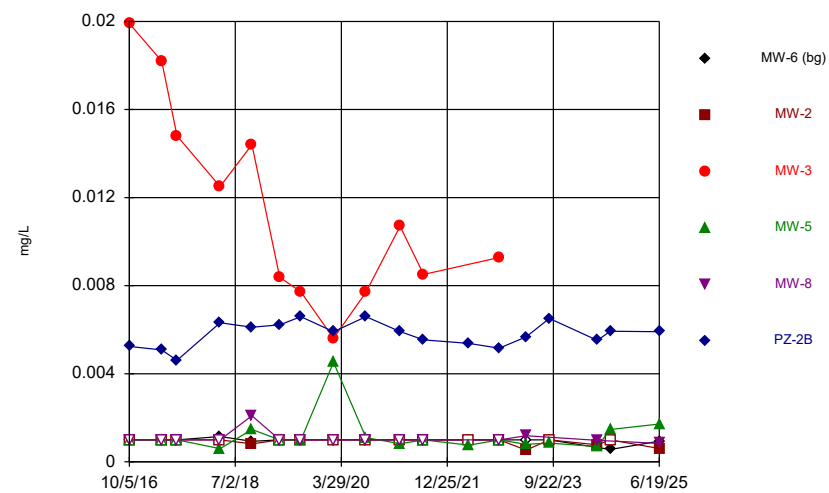
Time Series



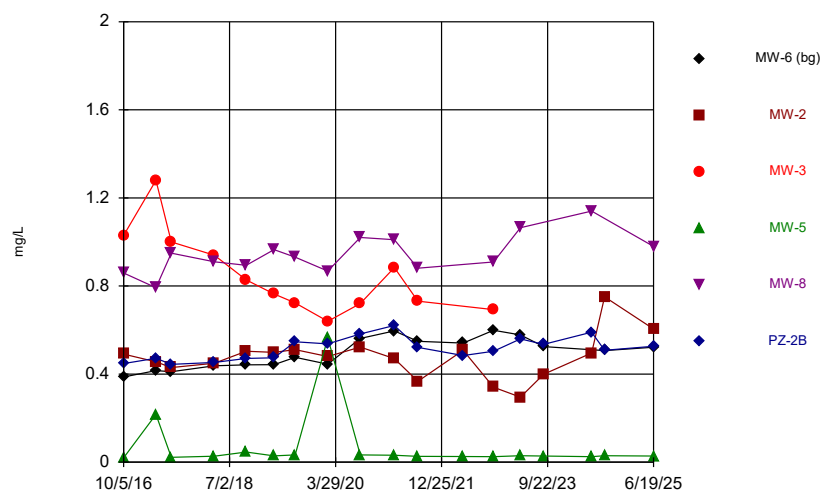
Time Series



Time Series

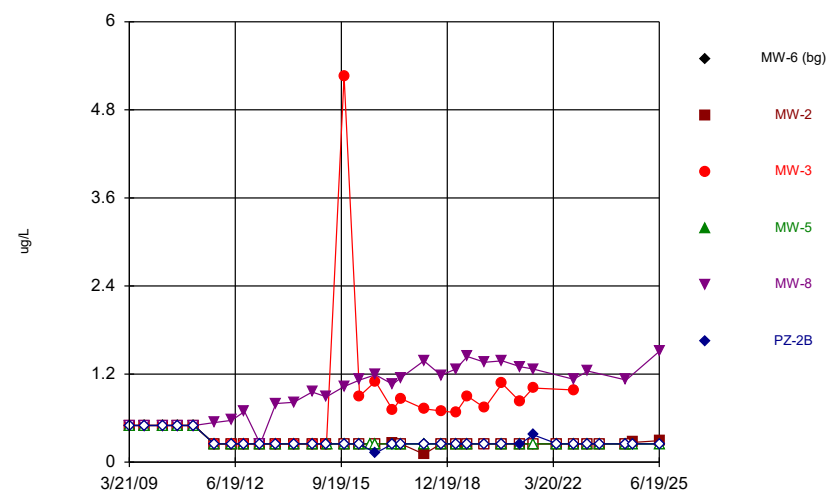


## Time Series



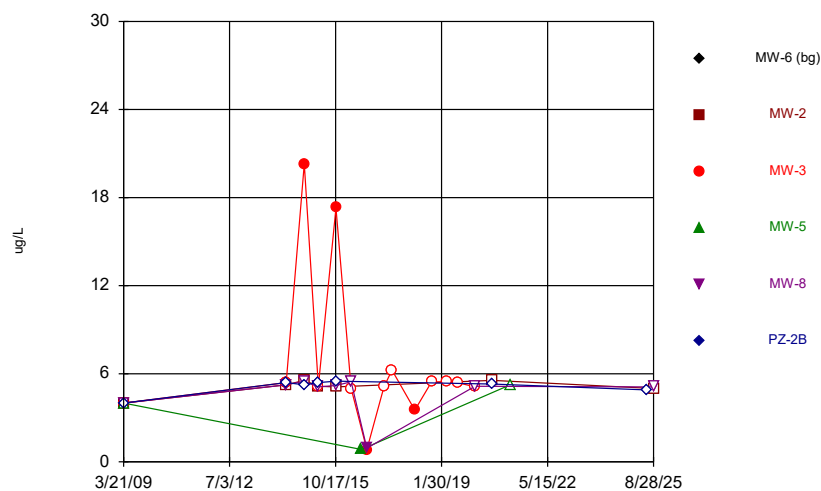
Constituent: Barium Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Time Series



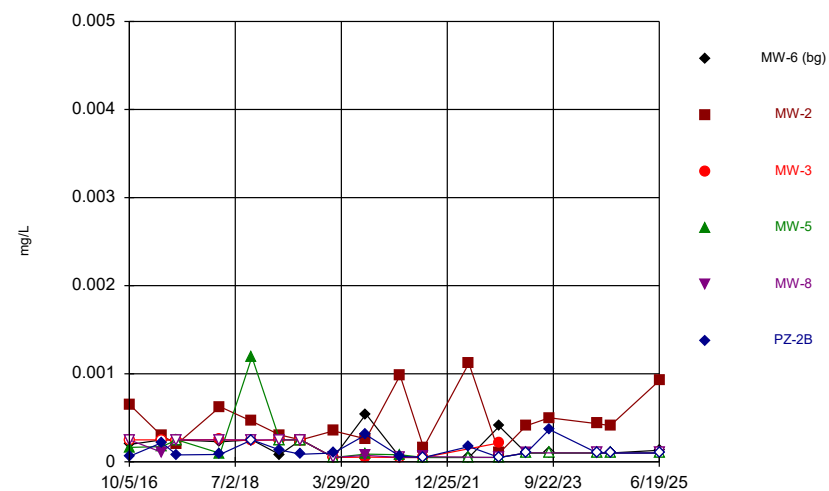
Constituent: Benzene Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Time Series



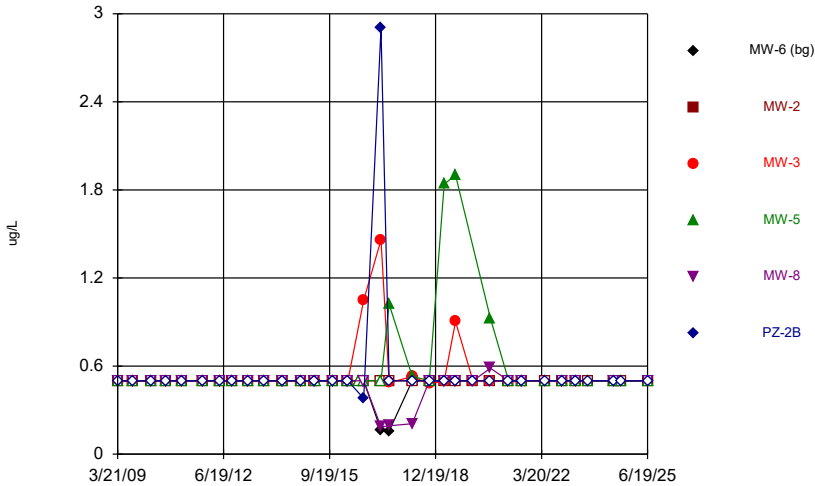
Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Time Series



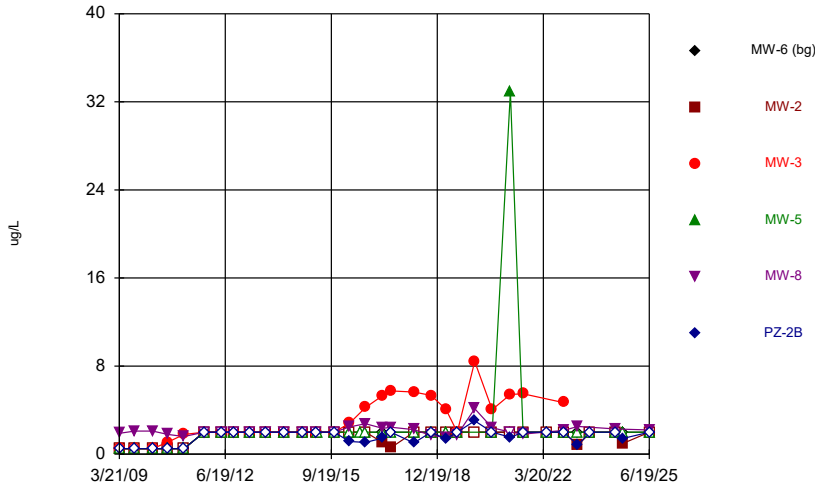
Constituent: Cadmium Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



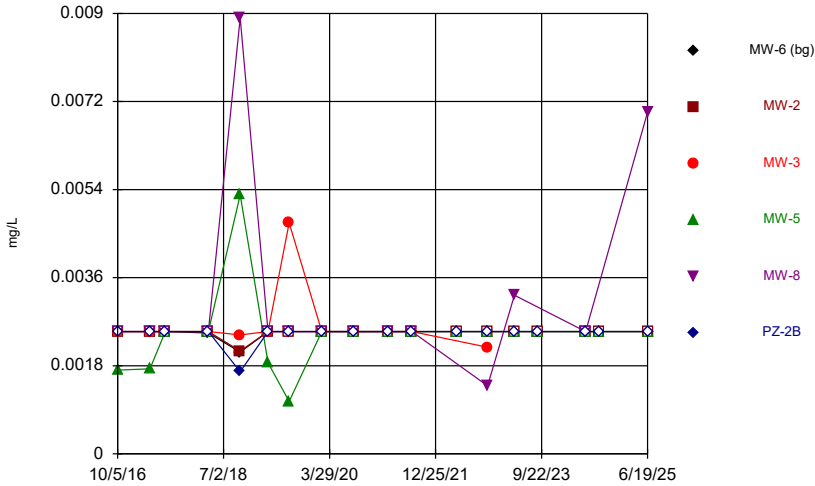
Constituent: Carbon Disulfide Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



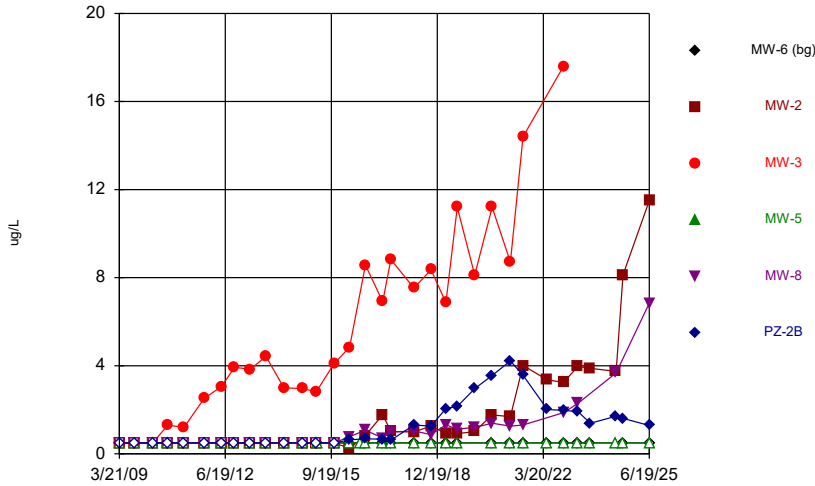
Constituent: Chloroethane Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



Constituent: Chromium Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

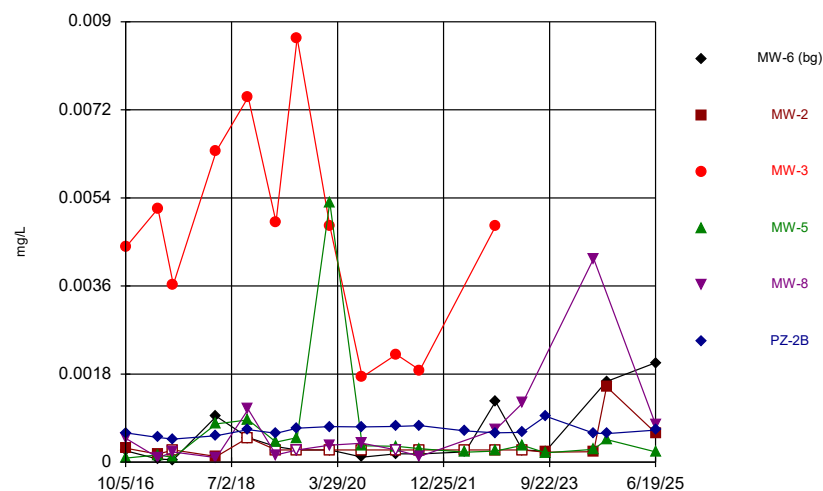
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

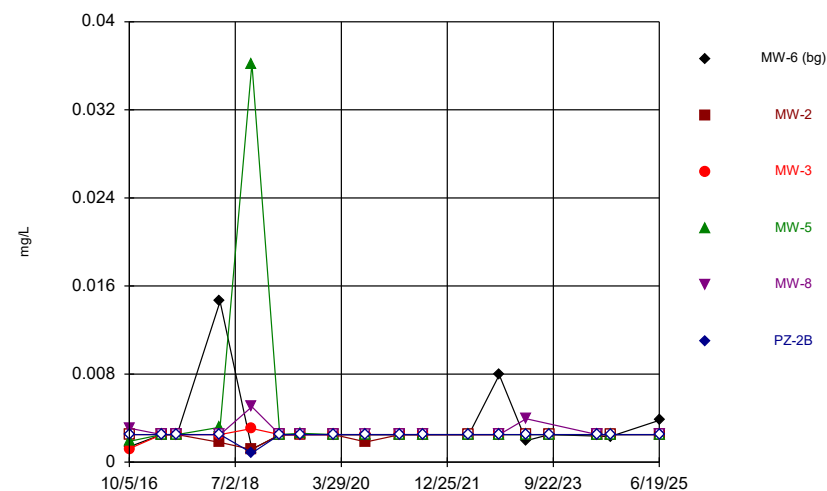


Time Series



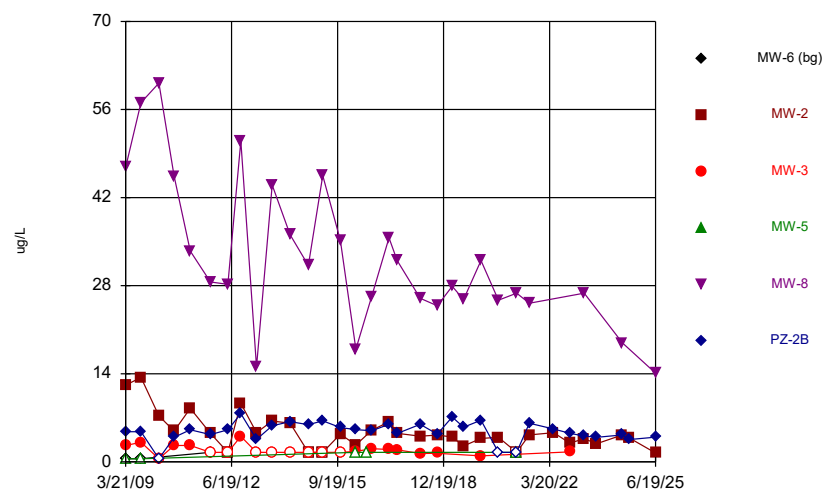
Constituent: Cobalt Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



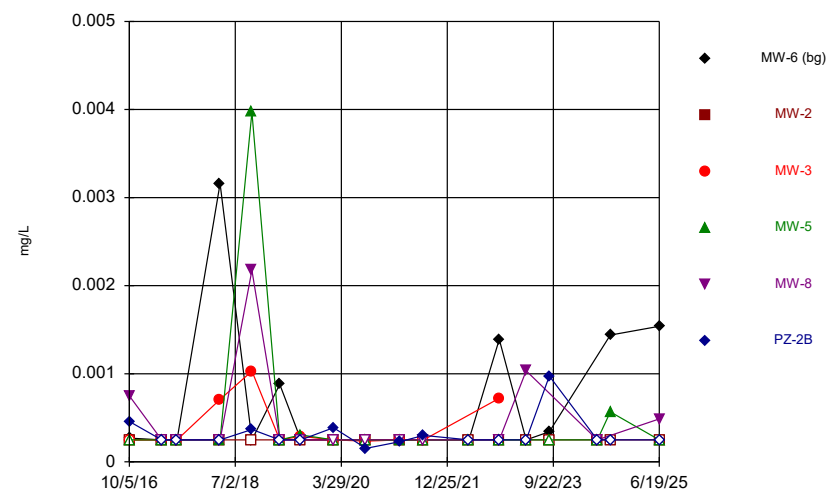
Constituent: Copper Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



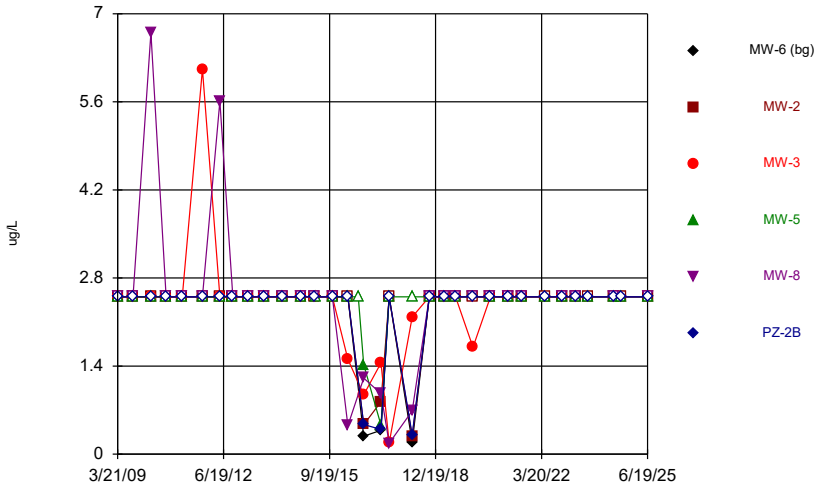
Constituent: Dichlorodifluoromethane Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series

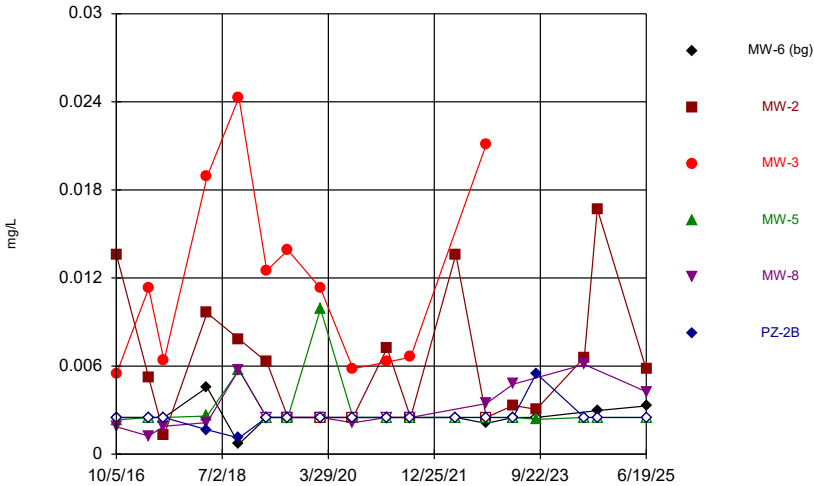


Constituent: Lead Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

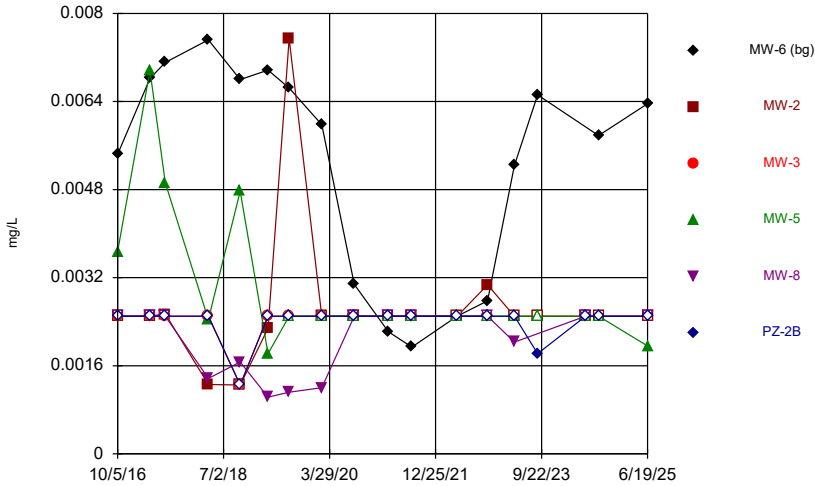
Time Series



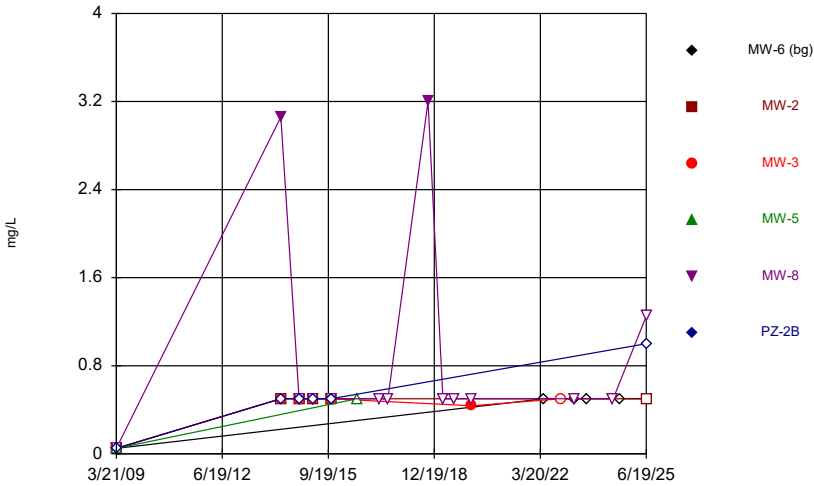
Time Series



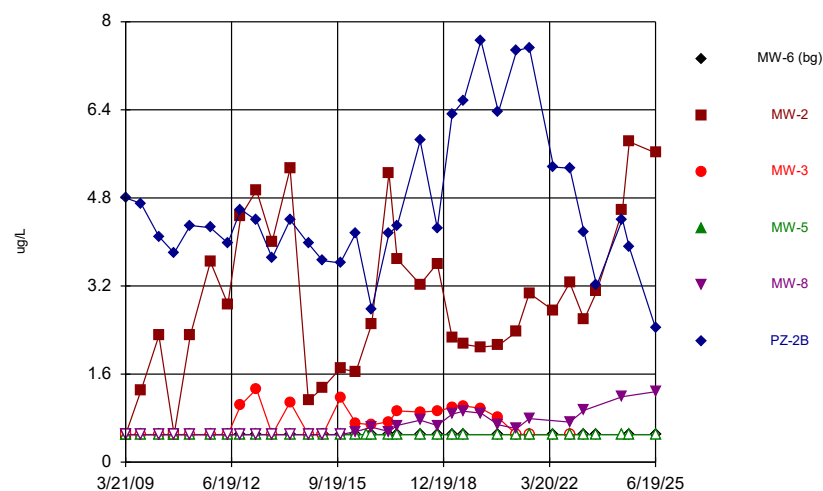
Time Series



Time Series

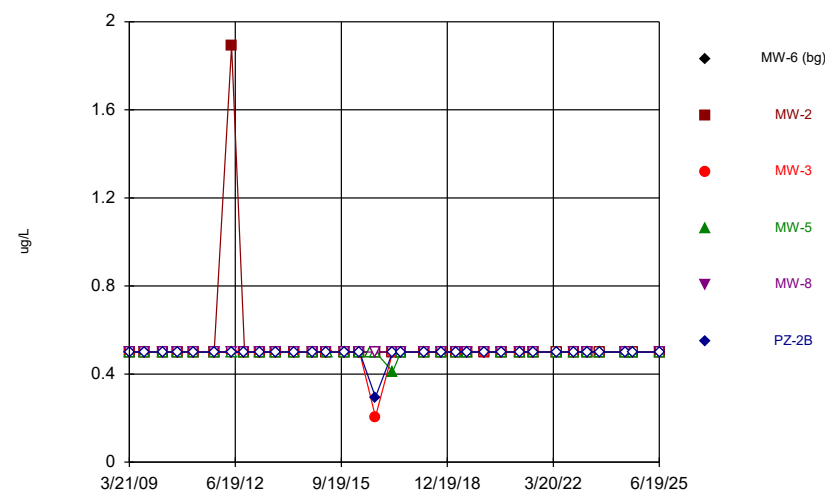


Time Series



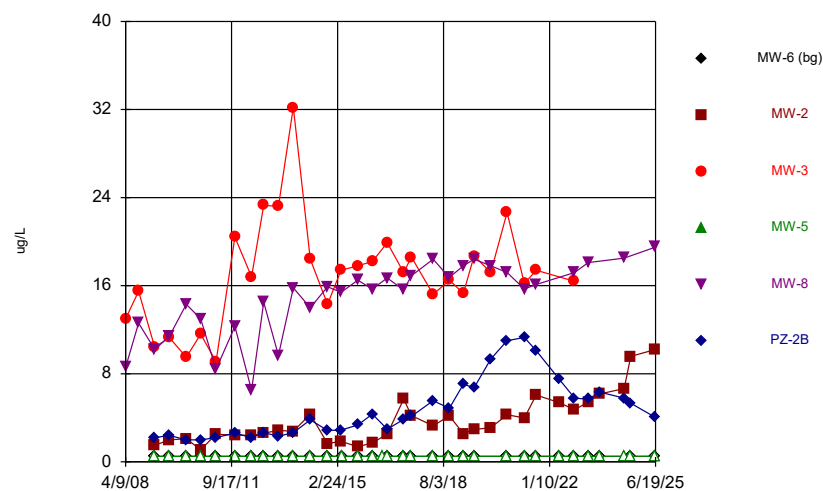
Constituent: Tetrachloroethene Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



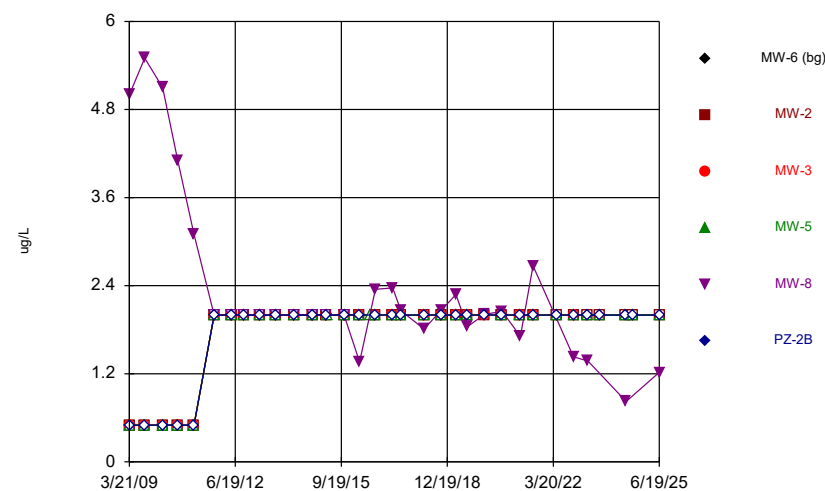
Constituent: Toluene Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



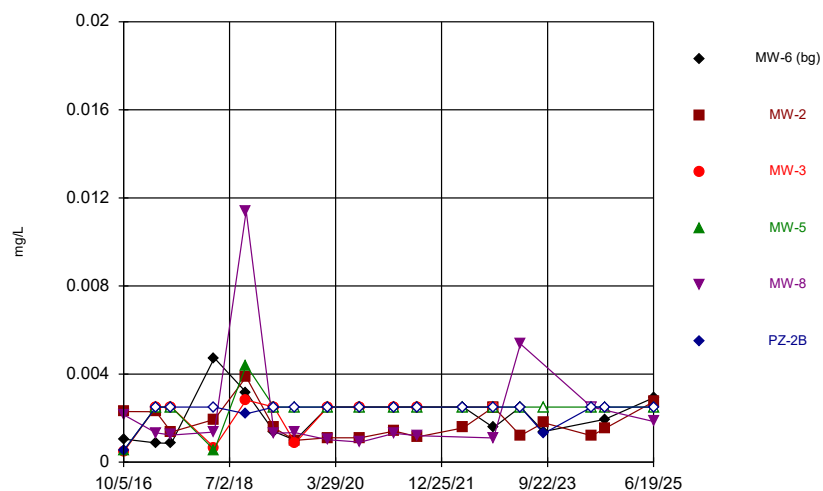
Constituent: Trichloroethene Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



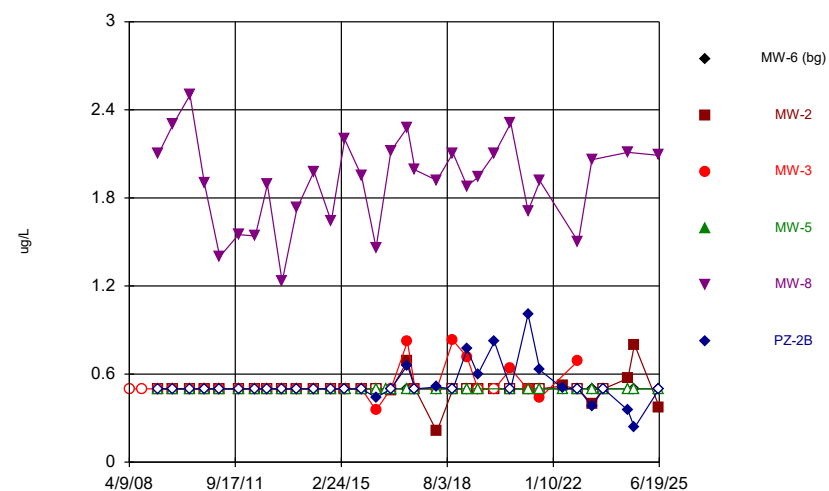
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Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

### Time Series



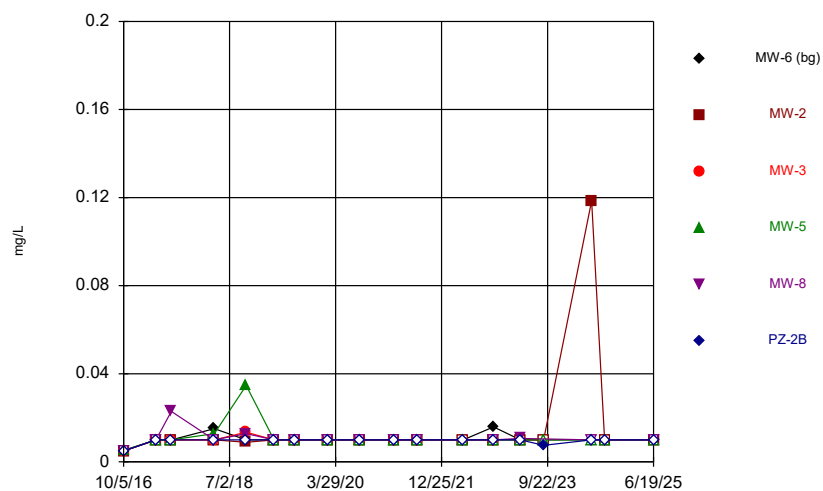
Constituent: Vanadium Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

### Time Series



Constituent: Vinyl Chloride Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

### Time Series



Constituent: Zinc Analysis Run 10/17/2025 9:32 AM View: 2025\_SSN-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

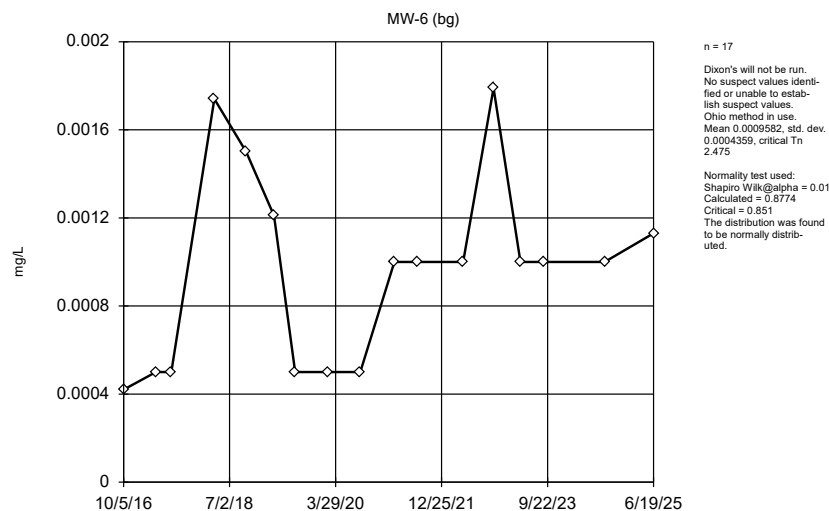
**Outlier Tests Summary Table and Graphs**

# BG Outlier Analysis

Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP Printed 10/17/2025, 9:40 AM

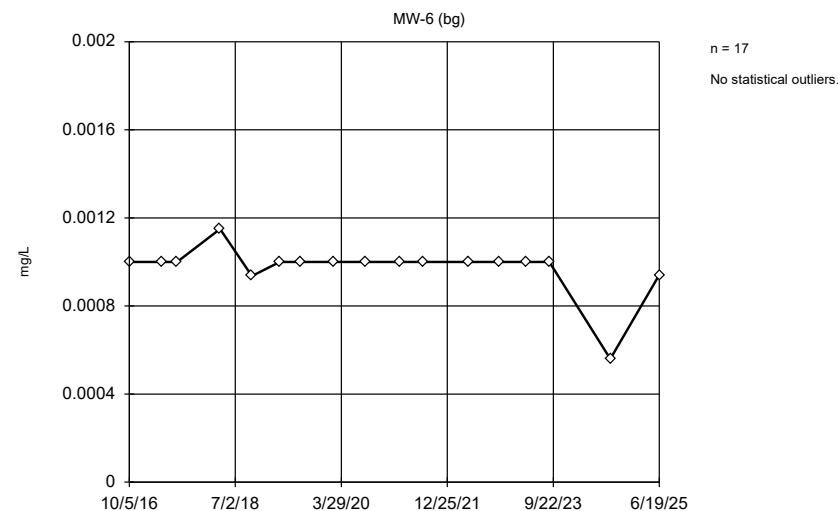
| <u>Constituent</u>     | <u>Well</u>      | <u>Outlier</u> | <u>Value(s)</u>                                 | <u>Date(s)</u>                                      | <u>Method</u>      | <u>Alpha</u> | <u>N</u>  | <u>Mean</u>      | <u>Std. Dev.</u> | <u>Distribution</u> | <u>Normality Test</u> |
|------------------------|------------------|----------------|-------------------------------------------------|-----------------------------------------------------|--------------------|--------------|-----------|------------------|------------------|---------------------|-----------------------|
| Antimony (mg/L)        | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | EPA/OH             | 0.05         | 17        | 0.0009582        | 0.0004359        | normal              | ShapiroWilk           |
| Arsenic (mg/L)         | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | OH                 | NaN          | 17        | 0.0009757        | 0.0001156        | n/a                 | n/a                   |
| Barium (mg/L)          | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | EPA/OH             | 0.05         | 17        | 0.4963           | 0.0688           | normal              | ShapiroWilk           |
| Cadmium (mg/L)         | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | EPA/OH             | 0.05         | 17        | 0.0001815        | 0.0001374        | ln(x)               | ShapiroWilk           |
| Chromium (mg/L)        | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | OH                 | NaN          | 17        | 0.002474         | 0.0001017        | n/a                 | n/a                   |
| Cobalt (mg/L)          | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | EPA/OH             | 0.05         | 17        | 0.0005089        | 0.0005927        | ln(x)               | ShapiroWilk           |
| <b>Copper (mg/L)</b>   | <b>MW-6 (bg)</b> | <b>Yes</b>     | <b>0.0014,0.0146,0.0012,0.00792,0.00196,...</b> | <b>10/5/2016,4/2/2018,10/10/2018,11/2/2022,4...</b> | <b>NP (nrm)/OH</b> | <b>NaN</b>   | <b>17</b> | <b>0.003422</b>  | <b>0.003223</b>  | <b>unknown</b>      | <b>ShapiroWilk</b>    |
| Lead (mg/L)            | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | NP (nrm)/OH        | NaN          | 17        | 0.0006777        | 0.0007962        | unknown             | ShapiroWilk           |
| Nickel (mg/L)          | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | NP (nrm)/OH        | NaN          | 17        | 0.002565         | 0.0007243        | unknown             | ShapiroWilk           |
| Selenium (mg/L)        | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | NP (nrm)/OH        | NaN          | 17        | 0.005277         | 0.001946         | unknown             | ShapiroWilk           |
| <b>Thallium (mg/L)</b> | <b>MW-6 (bg)</b> | <b>Yes</b>     | <b>0.001</b>                                    | <b>10/10/2018</b>                                   | <b>OH</b>          | <b>NaN</b>   | <b>17</b> | <b>0.0005194</b> | <b>0.0001306</b> | <b>n/a</b>          | <b>n/a</b>            |
| Vanadium (mg/L)        | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | EPA/OH             | 0.05         | 17        | 0.002111         | 0.001012         | normal              | ShapiroWilk           |
| Zinc (mg/L)            | MW-6 (bg)        | No             | n/a                                             | n/a                                                 | OH                 | NaN          | 17        | 0.01035          | 0.002287         | n/a                 | n/a                   |

## EPA Screening (suspected outliers for Dixon's Test)



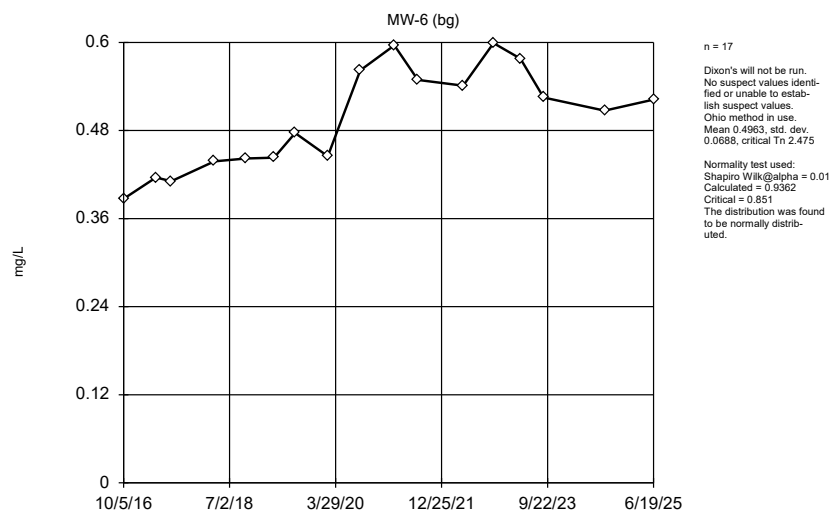
Constituent: Antimony Analysis Run 10/17/2025 9:37 AM View: 2025\_SSN-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Ohio EPA 0715 Outlier Algorithm



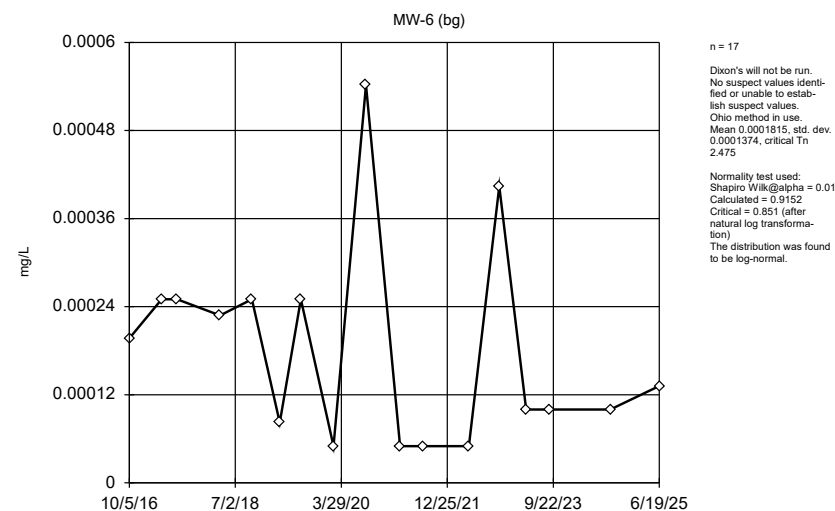
Constituent: Arsenic Analysis Run 10/17/2025 9:37 AM View: 2025\_SSN-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## EPA Screening (suspected outliers for Dixon's Test)

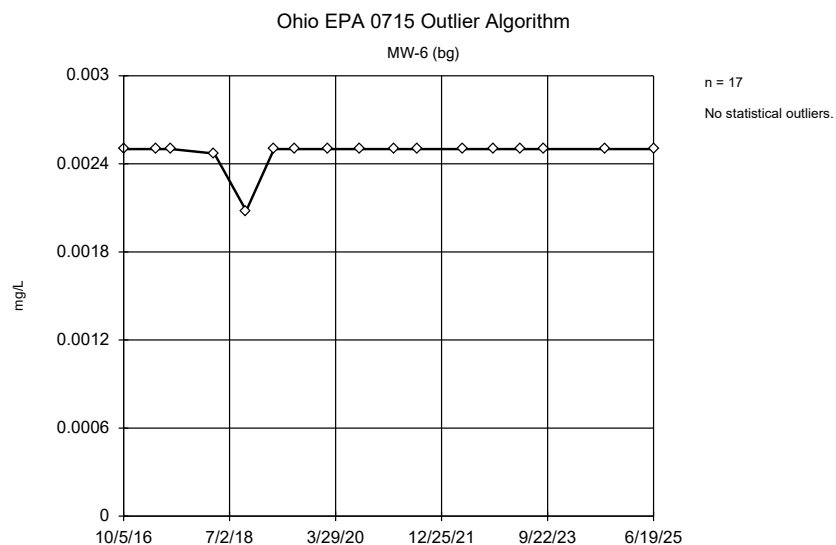


Constituent: Barium Analysis Run 10/17/2025 9:37 AM View: 2025\_SSN-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

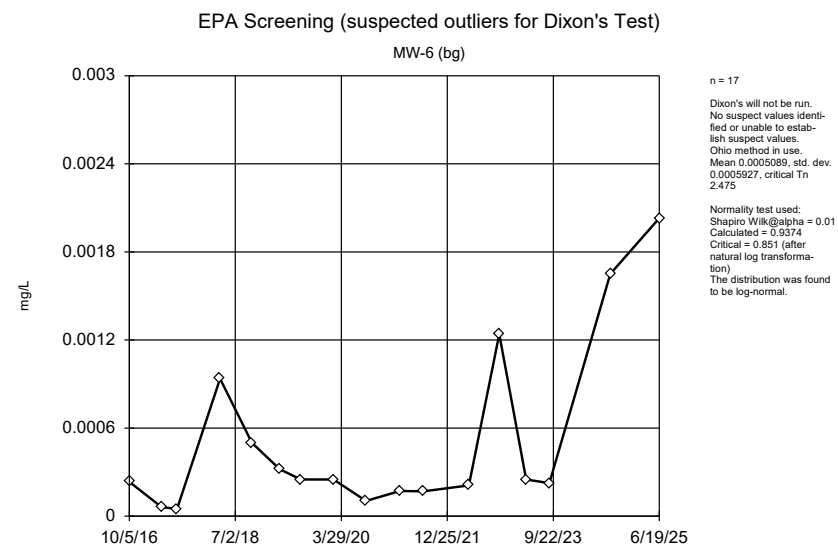
## EPA Screening (suspected outliers for Dixon's Test)



Constituent: Cadmium Analysis Run 10/17/2025 9:37 AM View: 2025\_SSN-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

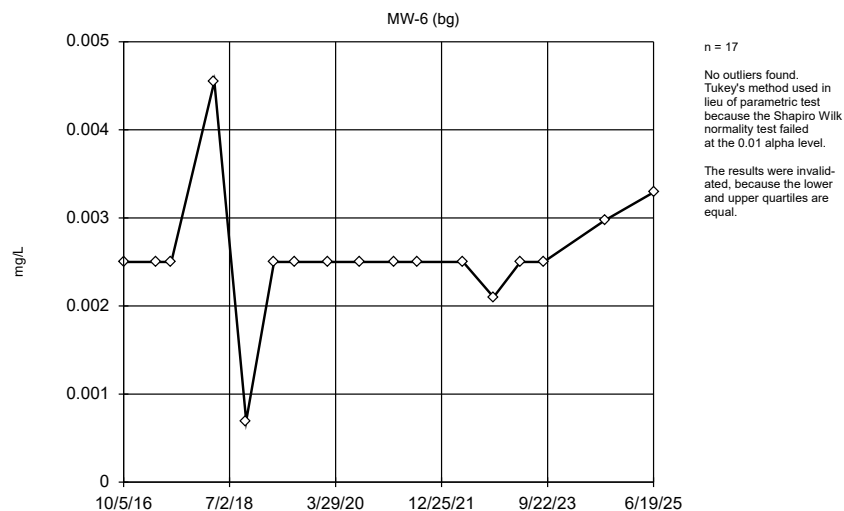


Constituent: Chromium Analysis Run 10/17/2025 9:37 AM View: 2025\_SSN-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP



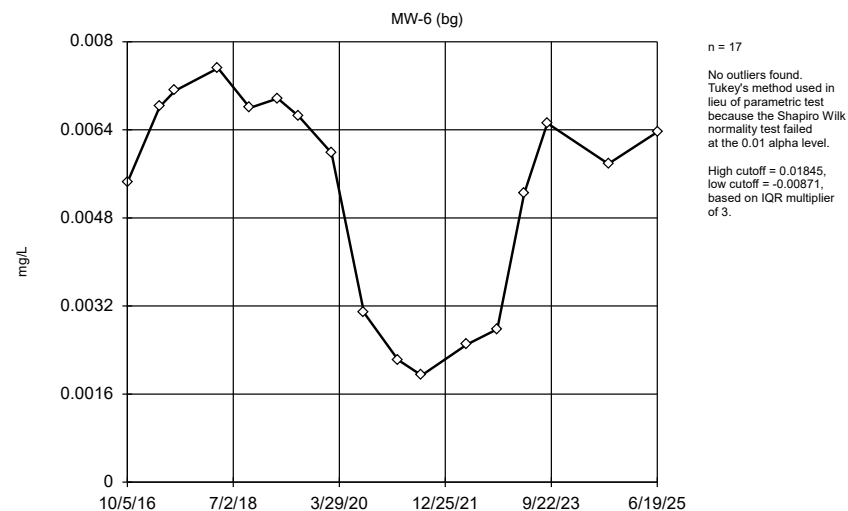


## Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



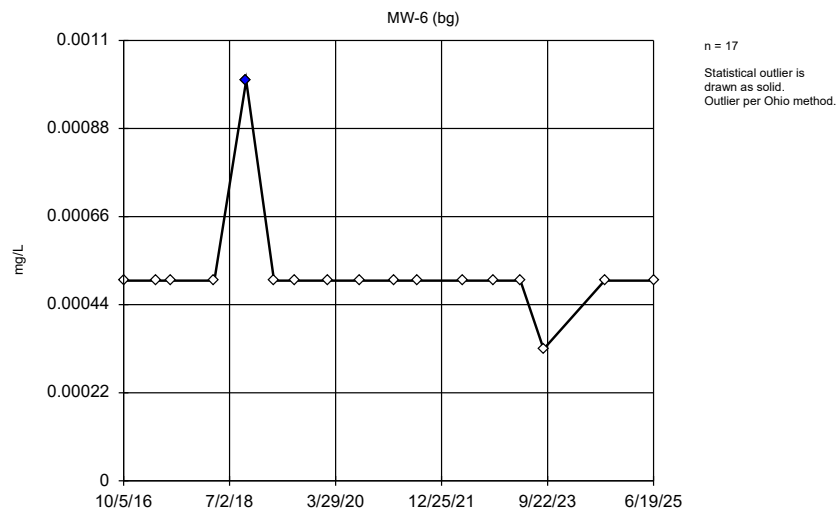
Constituent: Nickel Analysis Run 10/17/2025 9:38 AM View: 2025\_SSN-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



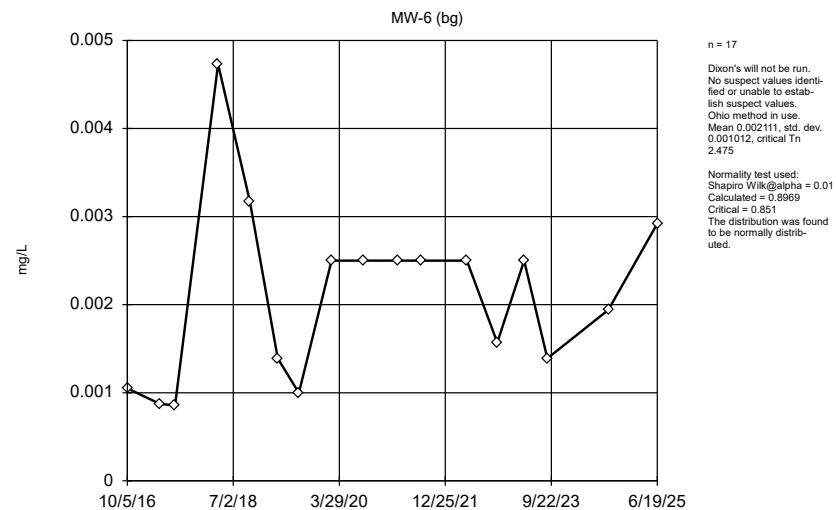
Constituent: Selenium Analysis Run 10/17/2025 9:38 AM View: 2025\_SSN-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Ohio EPA 0715 Outlier Algorithm

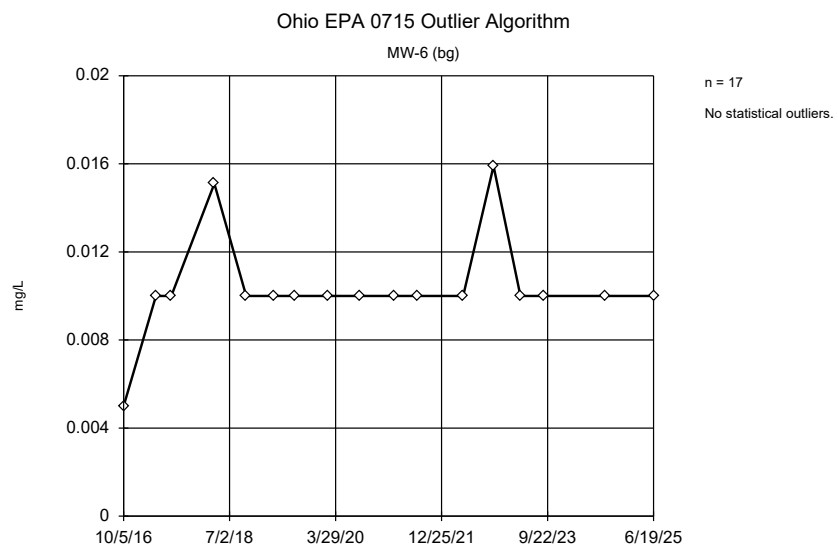


Constituent: Thallium Analysis Run 10/17/2025 9:38 AM View: 2025\_SSN-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## EPA Screening (suspected outliers for Dixon's Test)



Constituent: Vanadium Analysis Run 10/17/2025 9:38 AM View: 2025\_SSN-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP



Constituent: Zinc Analysis Run 10/17/2025 9:38 AM View: 2025\_SSN-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## **Interwell Prediction Limit Summary Table and Graphs**

# Prediction Limit

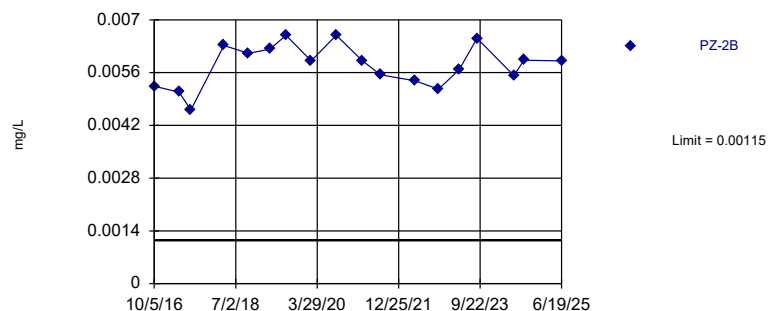
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP Printed 10/13/2025, 9:08 AM

| <u>Constituent</u>     | <u>Well</u>  | <u>Upper Lim.</u> | <u>Lower Lim.</u> | <u>Date</u>      | <u>Observ.</u>  | <u>Sig.</u> | <u>Bq N</u> | <u>%NDs</u>  | <u>Transform</u> | <u>Alpha</u>     | <u>Method</u>                |
|------------------------|--------------|-------------------|-------------------|------------------|-----------------|-------------|-------------|--------------|------------------|------------------|------------------------------|
| <b>Arsenic (mg/L)</b>  | <b>PZ-2B</b> | <b>0.00115</b>    | <b>n/a</b>        | <b>6/19/2025</b> | <b>0.00591</b>  | <b>Yes</b>  | <b>17</b>   | <b>76.47</b> | <b>n/a</b>       | <b>0.005427</b>  | <b>NP Inter (NDs) 1 of 2</b> |
| Barium (mg/L)          | MW-2         | 0.6563            | n/a               | 6/19/2025        | 0.605           | No          | 17          | 0            | No               | 0.0008101        | Param Inter 1 of 2           |
| Barium (mg/L)          | MW-5         | 0.6563            | n/a               | 6/19/2025        | 0.0277          | No          | 17          | 0            | No               | 0.0008101        | Param Inter 1 of 2           |
| <b>Barium (mg/L)</b>   | <b>MW-8</b>  | <b>0.6563</b>     | <b>n/a</b>        | <b>6/19/2025</b> | <b>0.98</b>     | <b>Yes</b>  | <b>17</b>   | <b>0</b>     | <b>No</b>        | <b>0.0008101</b> | <b>Param Inter 1 of 2</b>    |
| Barium (mg/L)          | PZ-2B        | 0.6563            | n/a               | 6/19/2025        | 0.526           | No          | 17          | 0            | No               | 0.0008101        | Param Inter 1 of 2           |
| <b>Cadmium (mg/L)</b>  | <b>MW-2</b>  | <b>0.000542</b>   | <b>n/a</b>        | <b>6/19/2025</b> | <b>0.000922</b> | <b>Yes</b>  | <b>17</b>   | <b>64.71</b> | <b>n/a</b>       | <b>0.005427</b>  | <b>NP Inter (NDs) 1 of 2</b> |
| <b>Chromium (mg/L)</b> | <b>MW-8</b>  | <b>0.0025</b>     | <b>n/a</b>        | <b>6/19/2025</b> | <b>0.00698</b>  | <b>Yes</b>  | <b>17</b>   | <b>88.24</b> | <b>n/a</b>       | <b>0.005427</b>  | <b>NP Inter (NDs) 1 of 2</b> |
| Cobalt (mg/L)          | MW-2         | 0.002223          | n/a               | 6/19/2025        | 0.0006          | No          | 17          | 23.53        | x^(1/3)          | 0.0008101        | Param Inter 1 of 2           |
| Cobalt (mg/L)          | MW-8         | 0.002223          | n/a               | 6/19/2025        | 0.000774        | No          | 17          | 23.53        | x^(1/3)          | 0.0008101        | Param Inter 1 of 2           |
| Cobalt (mg/L)          | PZ-2B        | 0.002223          | n/a               | 6/19/2025        | 0.000654        | No          | 17          | 23.53        | x^(1/3)          | 0.0008101        | Param Inter 1 of 2           |
| <b>Nickel (mg/L)</b>   | <b>MW-2</b>  | <b>0.00455</b>    | <b>n/a</b>        | <b>6/19/2025</b> | <b>0.00577</b>  | <b>Yes</b>  | <b>17</b>   | <b>70.59</b> | <b>n/a</b>       | <b>0.005427</b>  | <b>NP Inter (NDs) 1 of 2</b> |

Exceeds Limit: PZ-2B

## Prediction Limit

Interwell Non-parametric



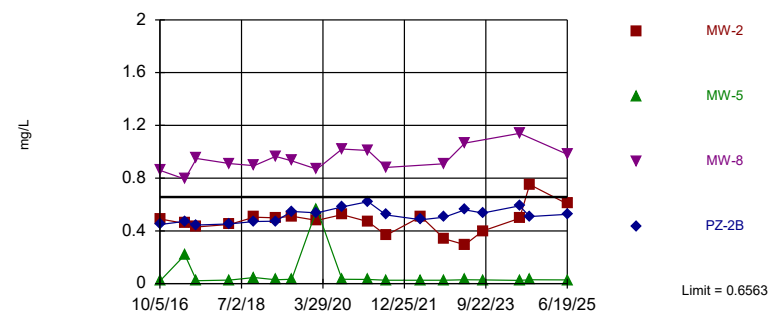
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 76.47% NDs. Annual per-constituent alpha = 0.05296. Individual comparison alpha = 0.005427 (1 of 2). Assumes 4 future values.

Constituent: Arsenic Analysis Run 10/13/2025 9:04 AM View: 2025\_SSN\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Exceeds Limit: MW-8

## Prediction Limit

Interwell Parametric



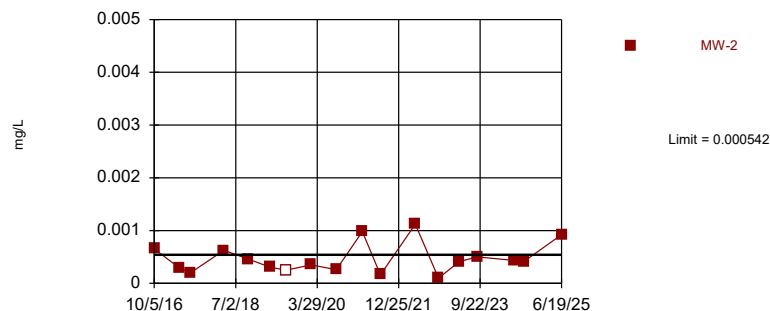
Background Data Summary: Mean=0.4963, Std. Dev.=0.0688, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9362, critical = 0.851. Kappa = 2.326 (c=13, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.004044. Individual comparison alpha = 0.0008101. Comparing 4 points to limit. Assumes 1 future value.

Constituent: Barium Analysis Run 10/13/2025 9:04 AM View: 2025\_SSN\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Exceeds Limit: MW-2

## Prediction Limit

Interwell Non-parametric



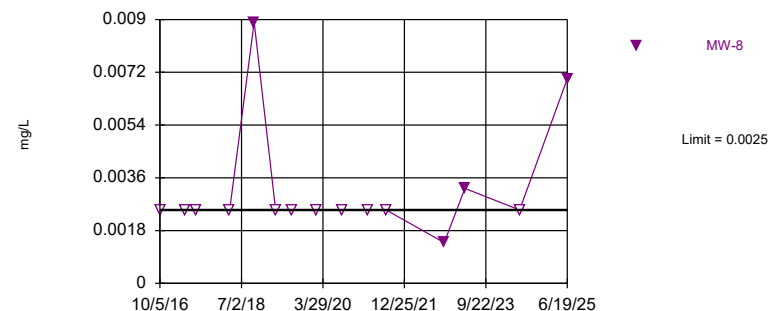
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 64.71% NDs. Annual per-constituent alpha = 0.05296. Individual comparison alpha = 0.005427 (1 of 2). Assumes 4 future values.

Constituent: Cadmium Analysis Run 10/13/2025 9:04 AM View: 2025\_SSN\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Exceeds Limit: MW-8

## Prediction Limit

Interwell Non-parametric

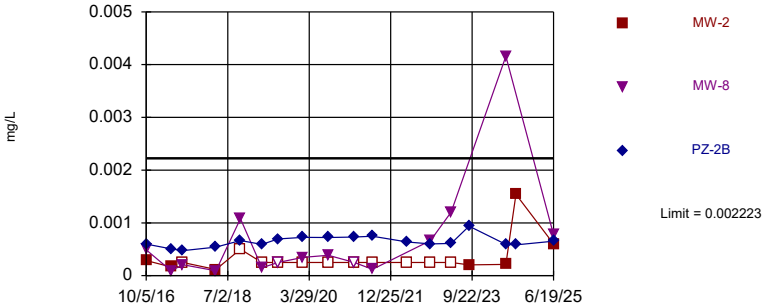


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 88.24% NDs. Annual per-constituent alpha = 0.05296. Individual comparison alpha = 0.005427 (1 of 2). Assumes 4 future values.

Constituent: Chromium Analysis Run 10/13/2025 9:04 AM View: 2025\_SSN\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Within Limit

Prediction Limit  
Interwell Parametric

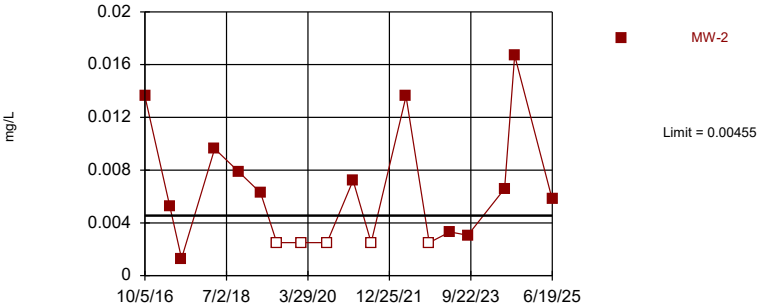


Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.06784, Std. Dev.=0.02695, n=17, 23.53% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8764, critical = 0.851. Kappa = 2.326 (c=13, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.004044. Individual comparison alpha = 0.0008101. Comparing 3 points to limit. Assumes 2 future values.

Constituent: Cobalt Analysis Run 10/13/2025 9:04 AM View: 2025\_SSN\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Exceeds Limit: MW-2

Prediction Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 70.59% NDs. Annual per-constituent alpha = 0.05296. Individual comparison alpha = 0.005427 (1 of 2). Assumes 4 future values.

Constituent: Nickel Analysis Run 10/13/2025 9:04 AM View: 2025\_SSN\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## **Mann-Kendall/Sen's Slope Trend Test Summary Table and Graphs**

# Trend Test

Woodbury County SLF

Client: SCS Engineers

Data: WCASW\_AM\_2025\_SSN

Printed 10/13/2025, 9:47 AM

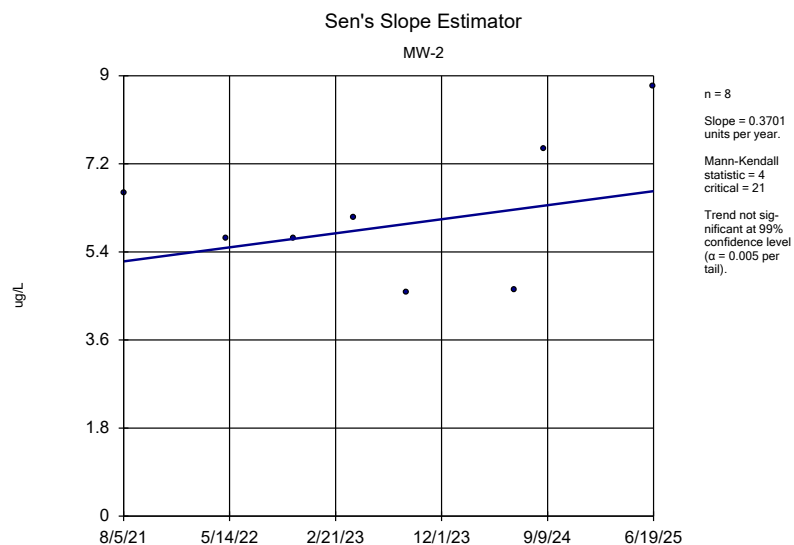
| <u>Constituent</u>                   | <u>Well</u>  | <u>Slope</u>   | <u>Calc.</u> | <u>Critical</u> | <u>Sig.</u> | <u>N</u> | <u>%NDs</u> | <u>Alpha</u> | <u>Method</u> |
|--------------------------------------|--------------|----------------|--------------|-----------------|-------------|----------|-------------|--------------|---------------|
| 1,1-Dichloroethane (ug/L)            | MW-2         | 0.3701         | 4            | 21              | No          | 8        | 0           | 0.01         | NP            |
| 1,1-Dichloroethane (ug/L)            | MW-3         | 0.5957         | 16           | 21              | No          | 8        | 0           | 0.01         | NP            |
| 1,1-Dichloroethane (ug/L)            | MW-8         | 1.926          | 20           | 21              | No          | 8        | 0           | 0.01         | NP            |
| 1,1-Dichloroethane (ug/L)            | PZ-2B        | -0.4214        | -20          | -21             | No          | 8        | 0           | 0.01         | NP            |
| 1,2-Dichloropropane (ug/L)           | MW-8         | 0.028          | 4            | 21              | No          | 8        | 0           | 0.01         | NP            |
| 2,4-D [2C] (ug/L)                    | MW-8         | 0.08124        | 14           | 21              | No          | 8        | 12.5        | 0.01         | NP            |
| Acetone (ug/L)                       | MW-2         | 0              | -7           | -21             | No          | 8        | 87.5        | 0.01         | NP            |
| Arsenic (mg/L)                       | MW-3         | 0.00002049     | 0            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Arsenic (mg/L)                       | PZ-2B        | 0.0001482      | 10           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Barium (mg/L)                        | MW-2         | 0.09864        | 12           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Barium (mg/L)                        | MW-3         | -0.01682       | -8           | -21             | No          | 8        | 0           | 0.01         | NP            |
| Barium (mg/L)                        | MW-5         | 0.0004782      | 5            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Barium (mg/L)                        | MW-8         | 0.0243         | 10           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Barium (mg/L)                        | PZ-2B        | 0.009347       | 8            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Benzene (ug/L)                       | MW-3         | 0.07338        | 14           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Benzene (ug/L)                       | MW-8         | -0.05289       | -10          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Cadmium (mg/L)                       | MW-2         | 0.0001206      | 8            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Cadmium (mg/L)                       | MW-3         | -0.000008293   | -10          | -21             | No          | 8        | 62.5        | 0.01         | NP            |
| Cadmium (mg/L)                       | PZ-2B        | 0              | 5            | 21              | No          | 8        | 75          | 0.01         | NP            |
| Chloroethane (ug/L)                  | MW-3         | 0.1025         | 4            | 21              | No          | 8        | 12.5        | 0.01         | NP            |
| Chloroethane (ug/L)                  | MW-8         | -0.06          | -4           | -21             | No          | 8        | 12.5        | 0.01         | NP            |
| Chromium (mg/L)                      | MW-8         | 0              | 8            | 21              | No          | 8        | 62.5        | 0.01         | NP            |
| cis-1,2-Dichloroethene (ug/L)        | MW-2         | 1.061          | 10           | 21              | No          | 8        | 0           | 0.01         | NP            |
| cis-1,2-Dichloroethene (ug/L)        | MW-3         | 2.207          | 17           | 21              | No          | 8        | 0           | 0.01         | NP            |
| <b>cis-1,2-Dichloroethene (ug/L)</b> | <b>MW-8</b>  | <b>0.5784</b>  | <b>24</b>    | <b>21</b>       | <b>Yes</b>  | <b>8</b> | <b>0</b>    | <b>0.01</b>  | <b>NP</b>     |
| <b>cis-1,2-Dichloroethene (ug/L)</b> | <b>PZ-2B</b> | <b>-0.2732</b> | <b>-24</b>   | <b>-21</b>      | <b>Yes</b>  | <b>8</b> | <b>0</b>    | <b>0.01</b>  | <b>NP</b>     |
| Cobalt (mg/L)                        | MW-2         | 0              | 4            | 21              | No          | 8        | 50          | 0.01         | NP            |
| Cobalt (mg/L)                        | MW-3         | -0.001326      | -14          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Cobalt (mg/L)                        | MW-8         | 0.0001481      | 14           | 21              | No          | 8        | 12.5        | 0.01         | NP            |
| Cobalt (mg/L)                        | PZ-2B        | -0.00002067    | -8           | -21             | No          | 8        | 0           | 0.01         | NP            |
| Copper (mg/L)                        | MW-3         | 0              | -7           | -21             | No          | 8        | 87.5        | 0.01         | NP            |
| Copper (mg/L)                        | MW-8         | 0              | 3            | 21              | No          | 8        | 87.5        | 0.01         | NP            |
| Dichlorodifluoromethane (ug/L)       | MW-2         | -0.4784        | -10          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Dichlorodifluoromethane (ug/L)       | MW-8         | -2.097         | -15          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Dichlorodifluoromethane (ug/L)       | PZ-2B        | -0.5597        | -20          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Lead (mg/L)                          | MW-3         | 0              | -4           | -21             | No          | 8        | 50          | 0.01         | NP            |
| Lead (mg/L)                          | MW-5         | 0              | 5            | 21              | No          | 8        | 87.5        | 0.01         | NP            |
| Lead (mg/L)                          | MW-8         | 0              | 9            | 21              | No          | 8        | 75          | 0.01         | NP            |
| Lead (mg/L)                          | PZ-2B        | 0              | -5           | -21             | No          | 8        | 75          | 0.01         | NP            |
| Nickel (mg/L)                        | MW-2         | 0.001181       | 11           | 21              | No          | 8        | 25          | 0.01         | NP            |
| Nickel (mg/L)                        | MW-3         | -0.00316       | -8           | -21             | No          | 8        | 0           | 0.01         | NP            |
| Nickel (mg/L)                        | MW-8         | 0.0005906      | 19           | 21              | No          | 8        | 37.5        | 0.01         | NP            |
| Nickel (mg/L)                        | PZ-2B        | 0              | 1            | 21              | No          | 8        | 87.5        | 0.01         | NP            |
| Sulfide (mg/L)                       | MW-8         | 0              | 1            | 21              | No          | 8        | 87.5        | 0.01         | NP            |
| Tetrachloroethene (ug/L)             | MW-2         | 0.8967         | 16           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Tetrachloroethene (ug/L)             | MW-3         | -0.1449        | -17          | -21             | No          | 8        | 37.5        | 0.01         | NP            |
| Tetrachloroethene (ug/L)             | MW-8         | 0.1106         | 16           | 21              | No          | 8        | 0           | 0.01         | NP            |
| <b>Tetrachloroethene (ug/L)</b>      | <b>PZ-2B</b> | <b>-1.143</b>  | <b>-22</b>   | <b>-21</b>      | <b>Yes</b>  | <b>8</b> | <b>0</b>    | <b>0.01</b>  | <b>NP</b>     |
| Trichloroethene (ug/L)               | MW-2         | 1.171          | 20           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Trichloroethene (ug/L)               | MW-3         | 0.1289         | 2            | 21              | No          | 8        | 0           | 0.01         | NP            |



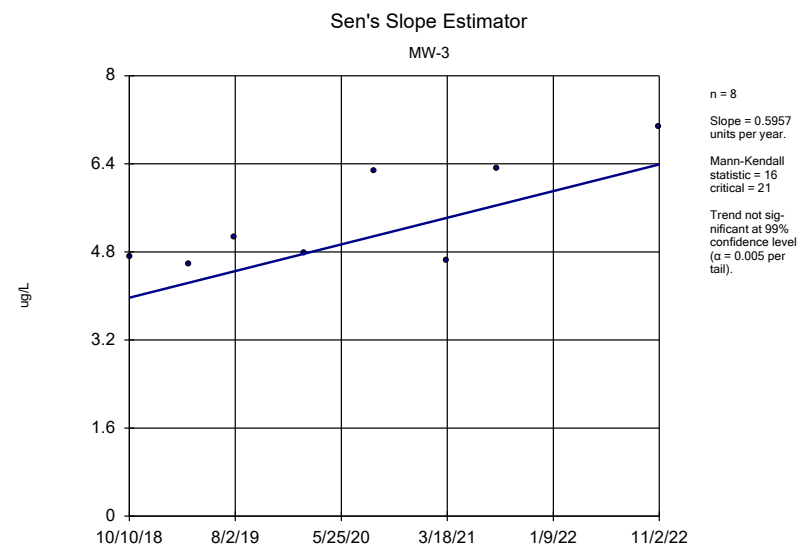
# Trend Test

Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN Printed 10/13/2025, 9:47 AM

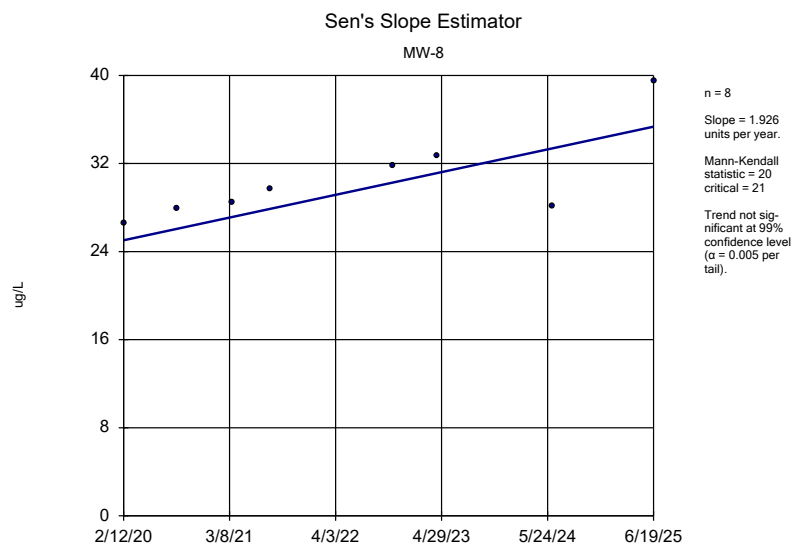
| <u>Constituent</u>     | <u>Well</u> | <u>Slope</u> | <u>Calc.</u> | <u>Critical</u> | <u>Sig.</u> | <u>N</u> | <u>%NDs</u> | <u>Alpha</u> | <u>Method</u> |
|------------------------|-------------|--------------|--------------|-----------------|-------------|----------|-------------|--------------|---------------|
| Trichloroethene (ug/L) | MW-8        | 0.5584       | 15           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Trichloroethene (ug/L) | PZ-2B       | -1.052       | -21          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Vanadium (mg/L)        | MW-8        | 0.0002301    | 14           | 21              | No          | 8        | 12.5        | 0.01         | NP            |
| Vinyl Chloride (ug/L)  | MW-8        | 0.0002196    | 0            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Zinc (mg/L)            | MW-2        | 0            | 3            | 21              | No          | 8        | 87.5        | 0.01         | NP            |



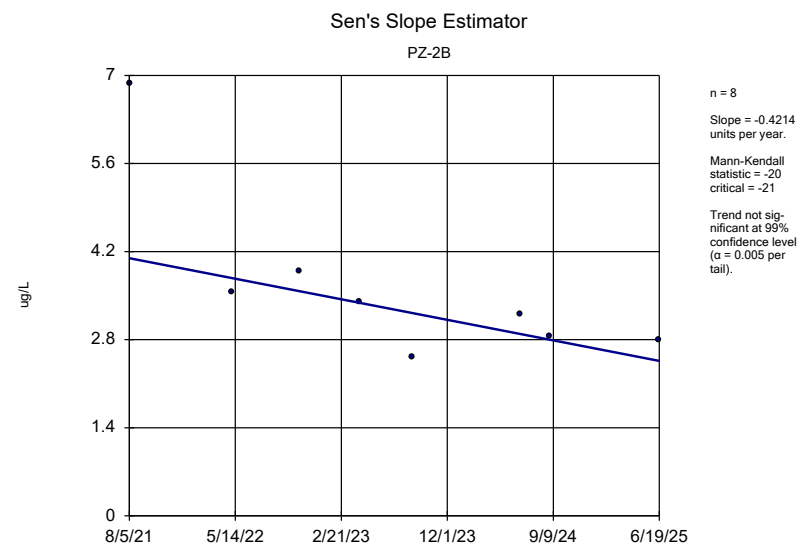
Constituent: 1,1-Dichloroethane Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: 1,1-Dichloroethane Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



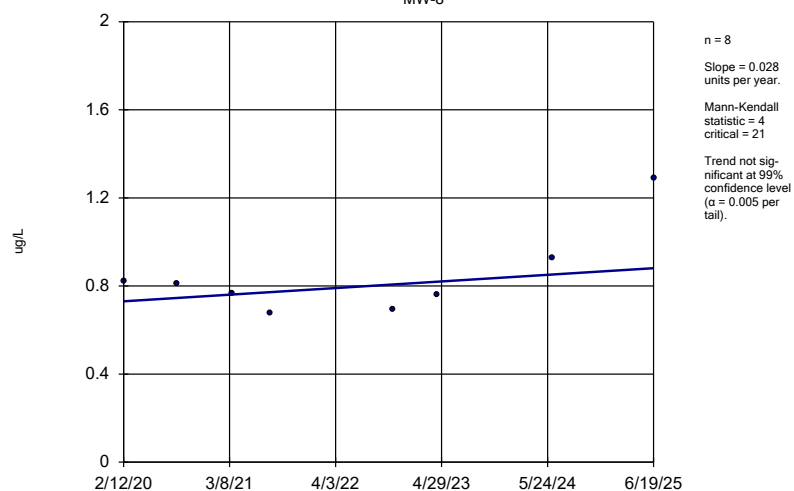
Constituent: 1,1-Dichloroethane Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: 1,1-Dichloroethane Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Sen's Slope Estimator

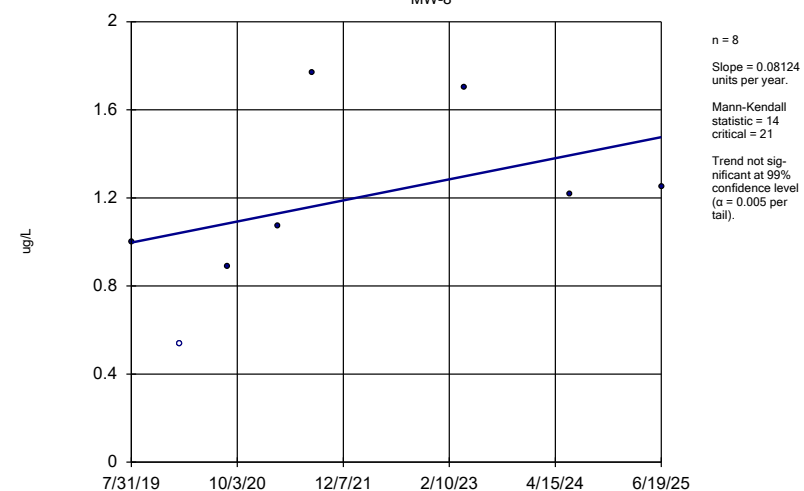
MW-8



Constituent: 1,2-Dichloropropane Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Sen's Slope Estimator

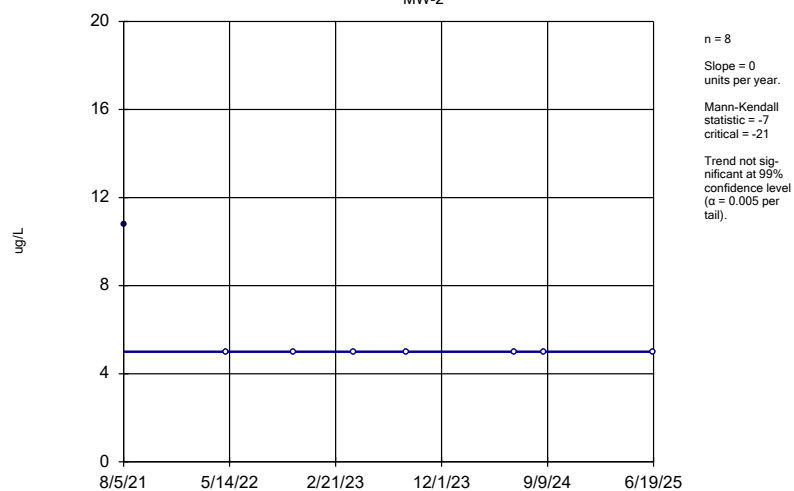
MW-8



Constituent: 2,4-D [2C] Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Sen's Slope Estimator

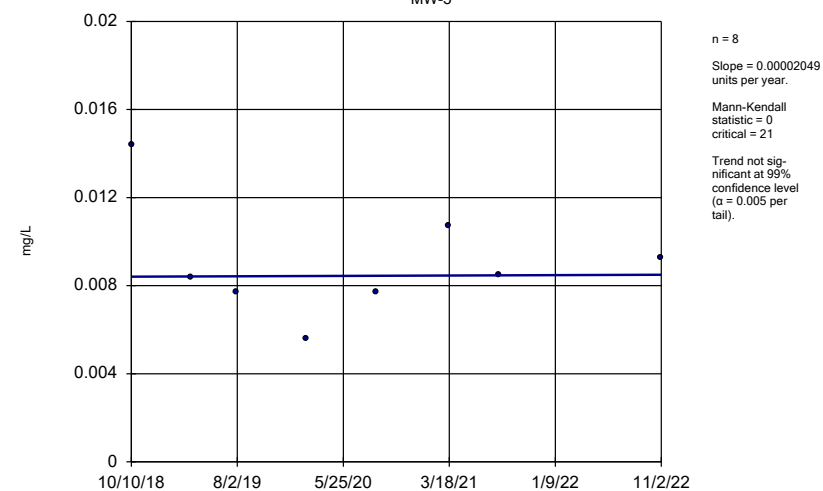
MW-2



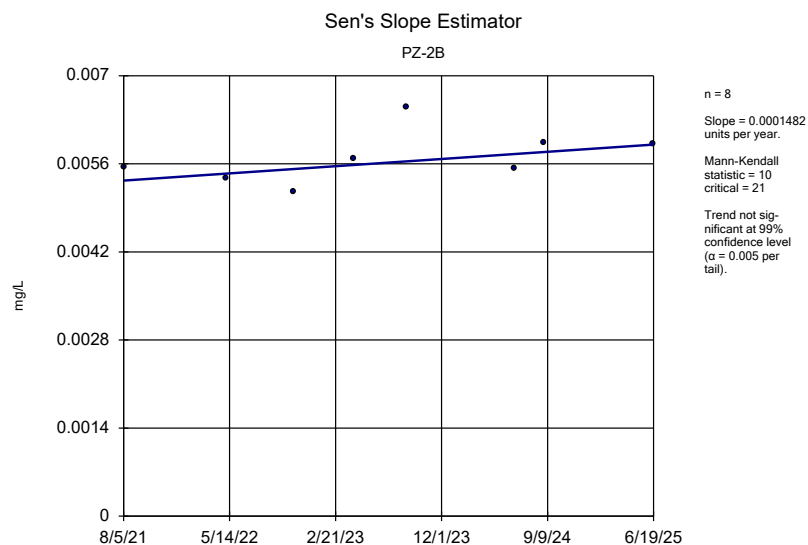
Constituent: Acetone Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Sen's Slope Estimator

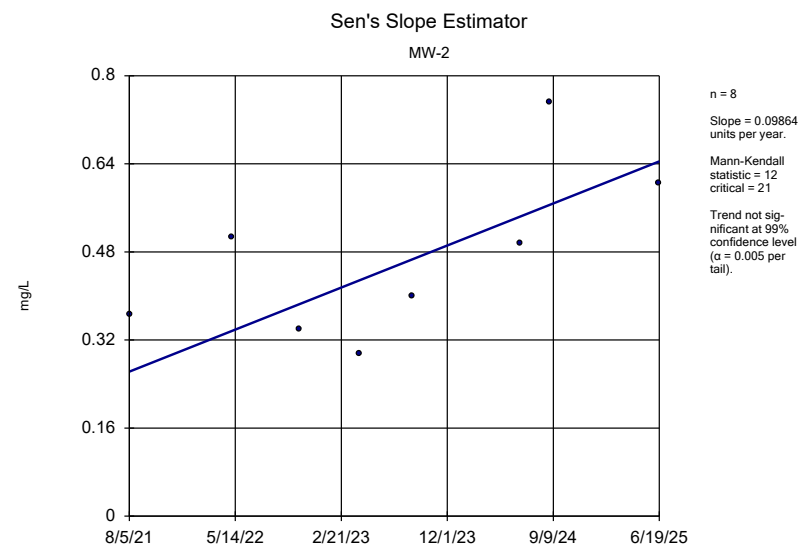
MW-3



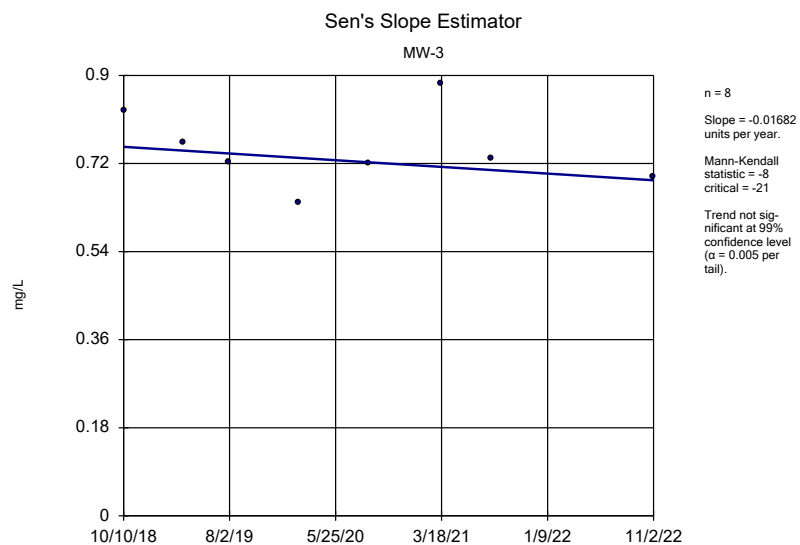
Constituent: Arsenic Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



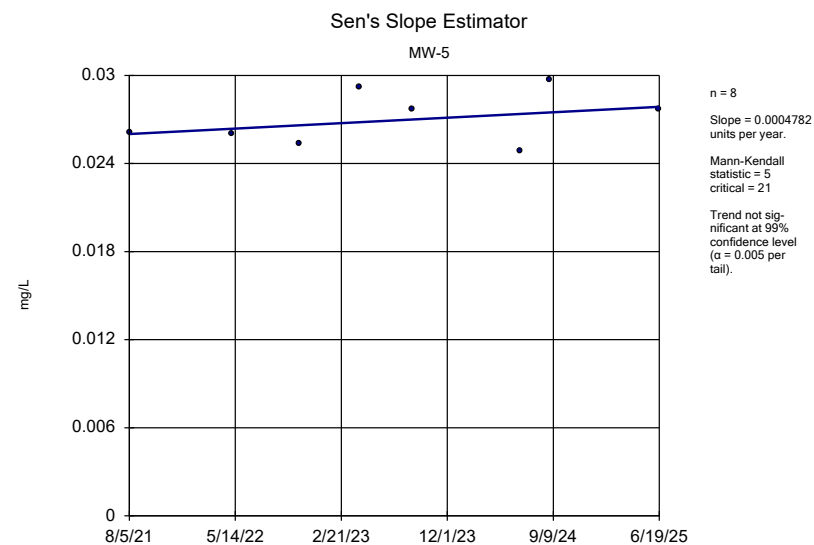
Constituent: Arsenic Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



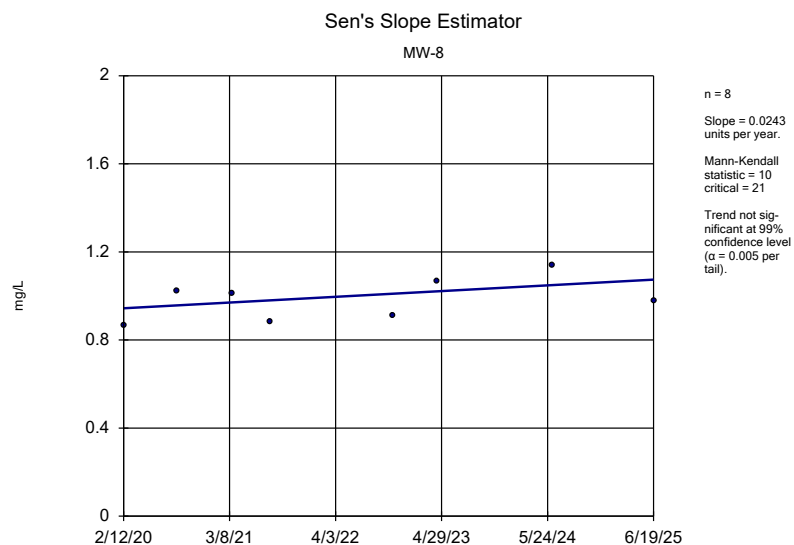
Constituent: Barium Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



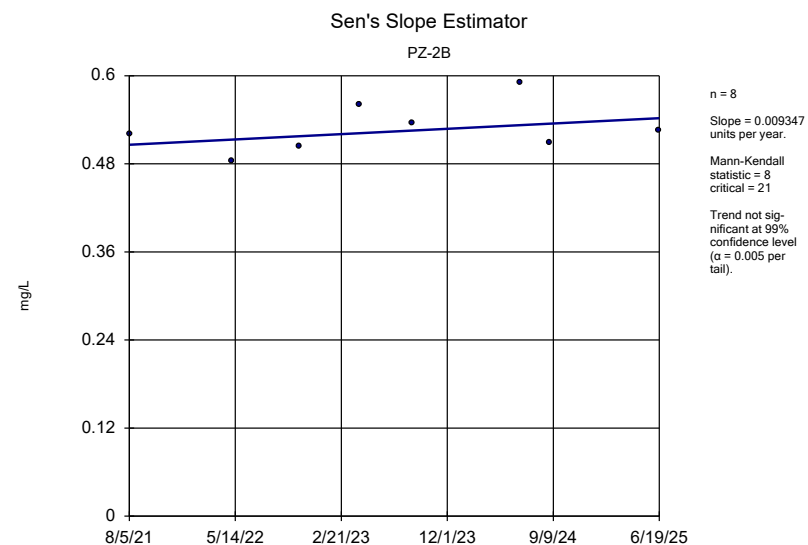
Constituent: Barium Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



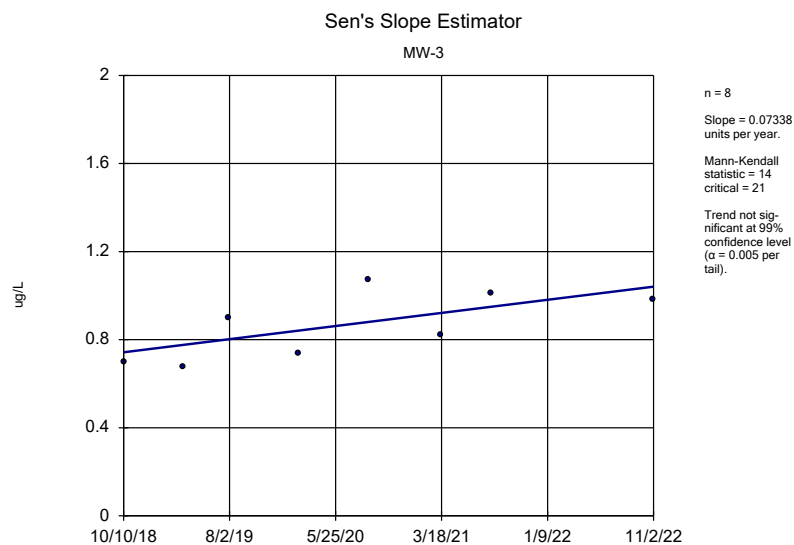
Constituent: Barium Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



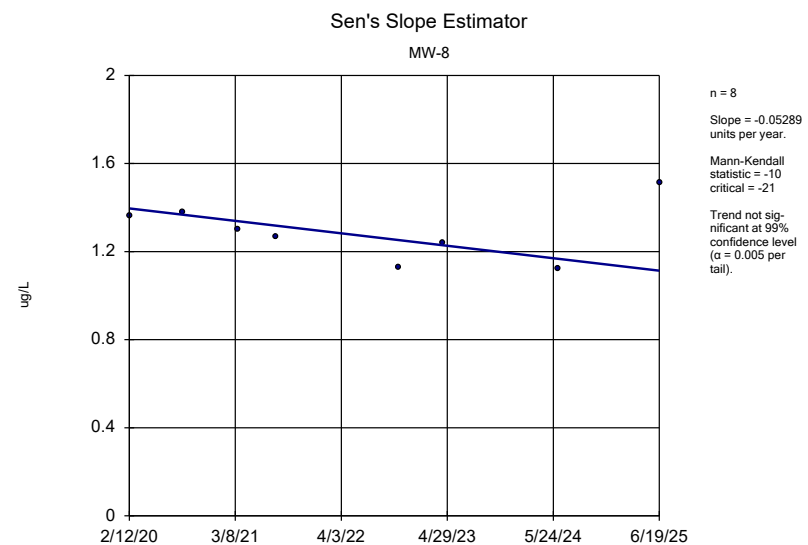
Constituent: Barium Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: Barium Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



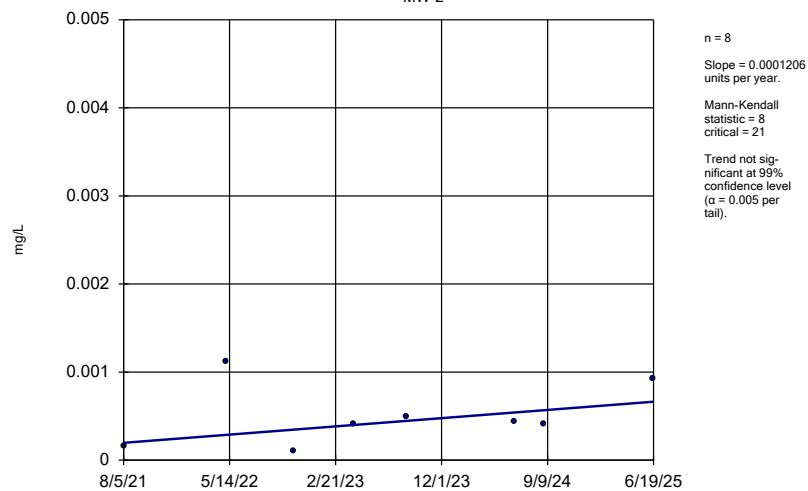
Constituent: Benzene Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: Benzene Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Sen's Slope Estimator

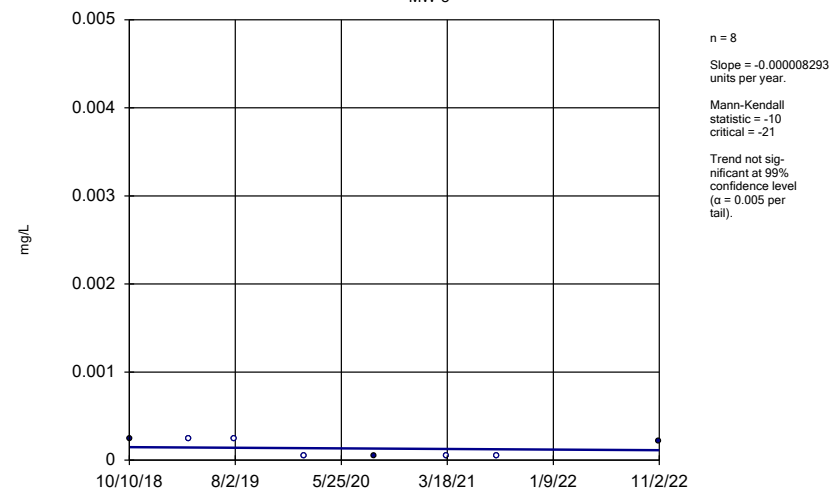
MW-2



Constituent: Cadmium Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Sen's Slope Estimator

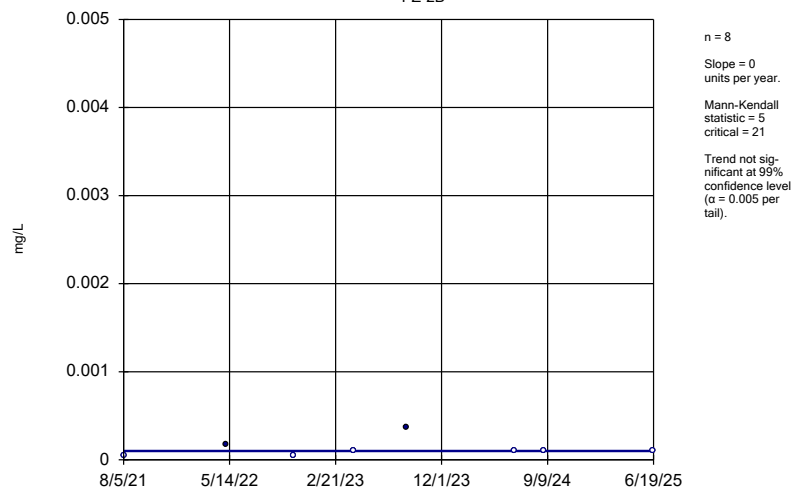
MW-3



Constituent: Cadmium Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Sen's Slope Estimator

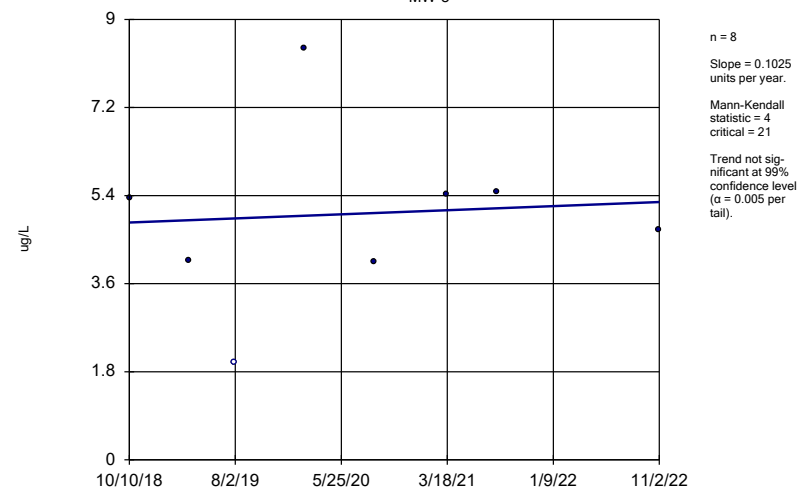
PZ-2B



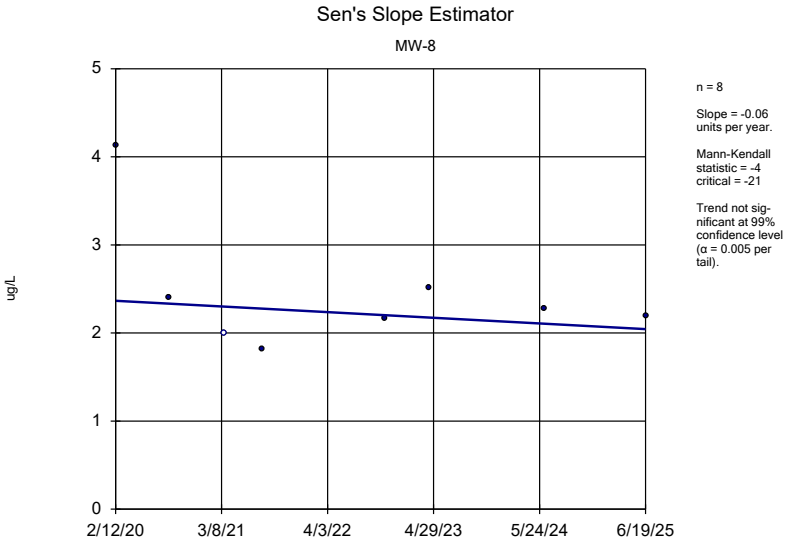
Constituent: Cadmium Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Sen's Slope Estimator

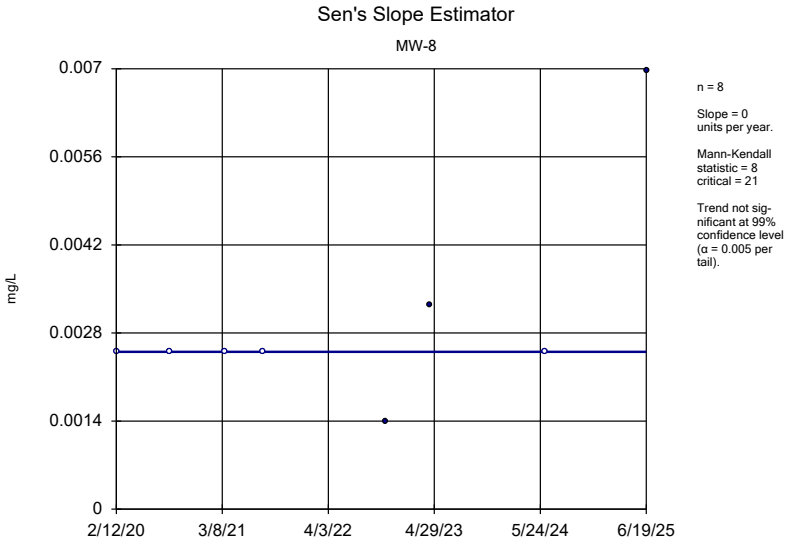
MW-3



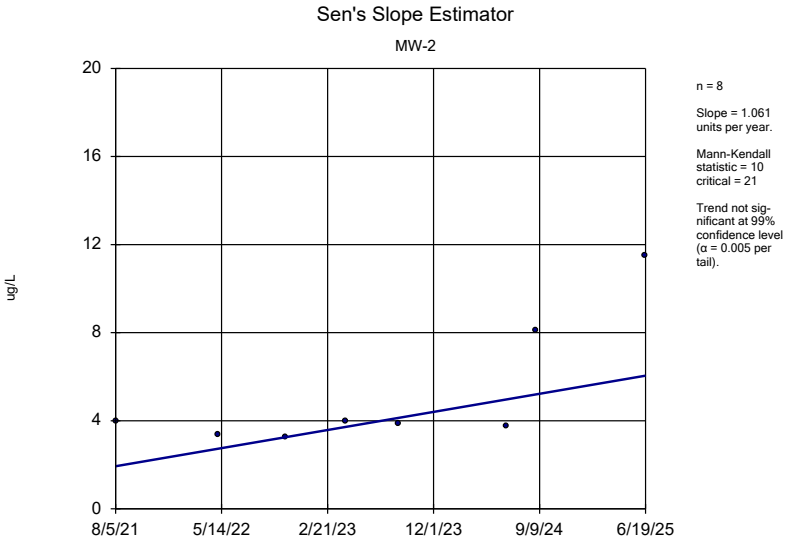
Constituent: Chloroethane Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



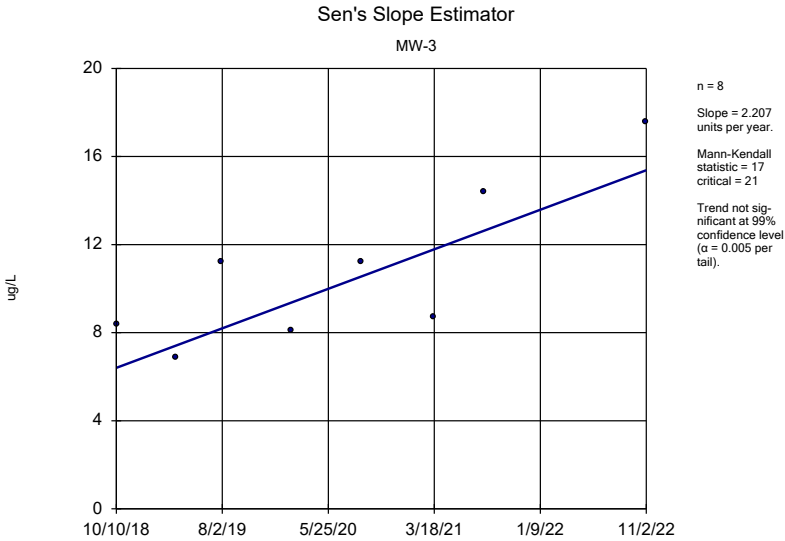
Constituent: Chloroethane Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



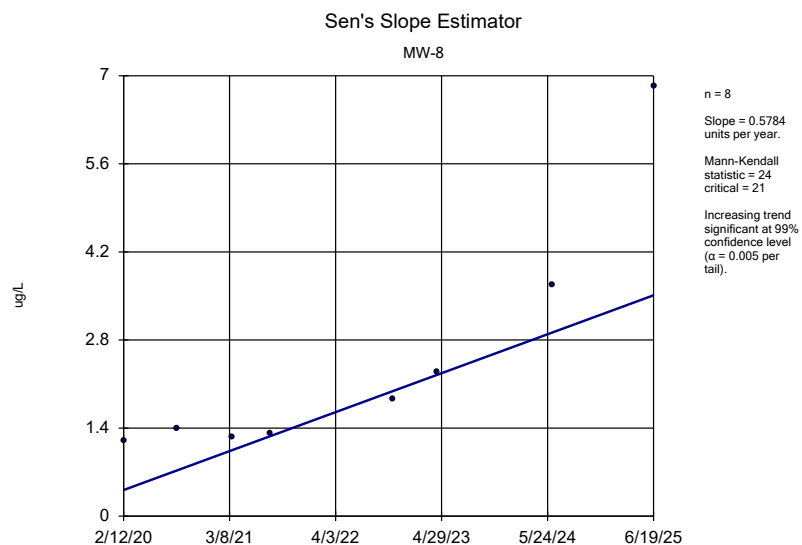
Constituent: Chromium Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



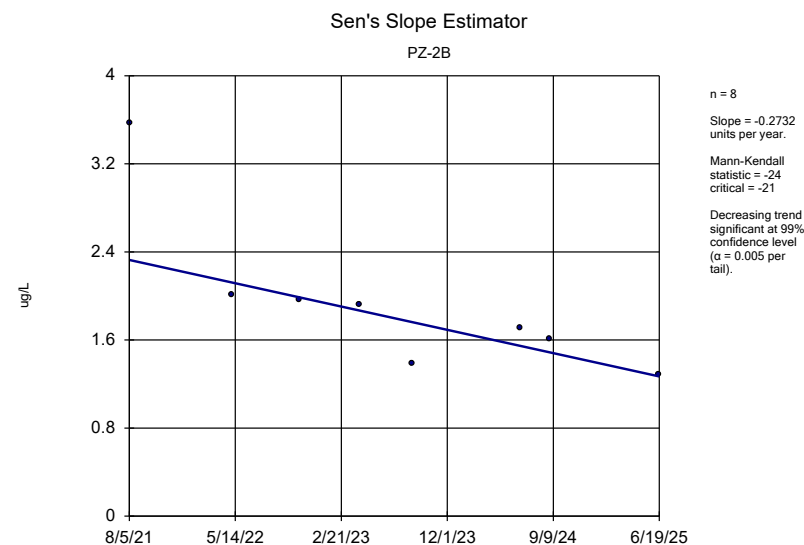
Constituent: cis-1,2-Dichloroethene Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



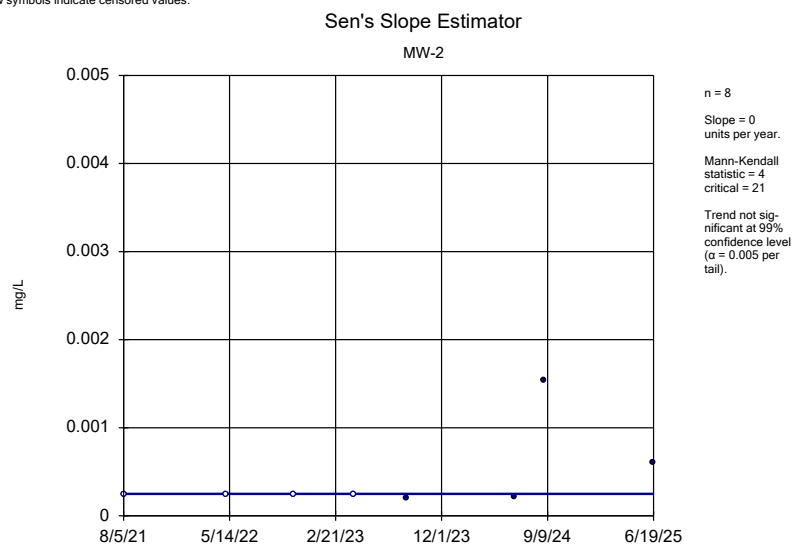
Constituent: cis-1,2-Dichloroethene Analysis Run 10/13/2025 9:42 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



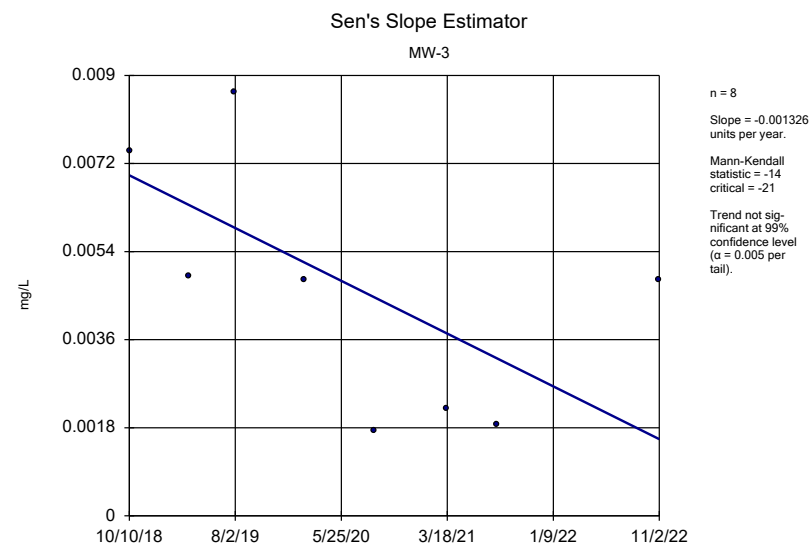
Constituent: cis-1,2-Dichloroethene Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: cis-1,2-Dichloroethene Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

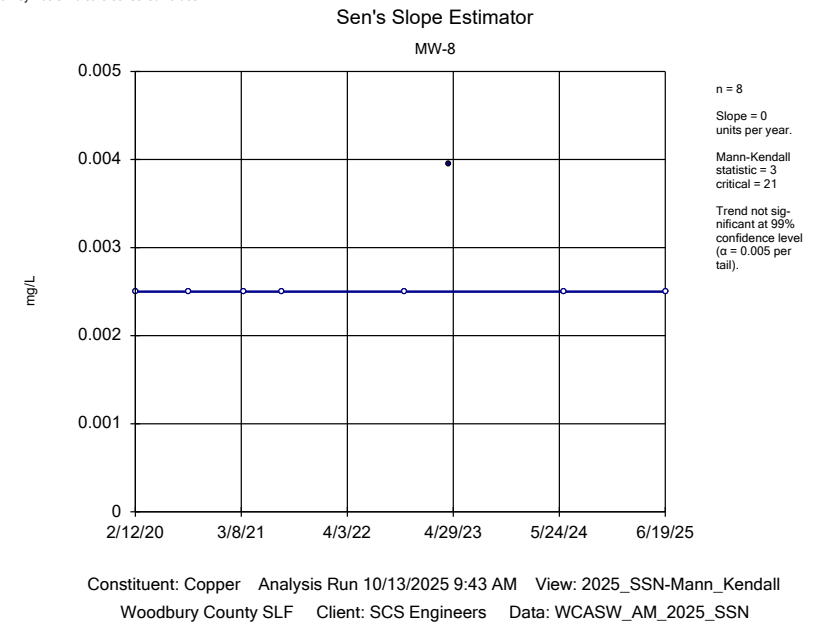
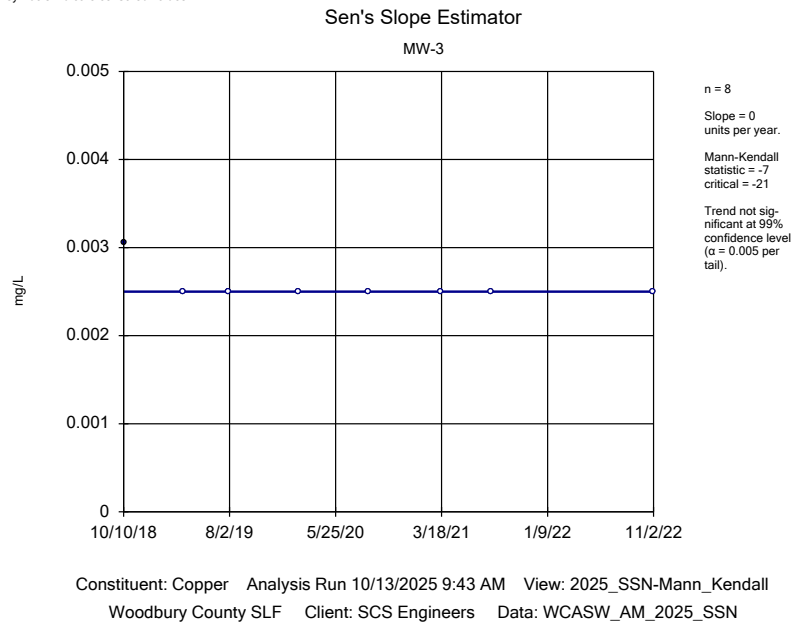
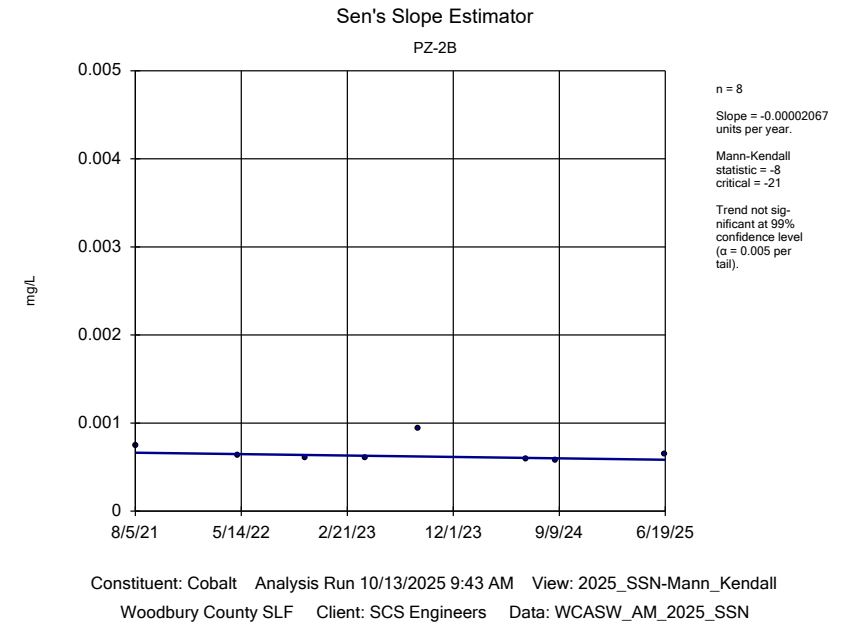
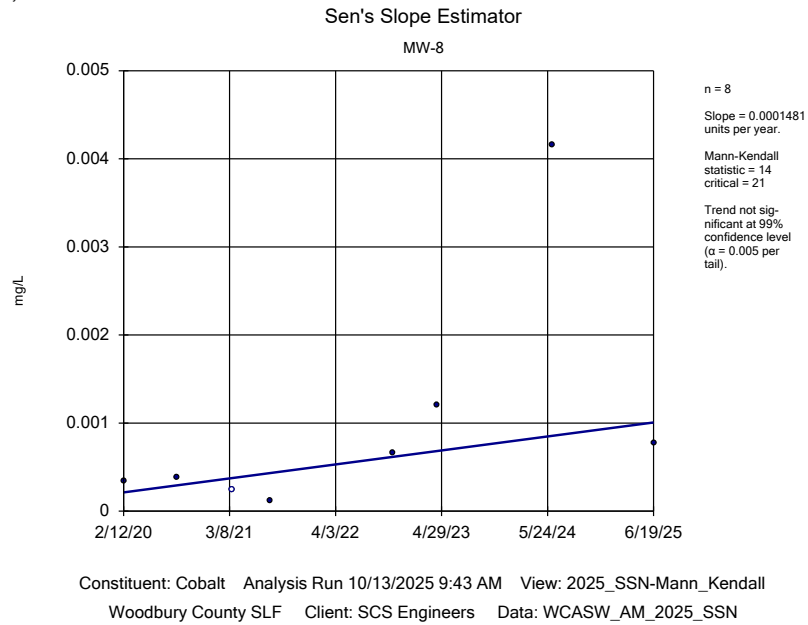


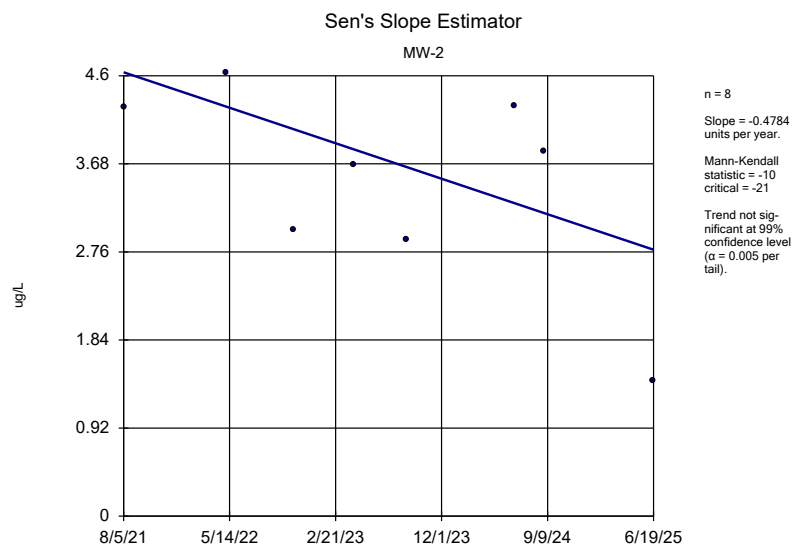
Constituent: Cobalt Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



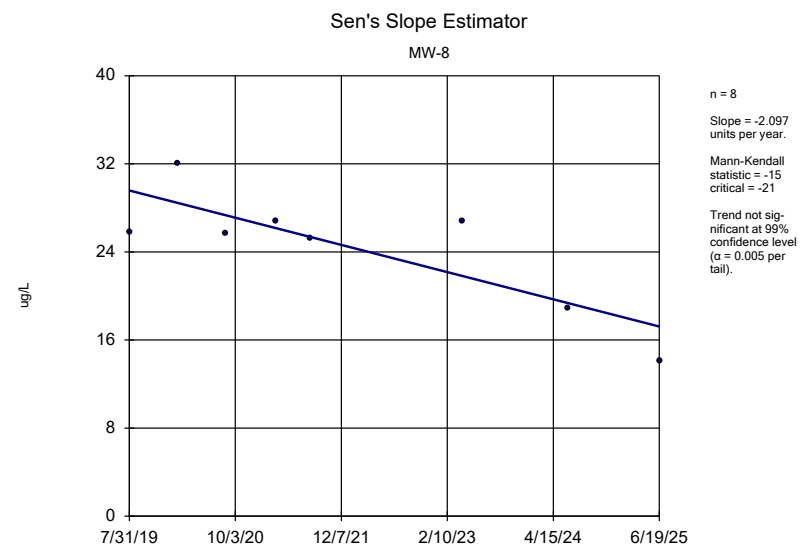
Constituent: Cobalt Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



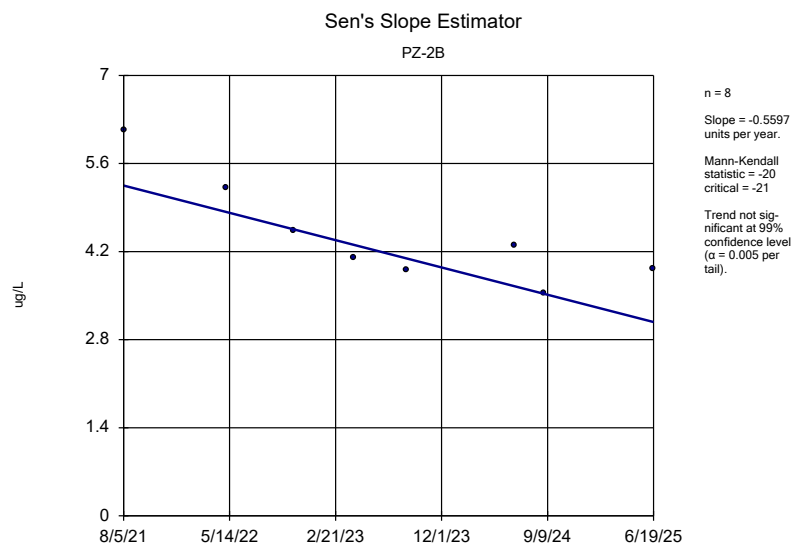




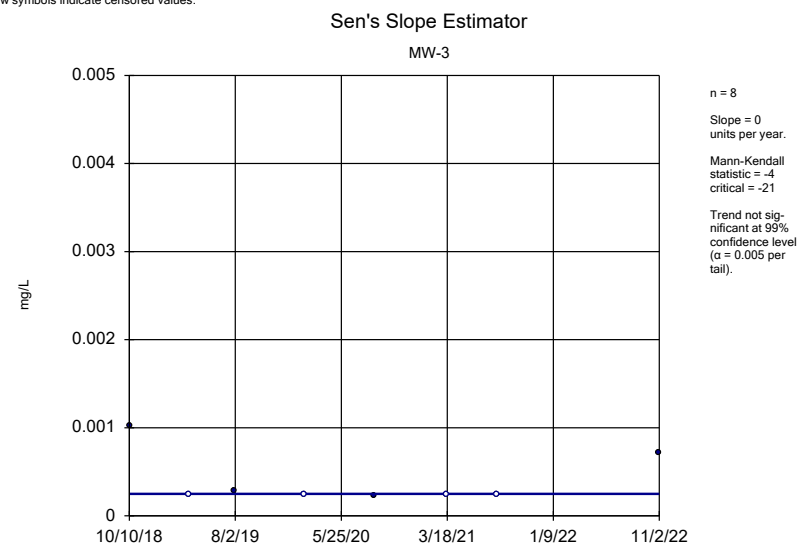
Constituent: Dichlorodifluoromethane Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: Dichlorodifluoromethane Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



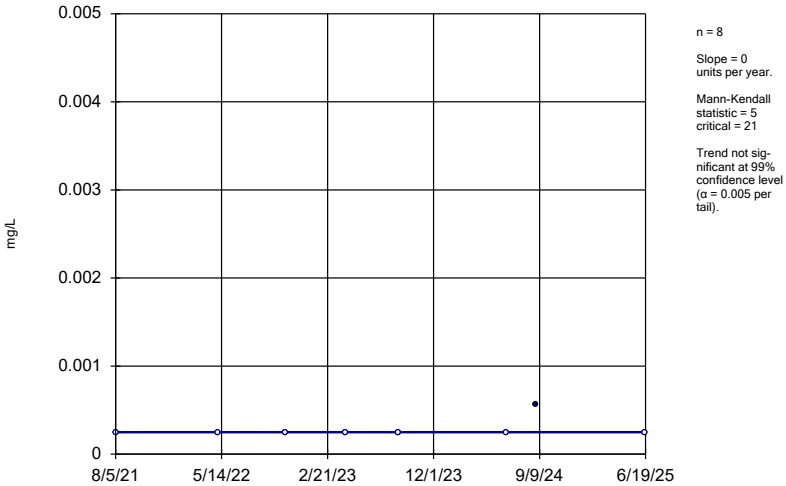
Constituent: Dichlorodifluoromethane Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: Lead Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

Sen's Slope Estimator

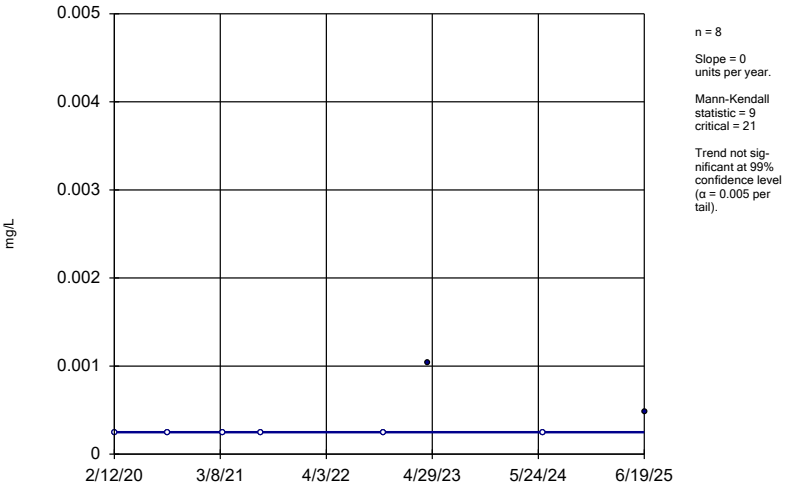
MW-5



Constituent: Lead Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

Sen's Slope Estimator

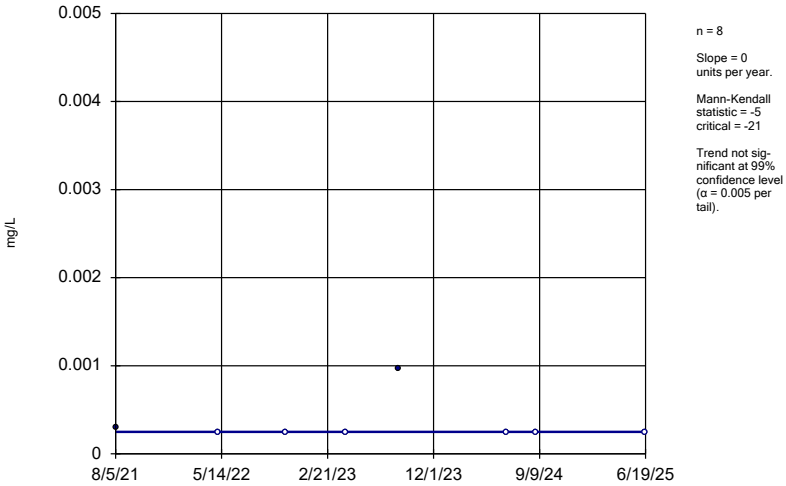
MW-8



Constituent: Lead Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

Sen's Slope Estimator

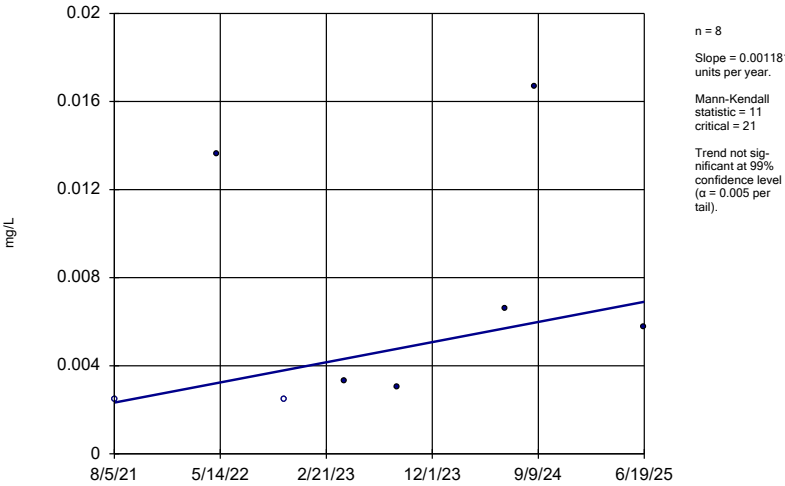
PZ-2B



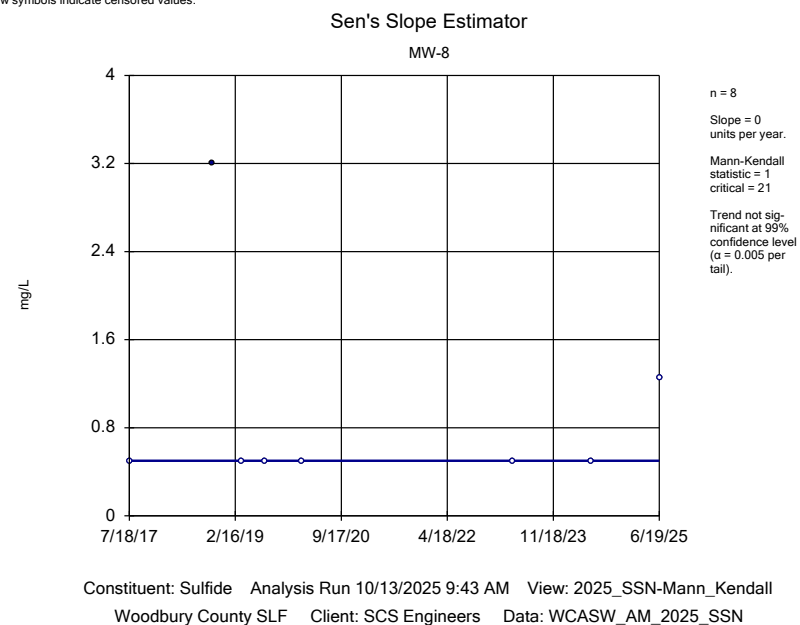
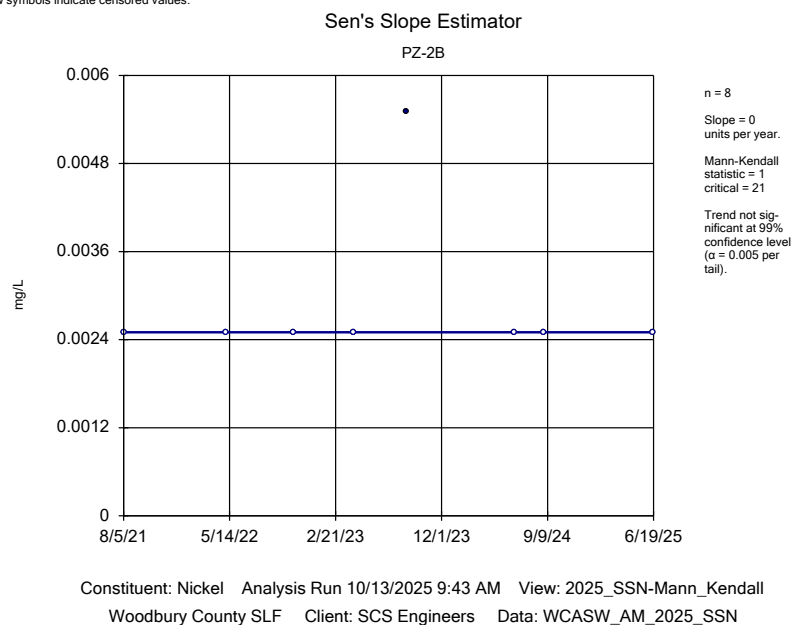
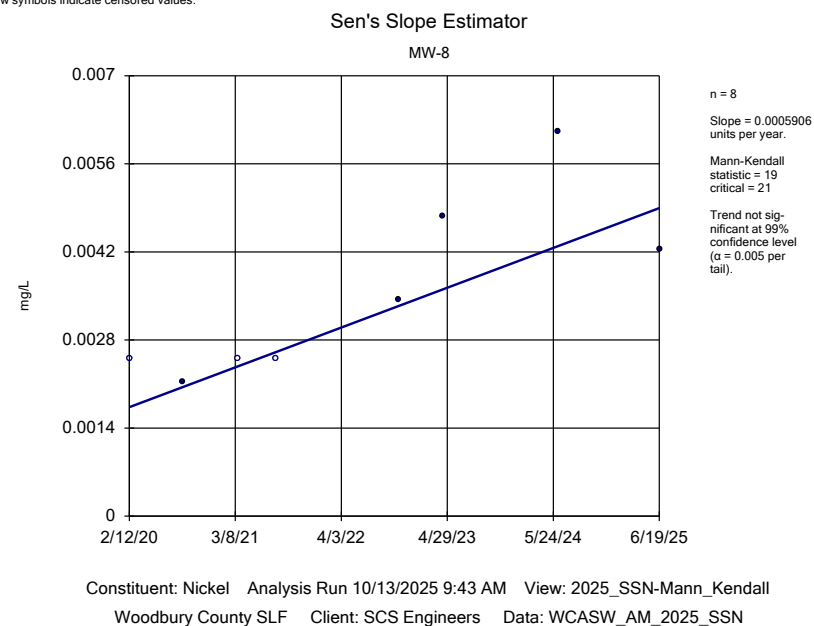
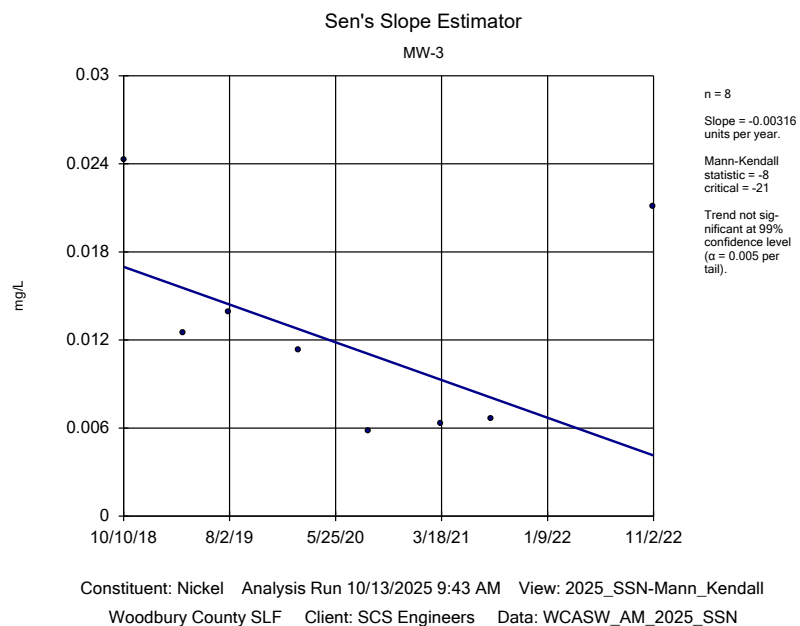
Constituent: Lead Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

Sen's Slope Estimator

MW-2

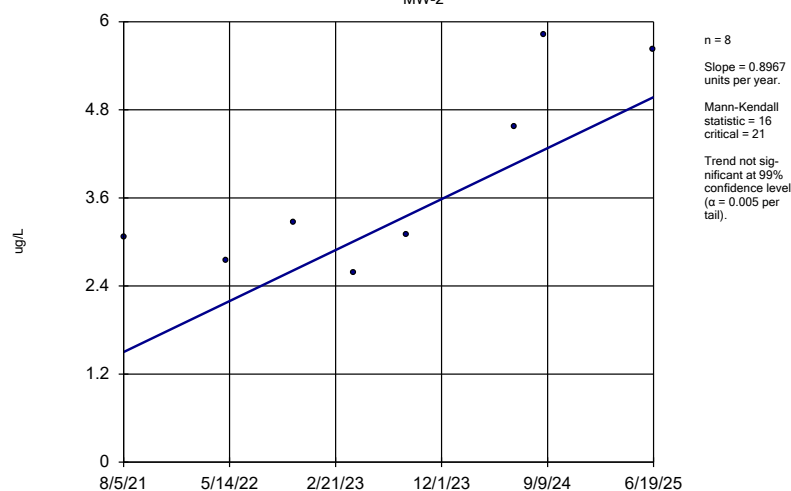


Constituent: Nickel Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



## Sen's Slope Estimator

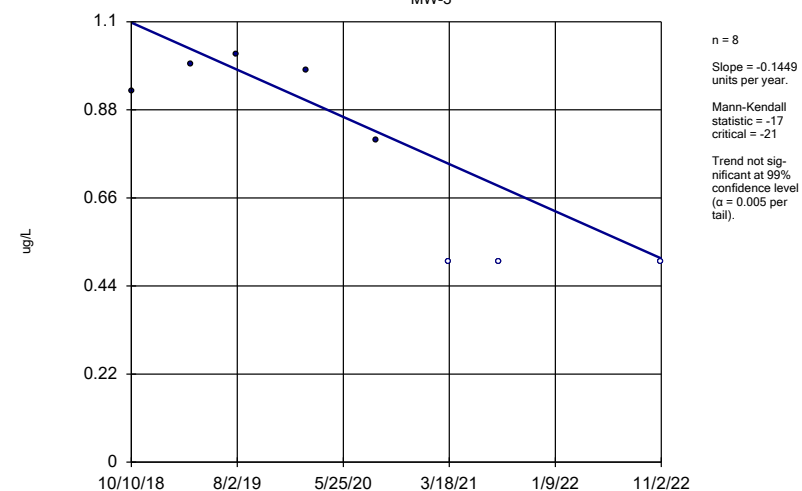
MW-2



Constituent: Tetrachloroethene Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Sen's Slope Estimator

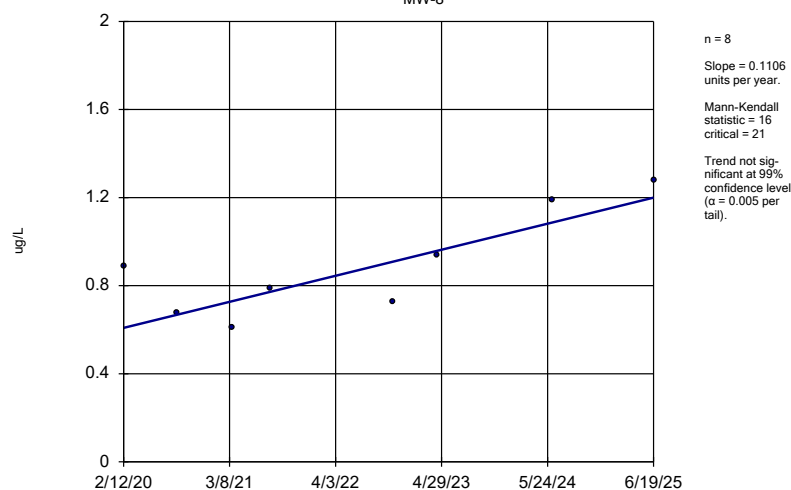
MW-3



Constituent: Tetrachloroethene Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Sen's Slope Estimator

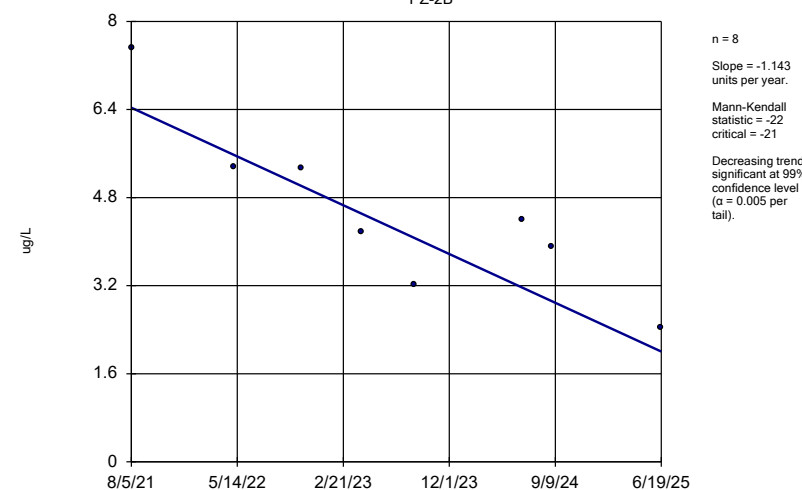
MW-8



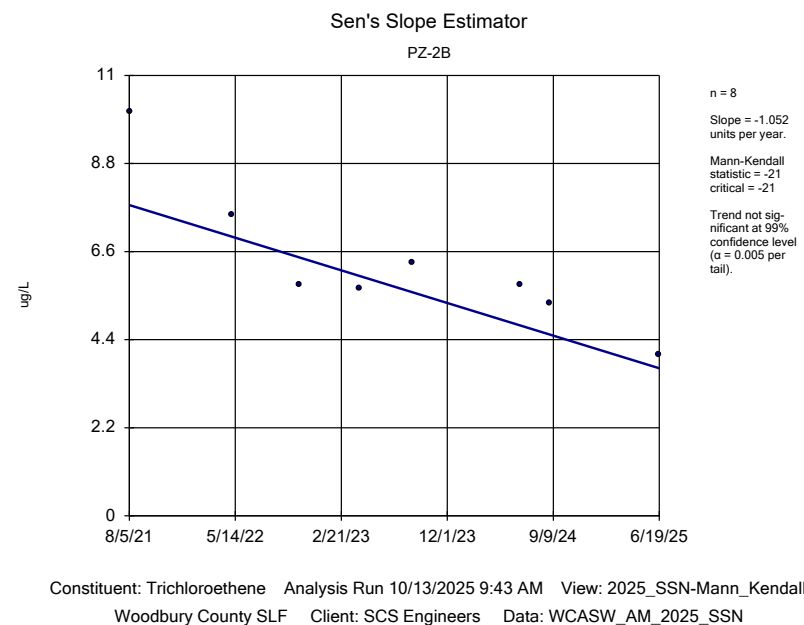
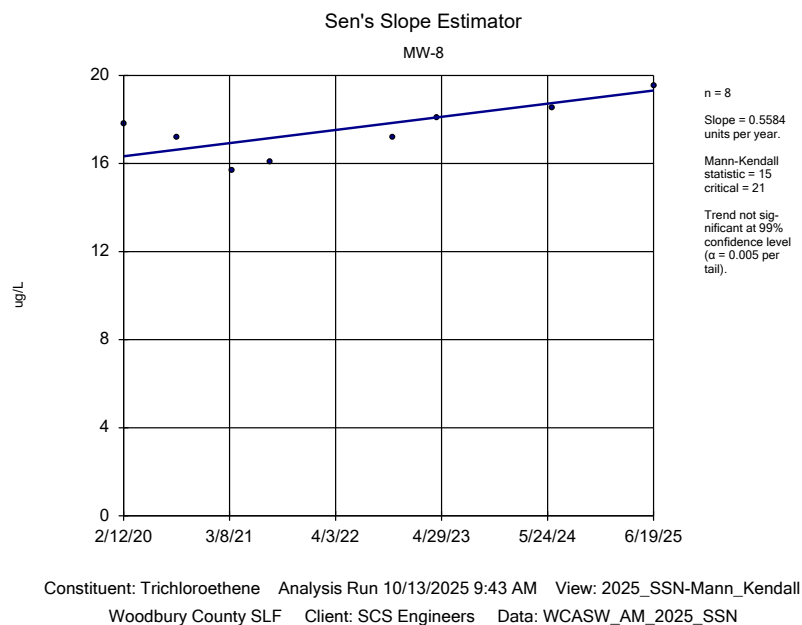
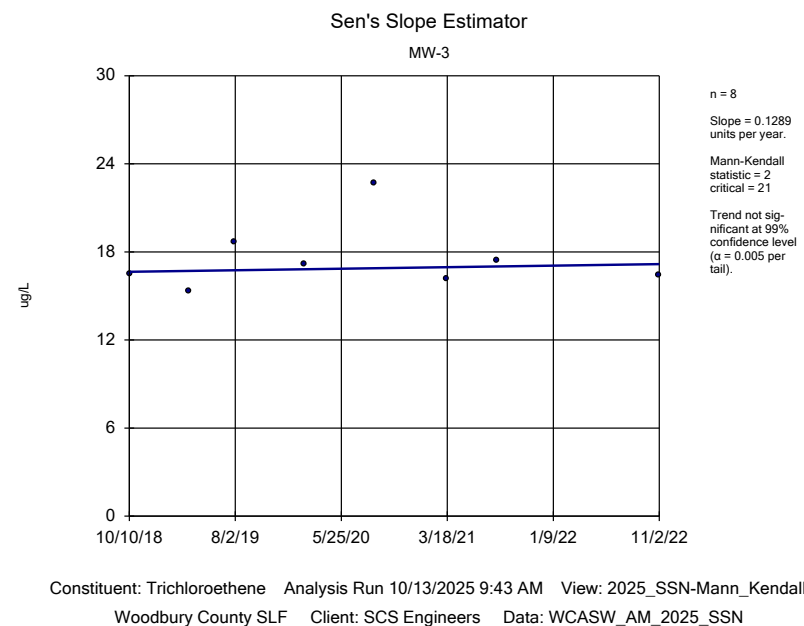
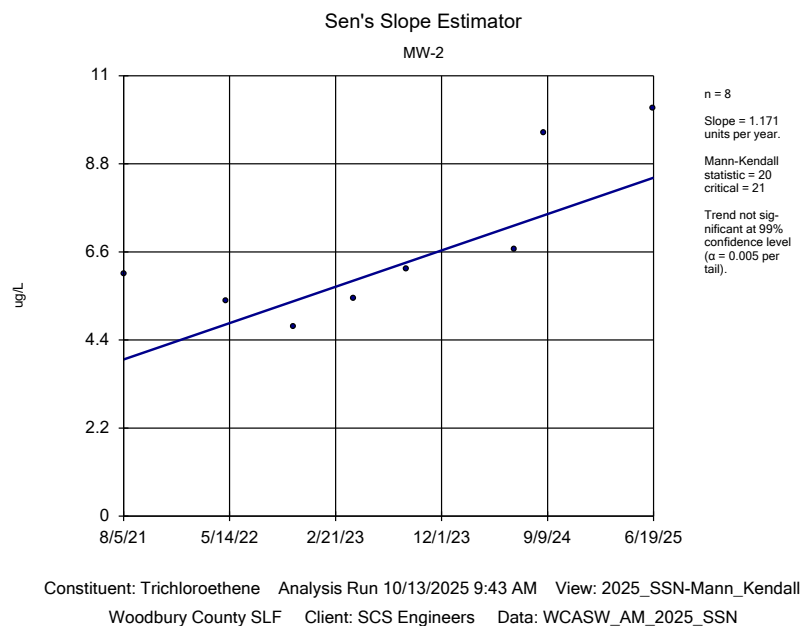
Constituent: Tetrachloroethene Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

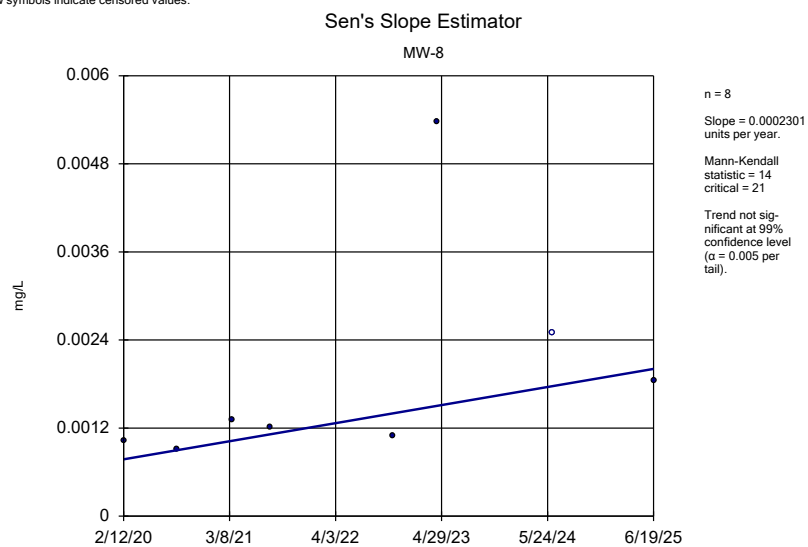
## Sen's Slope Estimator

PZ-2B

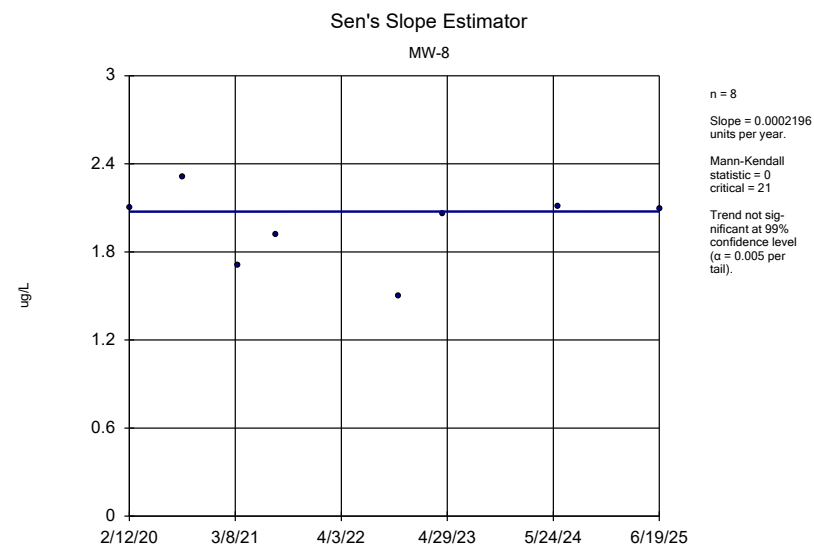


Constituent: Tetrachloroethene Analysis Run 10/13/2025 9:43 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

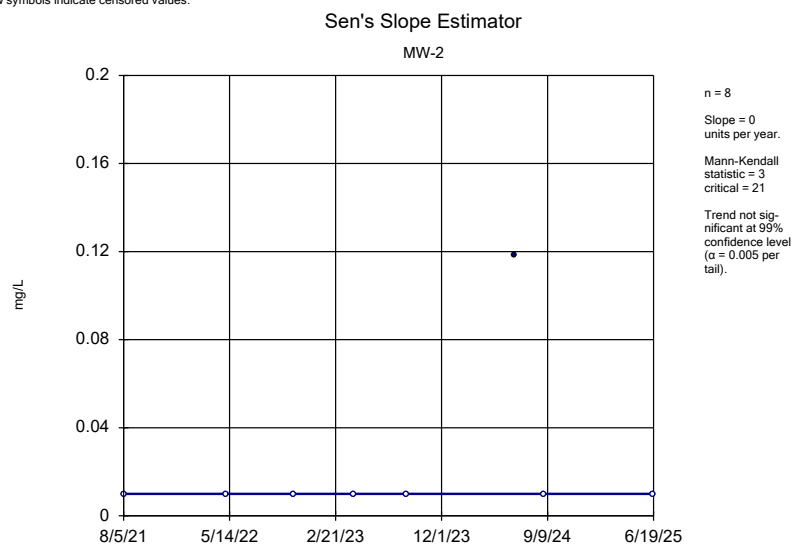




Constituent: Vanadium Analysis Run 10/13/2025 9:44 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: Vinyl Chloride Analysis Run 10/13/2025 9:44 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: Zinc Analysis Run 10/13/2025 9:44 AM View: 2025\_SSN-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## **Confidence Interval Summary Table and Graphs**



# Confidence Interval

Woodbury County SLF

Client: SCS Engineers

Data: WCASW\_AM\_2025\_SSN

Printed 10/17/2025, 9:54 AM

| <u>Constituent</u>             | <u>Well</u> | <u>Upper Lim.</u> | <u>Lower Lim.</u> | <u>Compliance</u> | <u>Sig.</u> | <u>N</u> | <u>%NDs</u> | <u>Transform</u> | <u>Alpha</u> | <u>Method</u>  |
|--------------------------------|-------------|-------------------|-------------------|-------------------|-------------|----------|-------------|------------------|--------------|----------------|
| 1,1-Dichloroethane (ug/L)      | MW-2        | 7.708             | 4.681             | 140               | No          | 8        | 0           | No               | 0.01         | Param.         |
| 1,1-Dichloroethane (ug/L)      | MW-3        | 6.466             | 4.404             | 140               | No          | 8        | 0           | No               | 0.01         | Param.         |
| 1,1-Dichloroethane (ug/L)      | MW-8        | 34.99             | 26.21             | 140               | No          | 8        | 0           | No               | 0.01         | Param.         |
| 1,1-Dichloroethane (ug/L)      | PZ-2B       | 6.88              | 2.52              | 140               | No          | 8        | 0           | No               | 0.004        | NP (normality) |
| 1,2-Dichloropropane (ug/L)     | MW-8        | 1.053             | 0.6352            | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| 2,4-D [2C] (ug/L)              | MW-8        | 1.613             | 0.7456            | 70                | No          | 8        | 12.5        | No               | 0.01         | Param.         |
| Acetone (ug/L)                 | MW-2        | 10.8              | 5                 | 6300              | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Arsenic (mg/L)                 | MW-3        | 0.0118            | 0.006276          | 0.01              | No          | 8        | 0           | No               | 0.01         | Param.         |
| Arsenic (mg/L)                 | PZ-2B       | 0.006144          | 0.005264          | 0.01              | No          | 8        | 0           | No               | 0.01         | Param.         |
| Barium (mg/L)                  | MW-2        | 0.6315            | 0.3086            | 2                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Barium (mg/L)                  | MW-3        | 0.8296            | 0.6663            | 2                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Barium (mg/L)                  | MW-5        | 0.02896           | 0.0252            | 2                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Barium (mg/L)                  | MW-8        | 1.084             | 0.8838            | 2                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Barium (mg/L)                  | PZ-2B       | 0.564             | 0.4932            | 2                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Benzene (ug/L)                 | MW-3        | 1.023             | 0.702             | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Benzene (ug/L)                 | MW-8        | 1.427             | 1.151             | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Cadmium (mg/L)                 | MW-2        | 0.0008782         | 0.0001366         | 0.005             | No          | 8        | 0           | No               | 0.01         | Param.         |
| Cadmium (mg/L)                 | MW-3        | 0.00025           | 0.00005           | 0.005             | No          | 8        | 62.5        | No               | 0.004        | NP (NDs)       |
| Cadmium (mg/L)                 | PZ-2B       | 0.000367          | 0.00005           | 0.005             | No          | 8        | 75          | No               | 0.004        | NP (NDs)       |
| Chloroethane (ug/L)            | MW-3        | 6.857             | 3.008             | 2800              | No          | 8        | 12.5        | No               | 0.01         | Param.         |
| Chloroethane (ug/L)            | MW-8        | 4.13              | 1.82              | 2800              | No          | 8        | 12.5        | No               | 0.004        | NP (normality) |
| Chromium (mg/L)                | MW-8        | 0.00698           | 0.00139           | 0.1               | No          | 8        | 62.5        | No               | 0.004        | NP (NDs)       |
| cis-1,2-Dichloroethene (ug/L)  | MW-2        | 11.5              | 3.24              | 70                | No          | 8        | 0           | No               | 0.004        | NP (normality) |
| cis-1,2-Dichloroethene (ug/L)  | MW-3        | 14.66             | 6.955             | 70                | No          | 8        | 0           | No               | 0.01         | Param.         |
| Cobalt (mg/L)                  | MW-2        | 0.00154           | 0.000204          | 0.002223          | No          | 8        | 50          | No               | 0.004        | NP (normality) |
| Cobalt (mg/L)                  | MW-3        | 0.007289          | 0.001839          | 0.002223          | No          | 8        | 0           | No               | 0.01         | Param.         |
| Cobalt (mg/L)                  | MW-8        | 0.00416           | 0.0001185         | 0.002223          | No          | 8        | 12.5        | No               | 0.004        | NP (normality) |
| Cobalt (mg/L)                  | PZ-2B       | 0.000939          | 0.000583          | 0.002223          | No          | 8        | 0           | No               | 0.004        | NP (normality) |
| Copper (mg/L)                  | MW-3        | 0.00306           | 0.0025            | 1.3               | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Copper (mg/L)                  | MW-8        | 0.003945          | 0.0025            | 1.3               | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Dichlorodifluoromethane (ug/L) | MW-2        | 4.598             | 2.389             | 1000              | No          | 8        | 0           | No               | 0.01         | Param.         |
| Dichlorodifluoromethane (ug/L) | MW-8        | 30.22             | 18.61             | 1000              | No          | 8        | 0           | No               | 0.01         | Param.         |
| Dichlorodifluoromethane (ug/L) | PZ-2B       | 5.349             | 3.565             | 1000              | No          | 8        | 0           | No               | 0.01         | Param.         |
| Lead (mg/L)                    | MW-3        | 0.00103           | 0.0002355         | 0.015             | No          | 8        | 50          | No               | 0.004        | NP (normality) |
| Lead (mg/L)                    | MW-5        | 0.000567          | 0.00025           | 0.015             | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Lead (mg/L)                    | MW-8        | 0.001035          | 0.00025           | 0.015             | No          | 8        | 75          | No               | 0.004        | NP (NDs)       |
| Lead (mg/L)                    | PZ-2B       | 0.000974          | 0.00025           | 0.015             | No          | 8        | 75          | No               | 0.004        | NP (NDs)       |
| Nickel (mg/L)                  | MW-2        | 0.01219           | 0.001663          | 0.1               | No          | 8        | 25          | No               | 0.01         | Param.         |
| Nickel (mg/L)                  | MW-3        | 0.02005           | 0.0054            | 0.1               | No          | 8        | 0           | No               | 0.01         | Param.         |
| Nickel (mg/L)                  | MW-8        | 0.005265          | 0.002652          | 0.1               | No          | 8        | 37.5        | No               | 0.01         | Param.         |
| Nickel (mg/L)                  | PZ-2B       | 0.0055            | 0.0025            | 0.1               | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Sulfide (mg/L)                 | MW-8        | 3.2               | 0.5               | 1                 | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Tetrachloroethene (ug/L)       | MW-2        | 5.227             | 2.468             | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Tetrachloroethene (ug/L)       | MW-3        | 1.019             | 0.8561            | 5                 | No          | 8        | 37.5        | No               | 0.01         | Param.         |
| Tetrachloroethene (ug/L)       | MW-8        | 1.143             | 0.6333            | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Trichloroethene (ug/L)         | MW-2        | 8.911             | 4.64              | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| <b>Trichloroethene (ug/L)</b>  | <b>MW-3</b> | <b>19.97</b>      | <b>15.11</b>      | <b>5</b>          | <b>Yes</b>  | <b>8</b> | <b>0</b>    | <b>No</b>        | <b>0.01</b>  | <b>Param.</b>  |
| <b>Trichloroethene (ug/L)</b>  | <b>MW-8</b> | <b>18.83</b>      | <b>16.19</b>      | <b>5</b>          | <b>Yes</b>  | <b>8</b> | <b>0</b>    | <b>No</b>        | <b>0.01</b>  | <b>Param.</b>  |
| Trichloroethene (ug/L)         | PZ-2B       | 8.236             | 4.402             | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Vanadium (mg/L)                | MW-8        | 0.005375          | 0.000911          | 0.035             | No          | 8        | 12.5        | No               | 0.004        | NP (normality) |

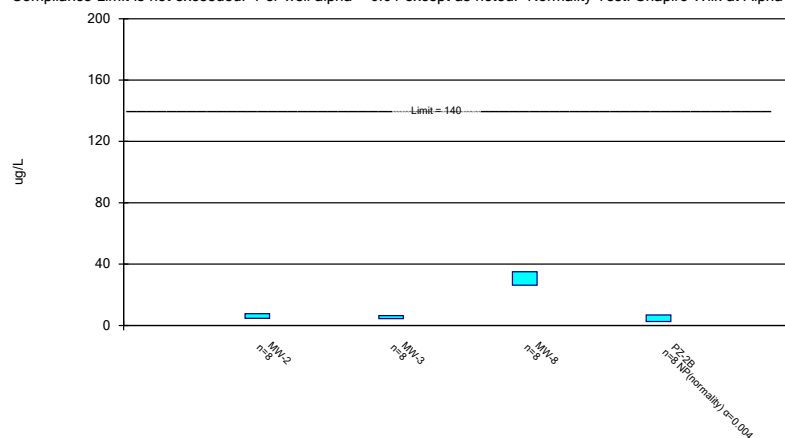
# Confidence Interval

Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN Printed 10/17/2025, 9:54 AM

| <u>Constituent</u>    | <u>Well</u> | <u>Upper Lim.</u> | <u>Lower Lim.</u> | <u>Compliance</u> | <u>Sig.</u> | <u>N</u> | <u>%NDs</u> | <u>Transform</u> | <u>Alpha</u> | <u>Method</u> |
|-----------------------|-------------|-------------------|-------------------|-------------------|-------------|----------|-------------|------------------|--------------|---------------|
| Vinyl Chloride (ug/L) | MW-8        | 2.248             | 1.701             | 2                 | No          | 8        | 0           | No               | 0.01         | Param.        |
| Zinc (mg/L)           | MW-2        | 0.1185            | 0.01              | 2                 | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)      |

## Parametric and Non-Parametric (NP) Confidence Interval

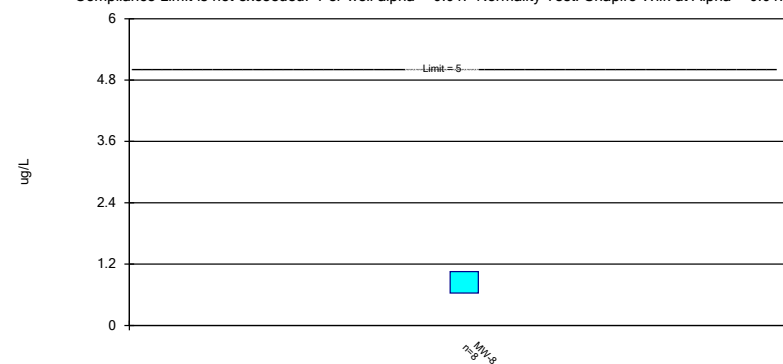
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,1-Dichloroethane Analysis Run 10/17/2025 9:47 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Parametric Confidence Interval

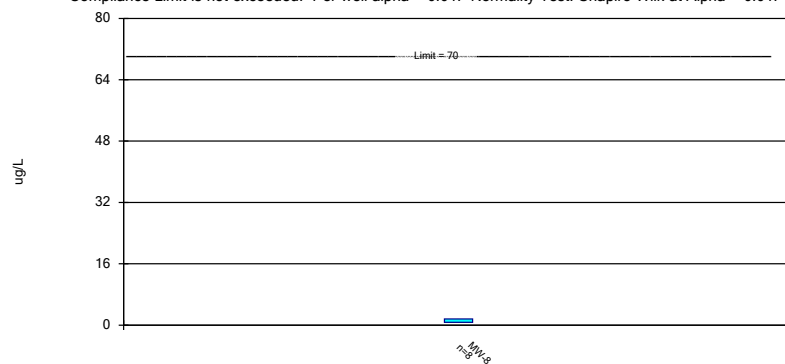
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,2-Dichloropropane Analysis Run 10/17/2025 9:47 AM View: 2025\_SSN-Confidence\_Interva  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Parametric Confidence Interval

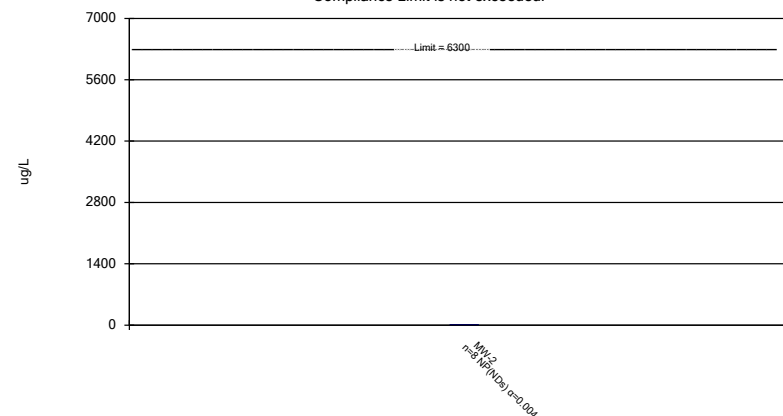
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 2,4-D [2C] Analysis Run 10/17/2025 9:47 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Non-Parametric Confidence Interval

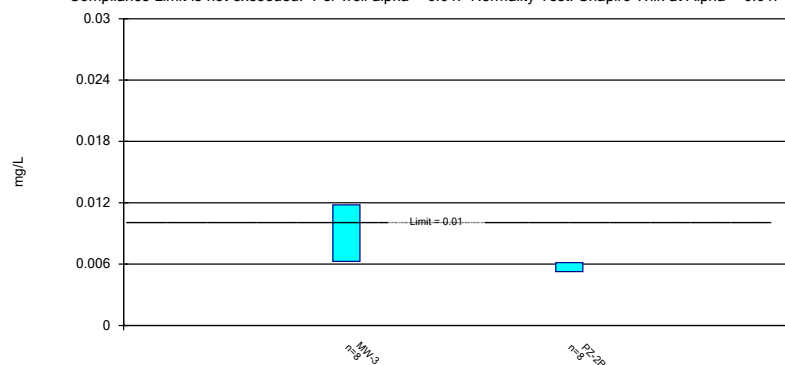
Compliance Limit is not exceeded.



Constituent: Acetone Analysis Run 10/17/2025 9:47 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Parametric Confidence Interval

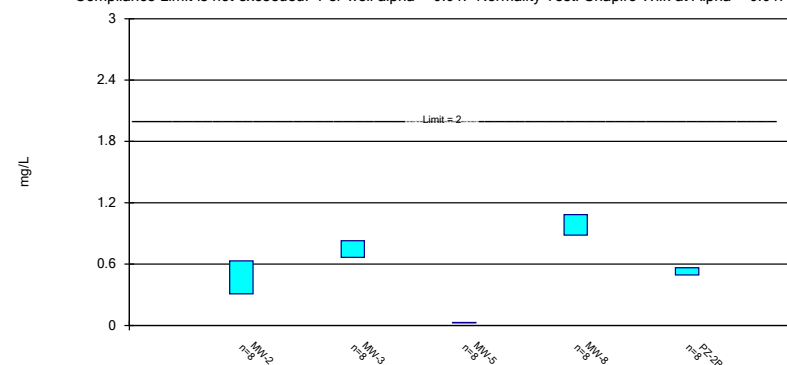
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 10/17/2025 9:47 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Parametric Confidence Interval

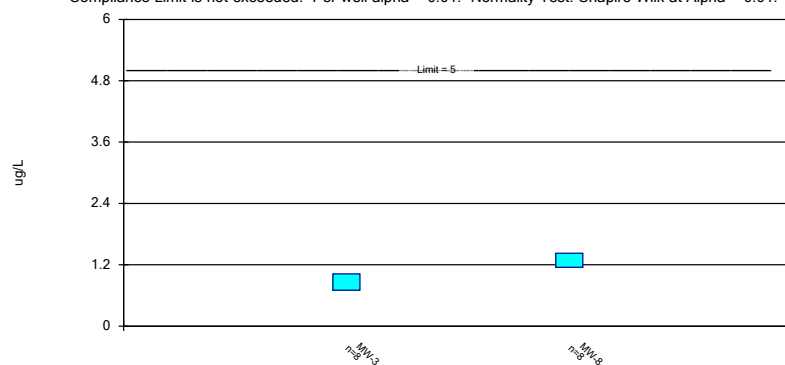
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Barium Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Parametric Confidence Interval

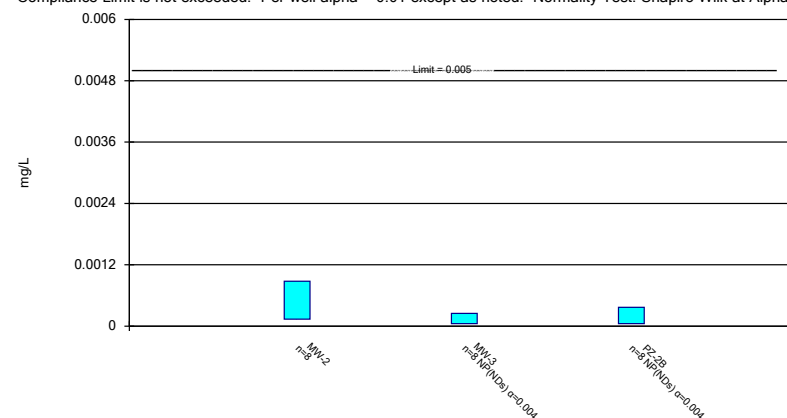
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Benzene Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Parametric and Non-Parametric (NP) Confidence Interval

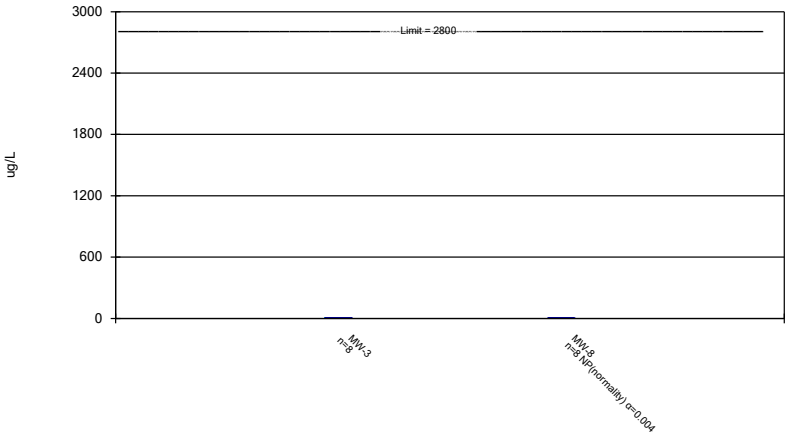
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cadmium Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

Parametric and Non-Parametric (NP) Confidence Interval

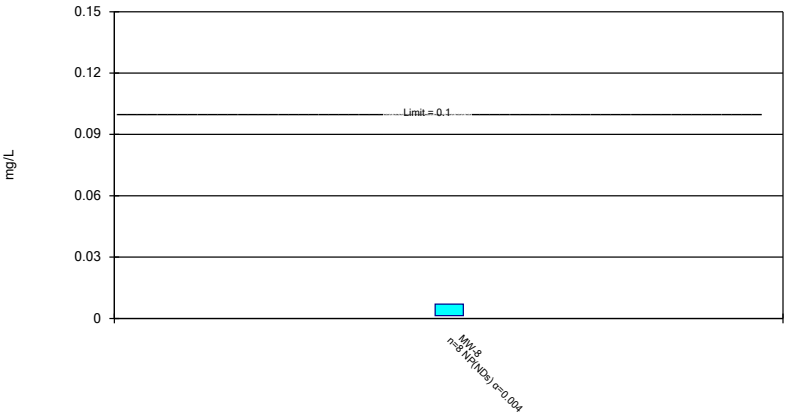
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chloroethane Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

Non-Parametric Confidence Interval

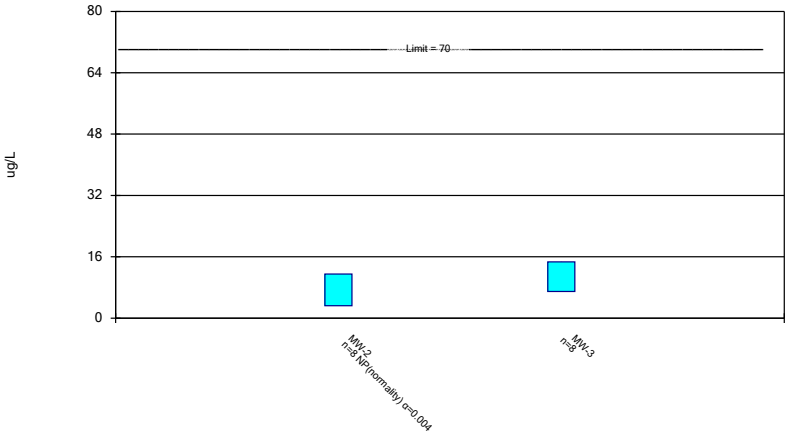
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

Parametric and Non-Parametric (NP) Confidence Interval

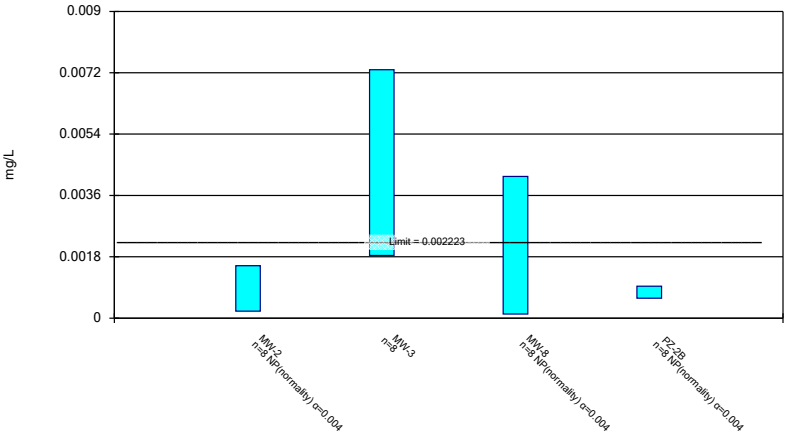
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: cis-1,2-Dichloroethene Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Inter  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

Parametric and Non-Parametric (NP) Confidence Interval

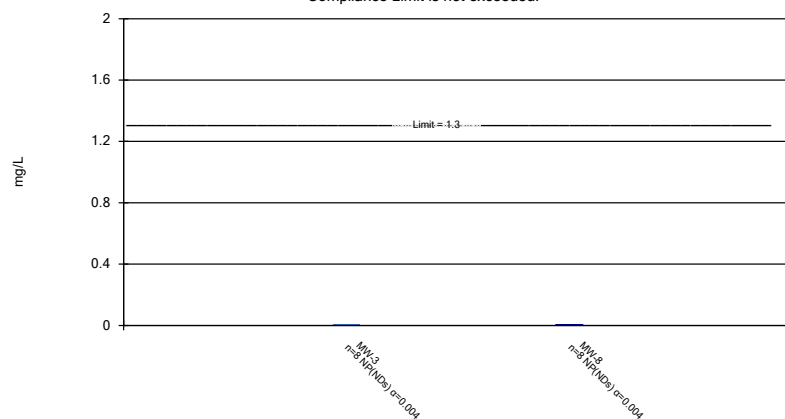
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Non-Parametric Confidence Interval

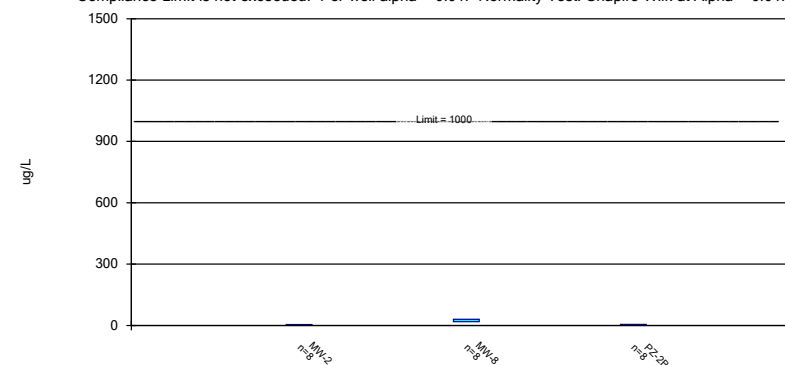
Compliance Limit is not exceeded.



Constituent: Copper Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Parametric Confidence Interval

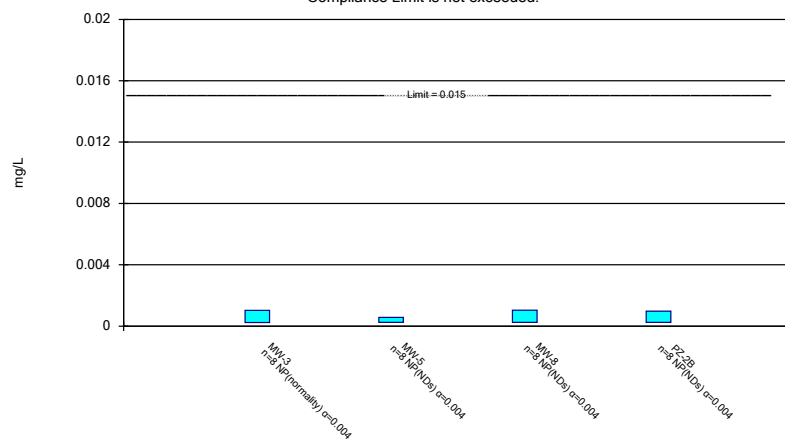
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Dichlorodifluoromethane Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Int  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Non-Parametric Confidence Interval

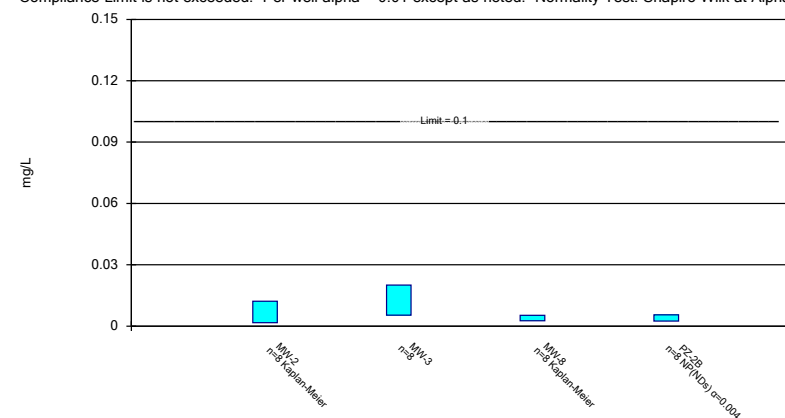
Compliance Limit is not exceeded.



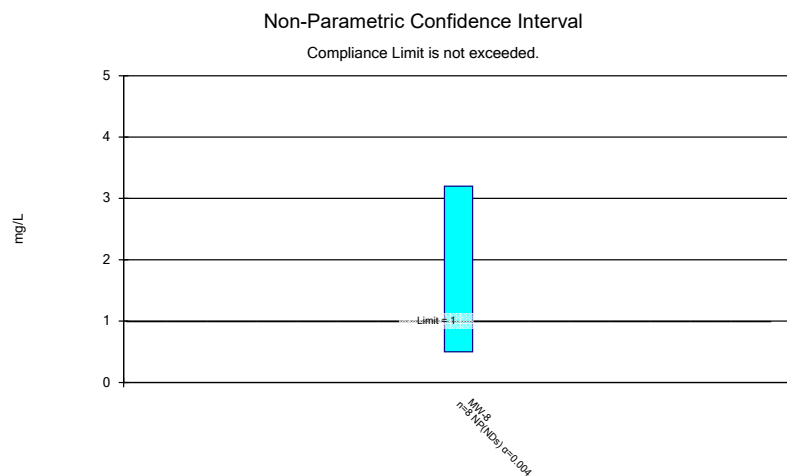
Constituent: Lead Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN

## Parametric and Non-Parametric (NP) Confidence Interval

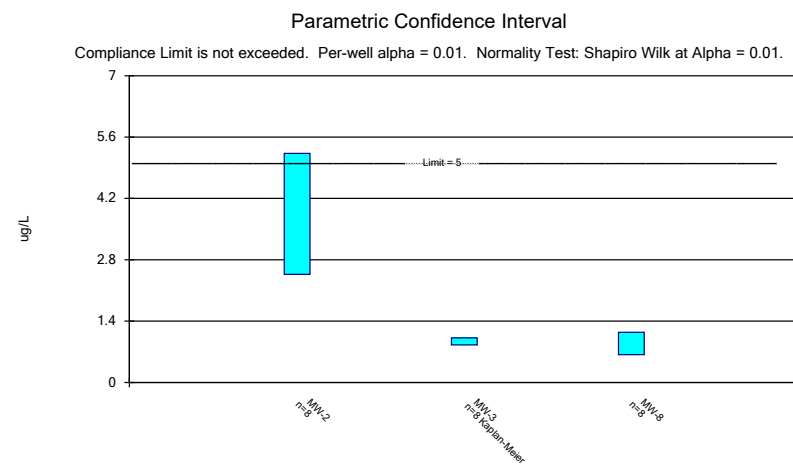
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



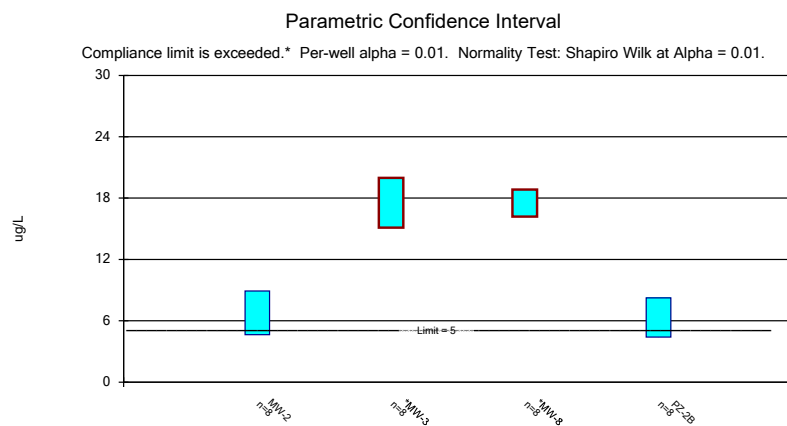
Constituent: Nickel Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



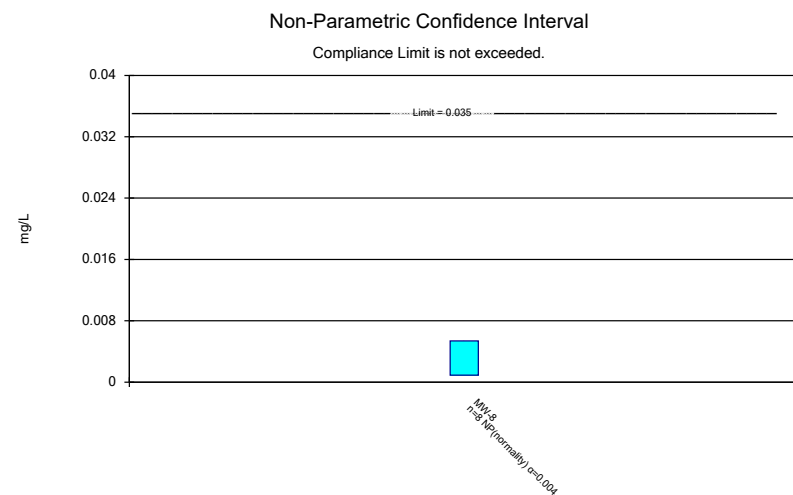
Constituent: Sulfide Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



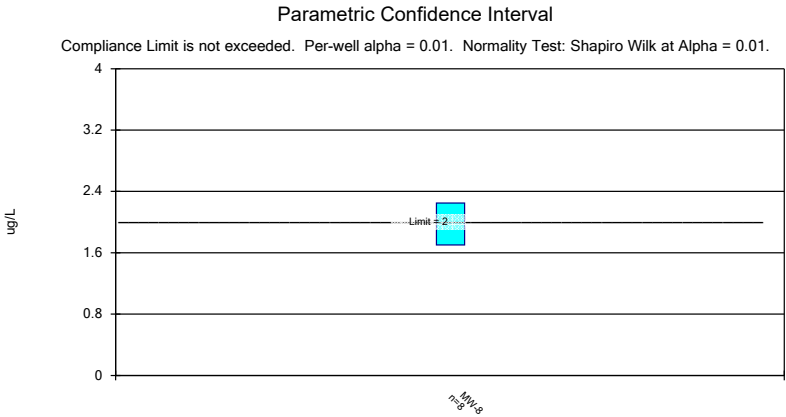
Constituent: Tetrachloroethene Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



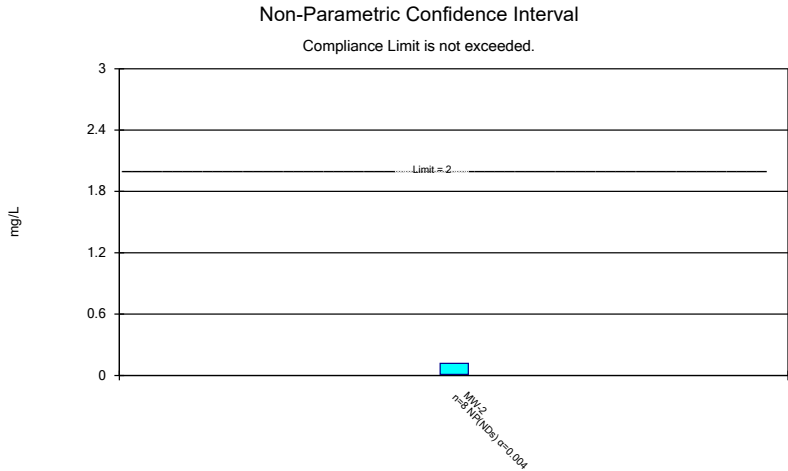
Constituent: Trichloroethene Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: Vanadium Analysis Run 10/17/2025 9:48 AM View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_SSN



Constituent: Vinyl Chloride    Analysis Run 10/17/2025 9:48 AM    View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF    Client: SCS Engineers    Data: WCASW\_AM\_2025\_SSN



Constituent: Zinc    Analysis Run 10/17/2025 9:48 AM    View: 2025\_SSN-Confidence\_Interval  
Woodbury County SLF    Client: SCS Engineers    Data: WCASW\_AM\_2025\_SSN

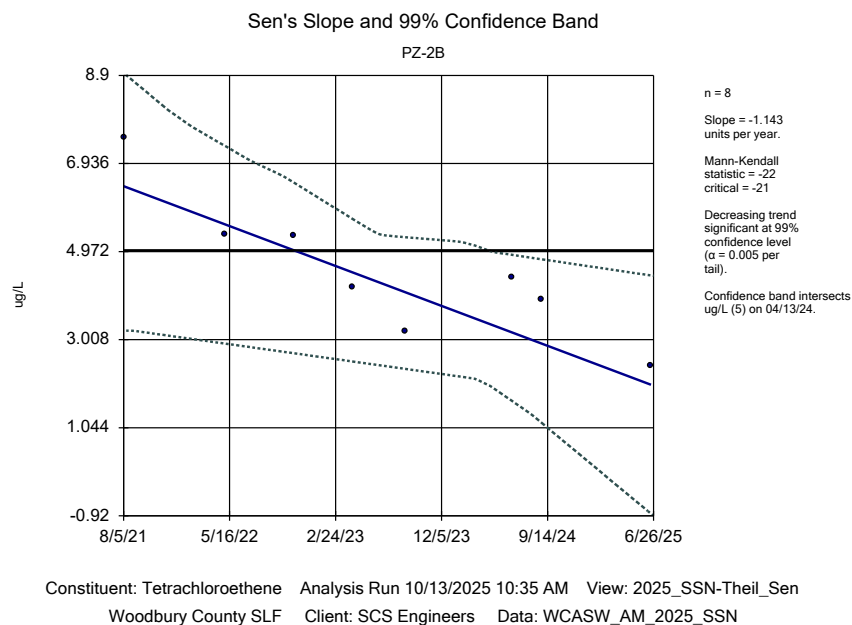
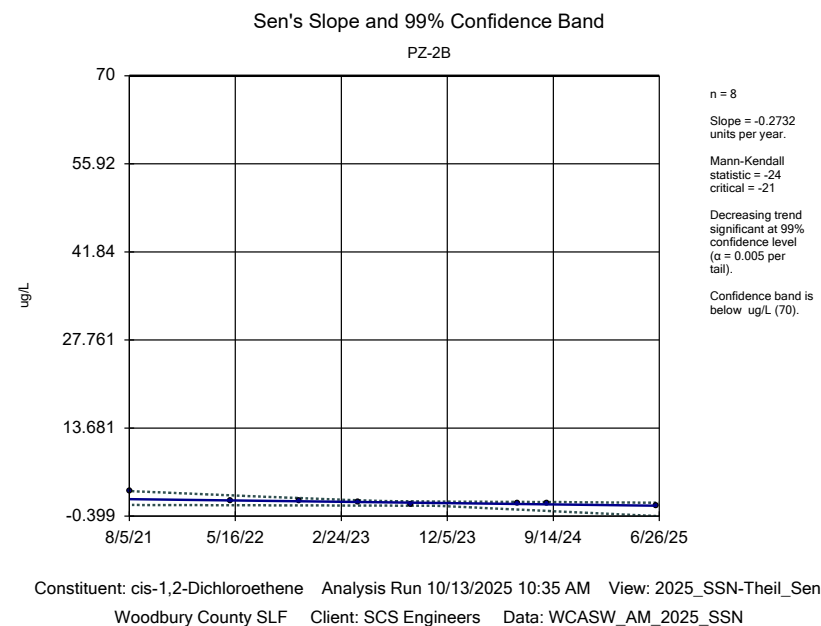
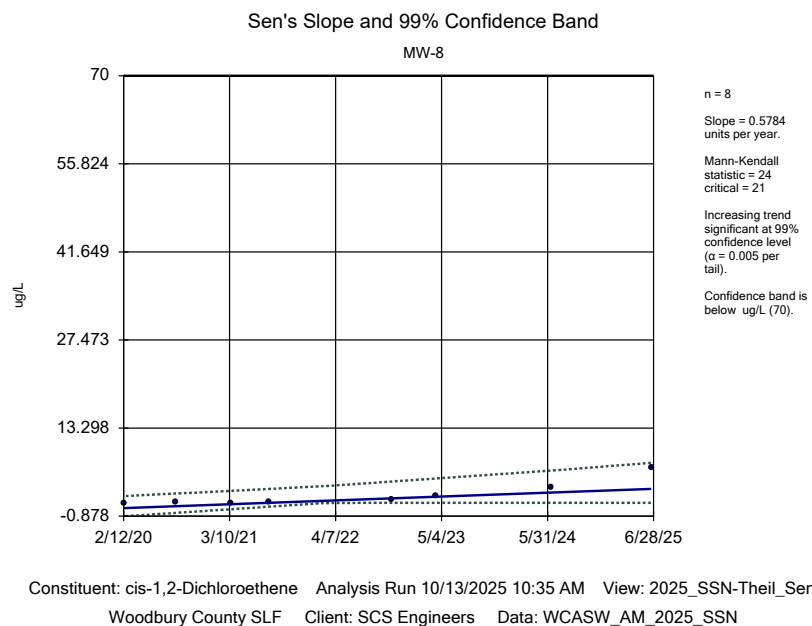


**Thiel-Sen Trend Line Summary Table and Confidence Band Graphs**

# Theil Sen/Trend Test

Woodbury County SLF    Client: SCS Engineers    Data: WCASW\_AM\_2025\_SSN    Printed 10/13/2025, 10:38 AM

| <u>Constituent</u>            | <u>Well</u> | <u>Slope</u> | <u>Calc.</u> | <u>Critical</u> | <u>Sig.</u> | <u>N</u> | <u>%NDs</u> | <u>Alpha</u> | <u>Method</u> |
|-------------------------------|-------------|--------------|--------------|-----------------|-------------|----------|-------------|--------------|---------------|
| cis-1,2-Dichloroethene (ug/L) | MW-8        | 0.5784       | 24           | 21              | Yes         | 8        | 0           | 0.01         | NP            |
| cis-1,2-Dichloroethene (ug/L) | PZ-2B       | -0.2732      | -24          | -21             | Yes         | 8        | 0           | 0.01         | NP            |
| Tetrachloroethene (ug/L)      | PZ-2B       | -1.143       | -22          | -21             | Yes         | 8        | 0           | 0.01         | NP            |



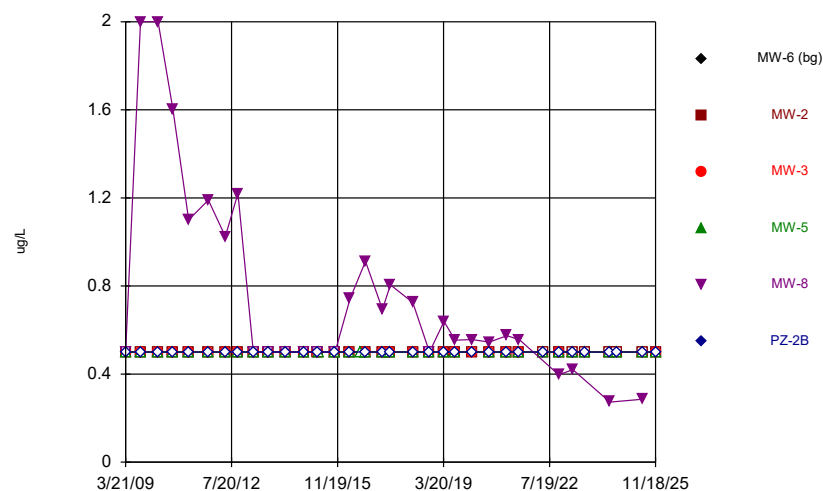


## Attachment B

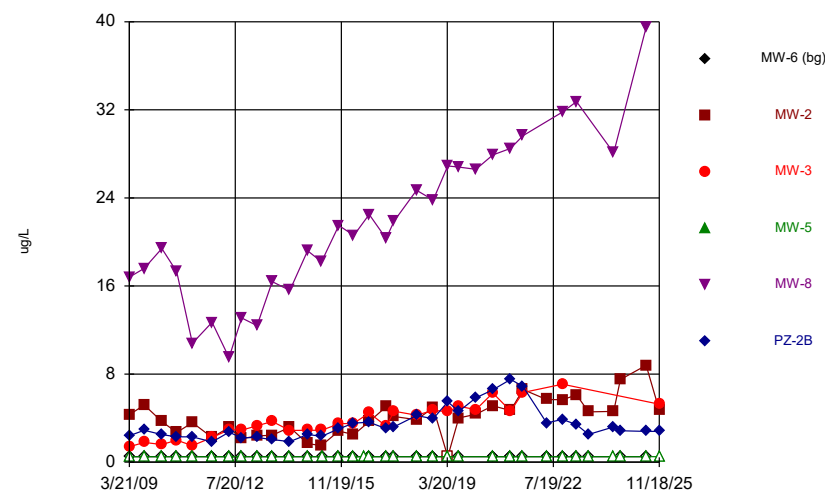
2<sup>nd</sup> 2025 Semi-Annual Statistical Output

## **Time Series Plots**

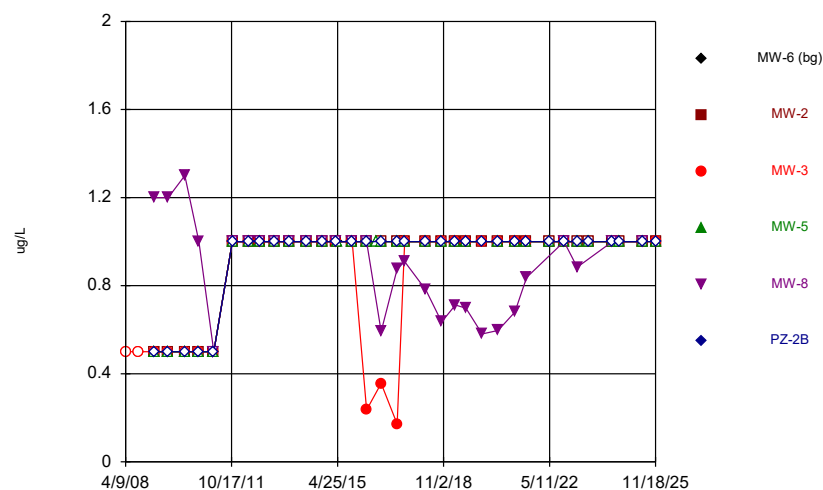
# Time Series



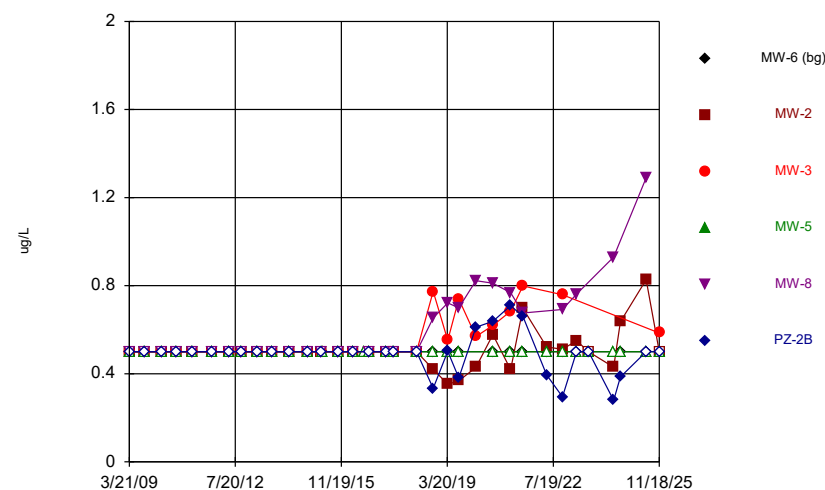
# Time Series



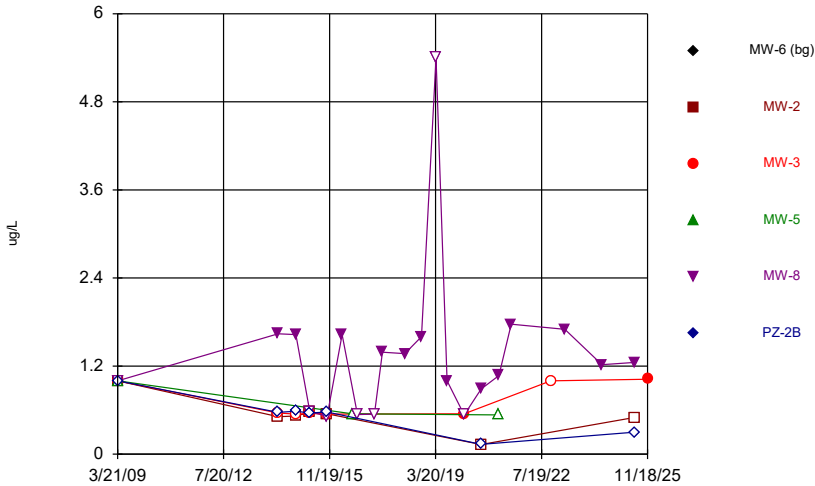
# Time Series



# Time Series

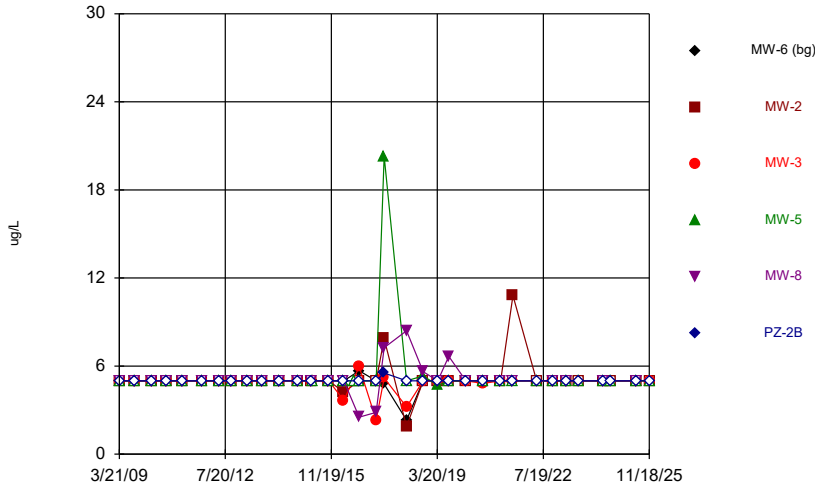


Time Series



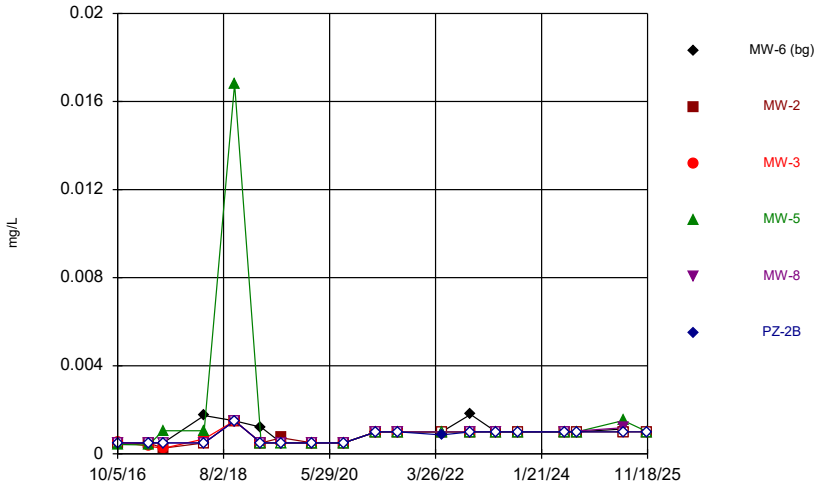
Constituent: 2,4-D [2C] Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



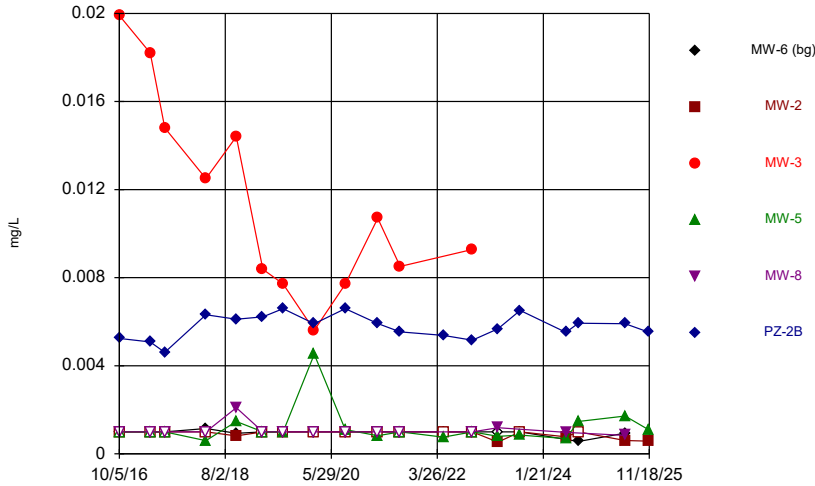
Constituent: Acetone Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



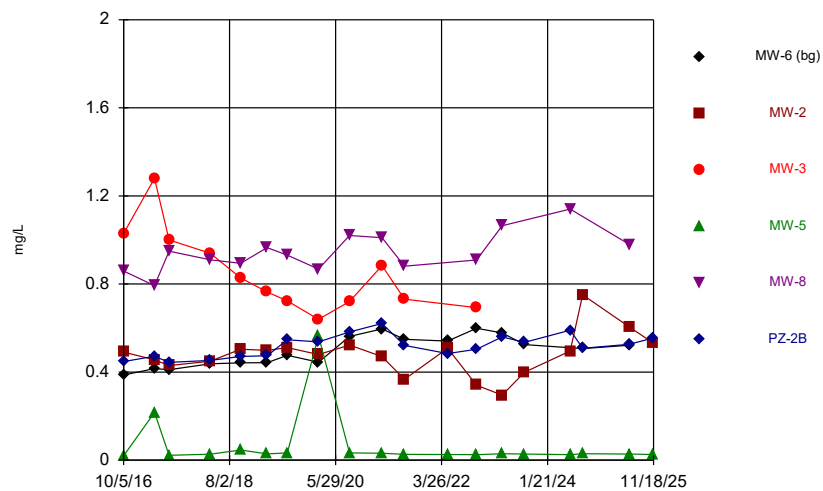
Constituent: Antimony Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



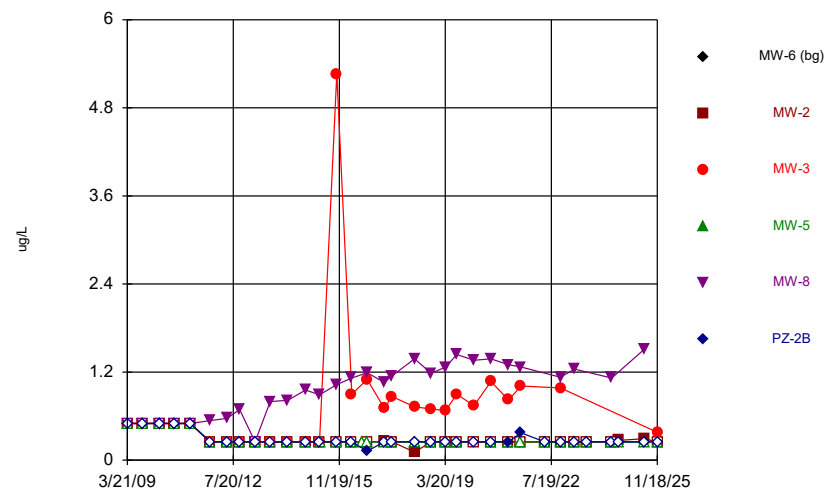
Constituent: Arsenic Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Time Series



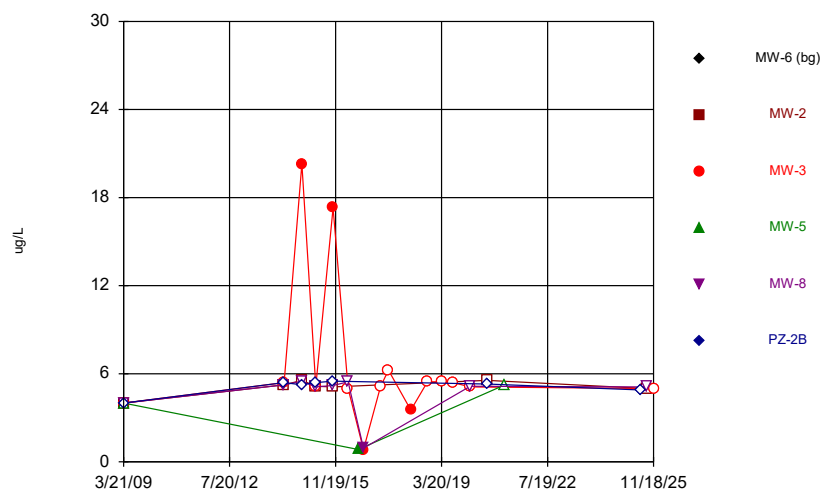
Constituent: Barium Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Time Series



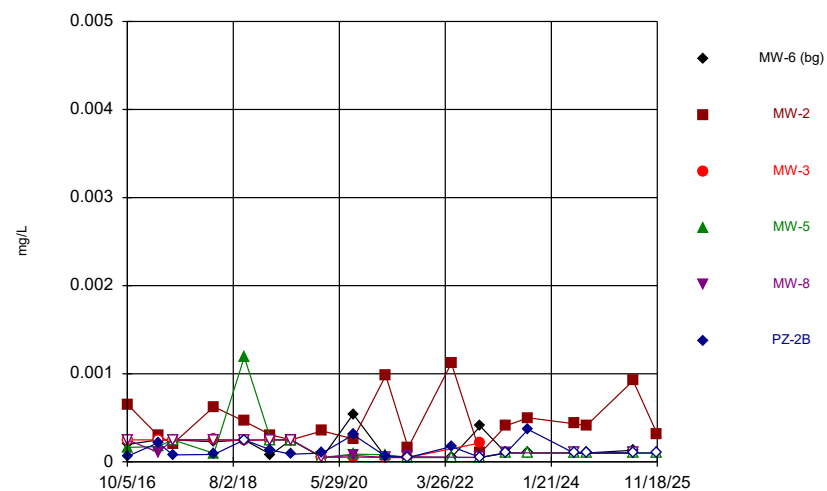
Constituent: Benzene Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Time Series



Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Seri  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

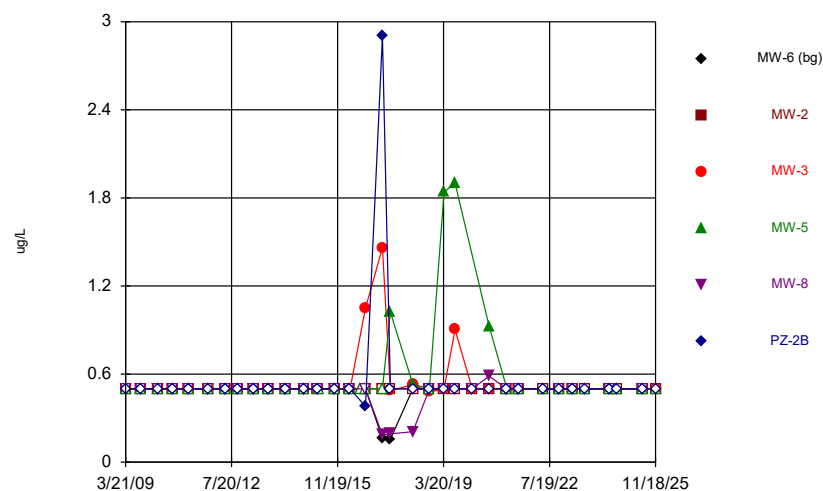
## Time Series



Constituent: Cadmium Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

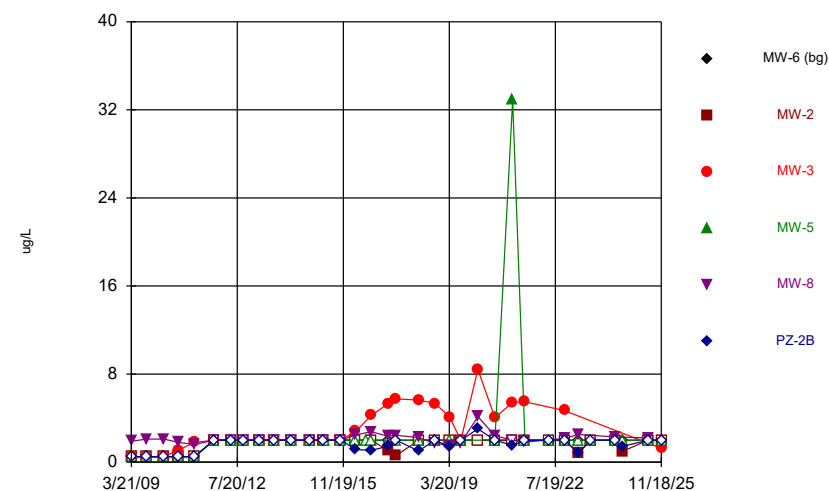


### Time Series



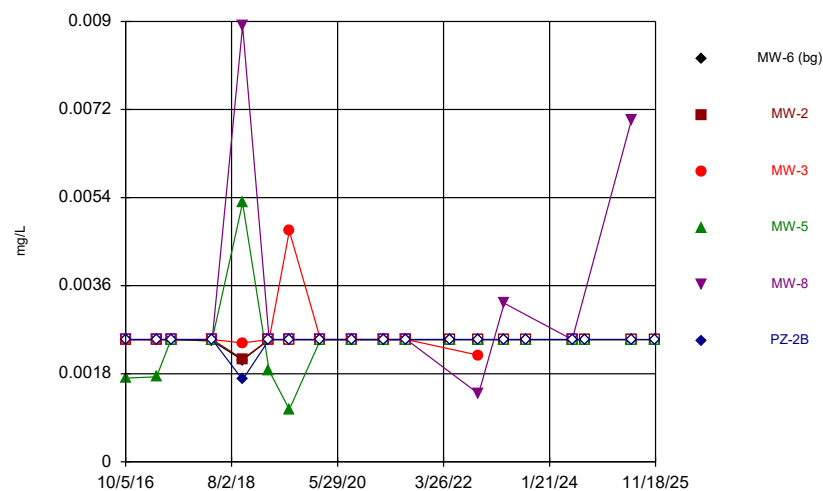
Constituent: Carbon Disulfide Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

### Time Series



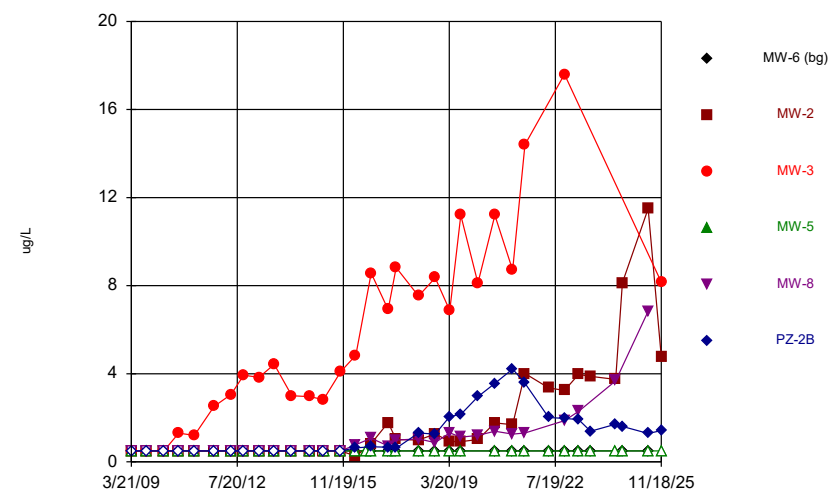
Constituent: Chloroethane Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

### Time Series



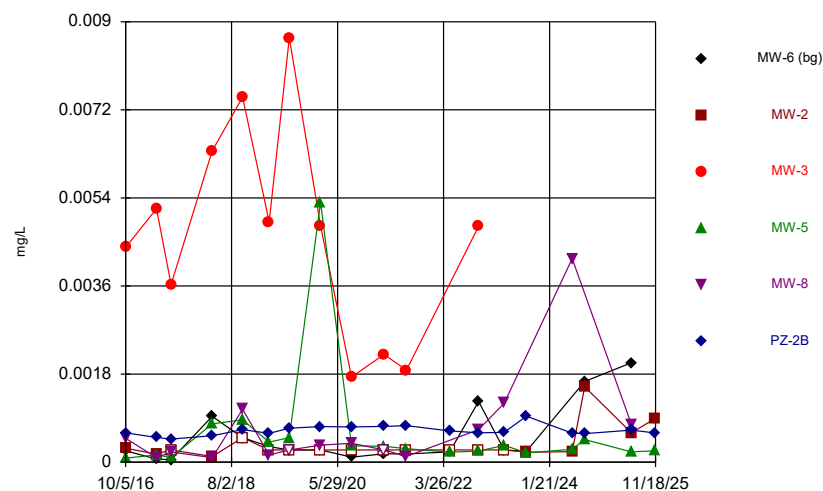
Constituent: Chromium Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

### Time Series



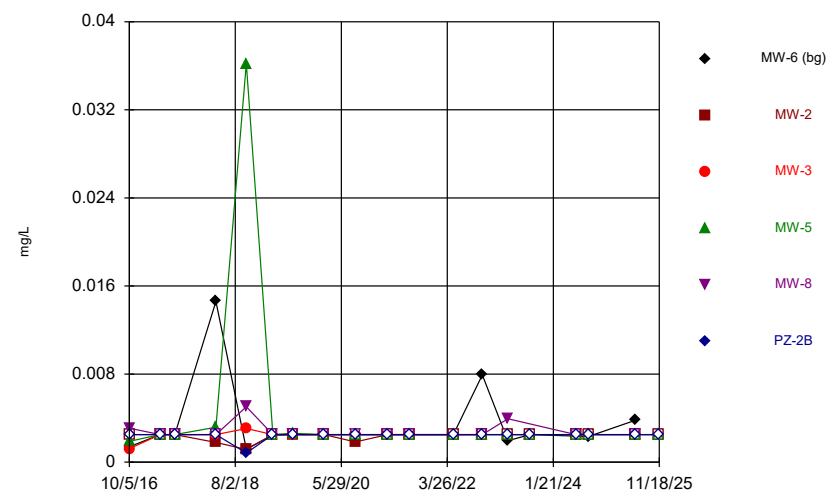
Constituent: cis-1,2-Dichloroethene Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



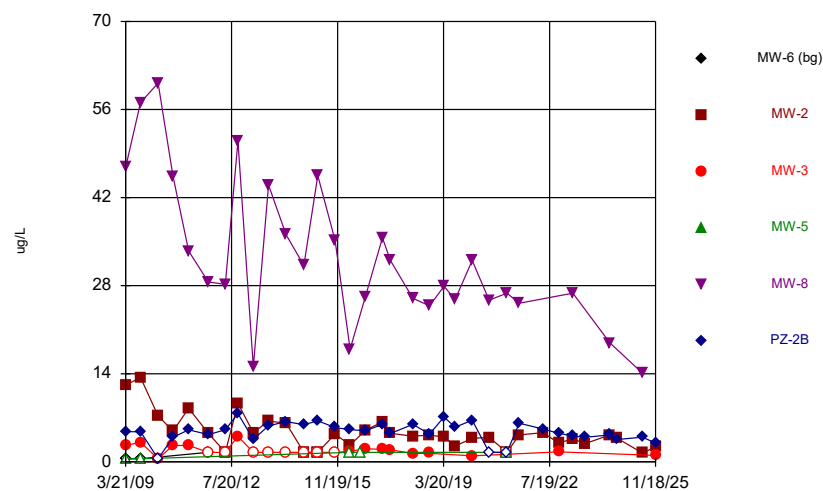
Constituent: Cobalt Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



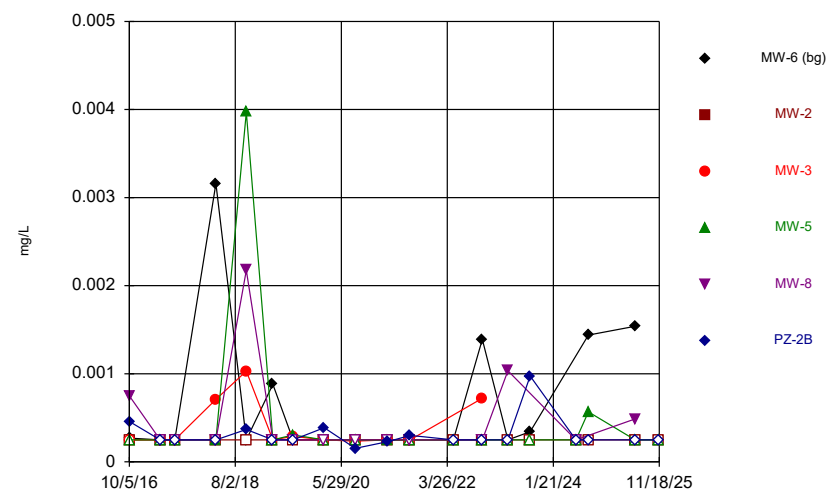
Constituent: Copper Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



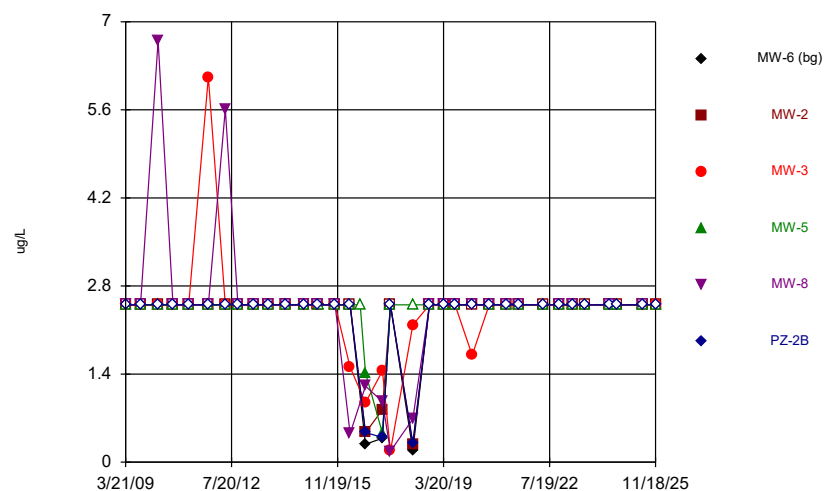
Constituent: Dichlorodifluoromethane Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series

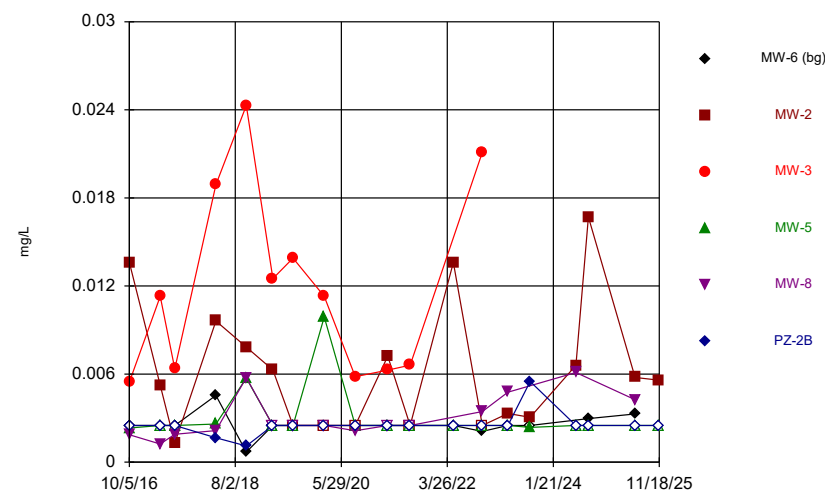


Constituent: Lead Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

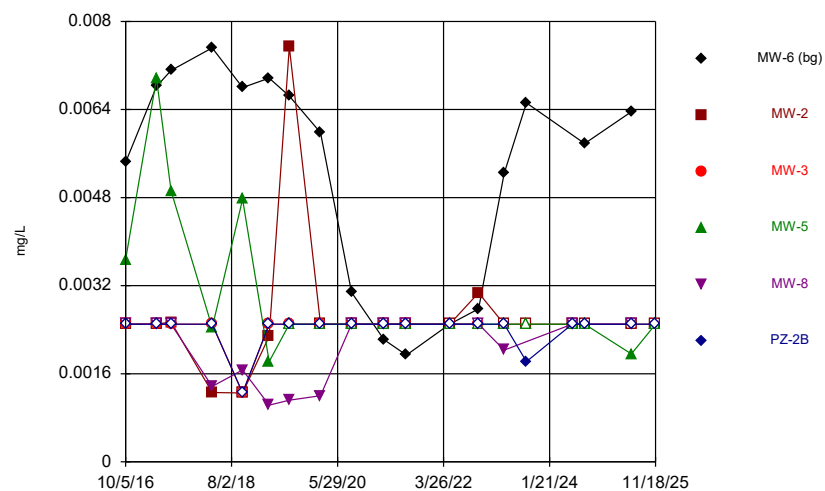
# Time Series



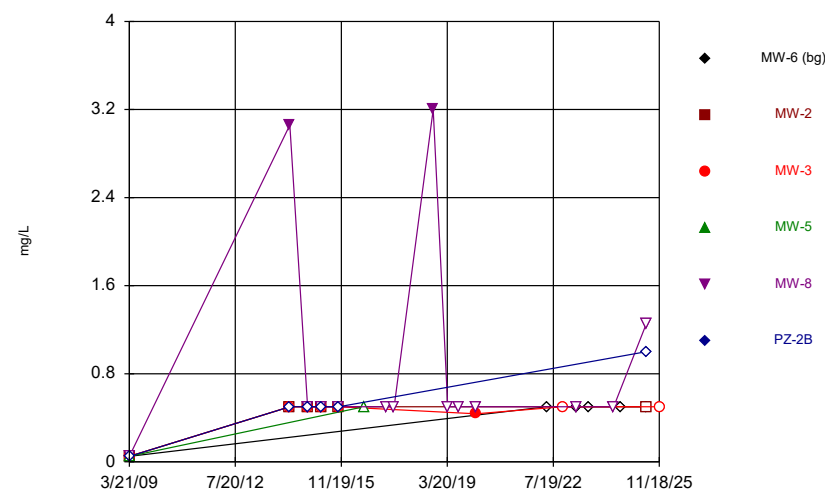
# Time Series



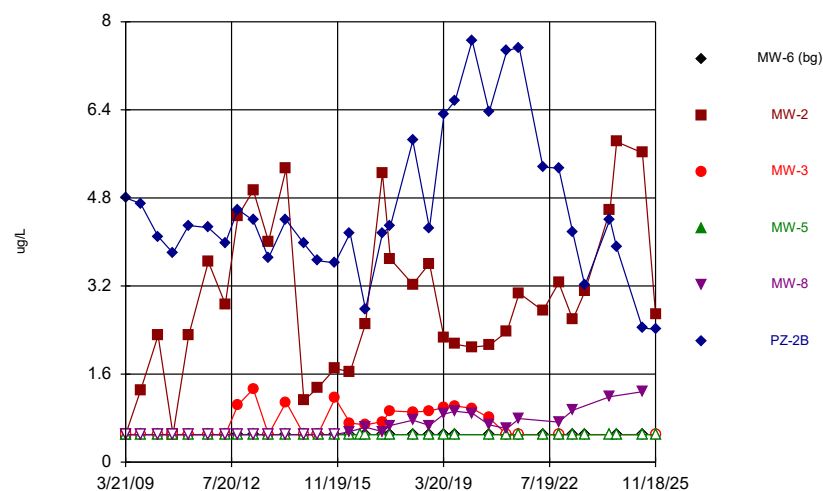
# Time Series



# Time Series

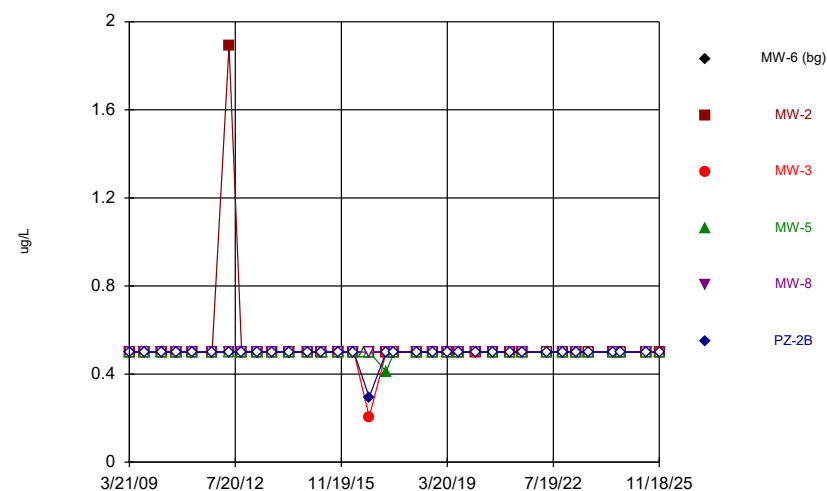


Time Series



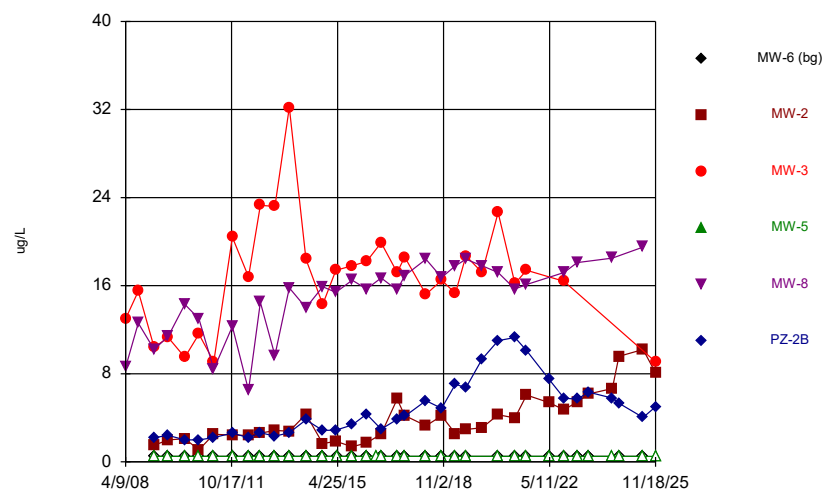
Constituent: Tetrachloroethene Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



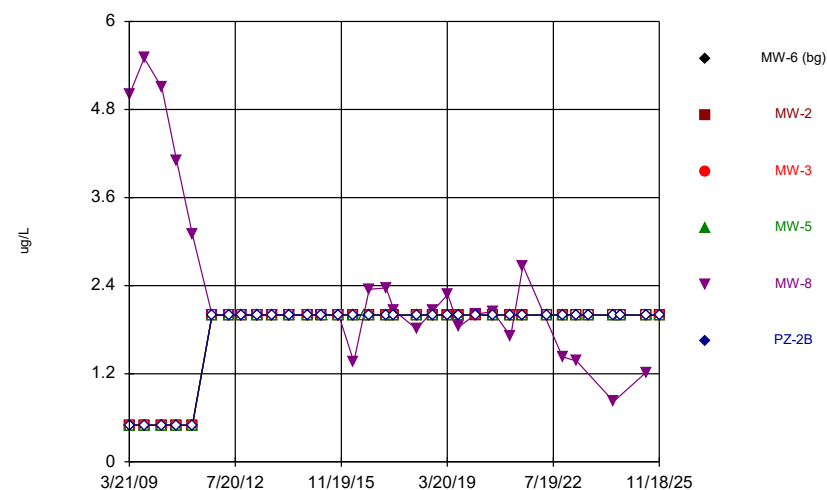
Constituent: Toluene Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



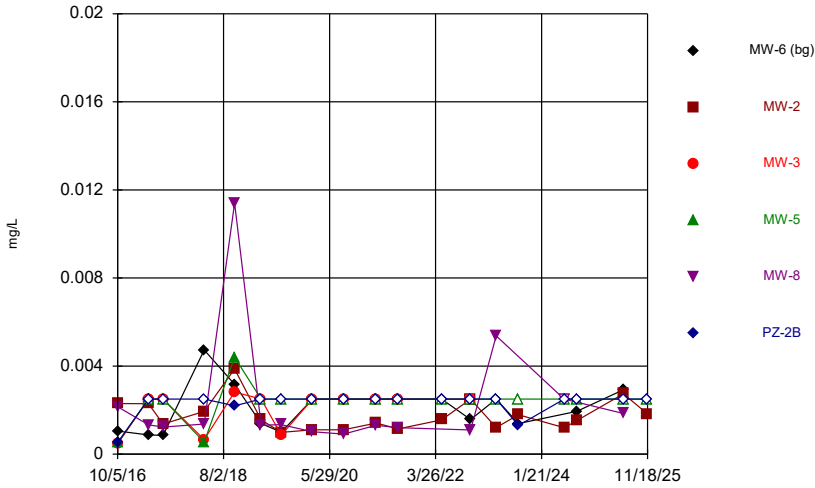
Constituent: Trichloroethene Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



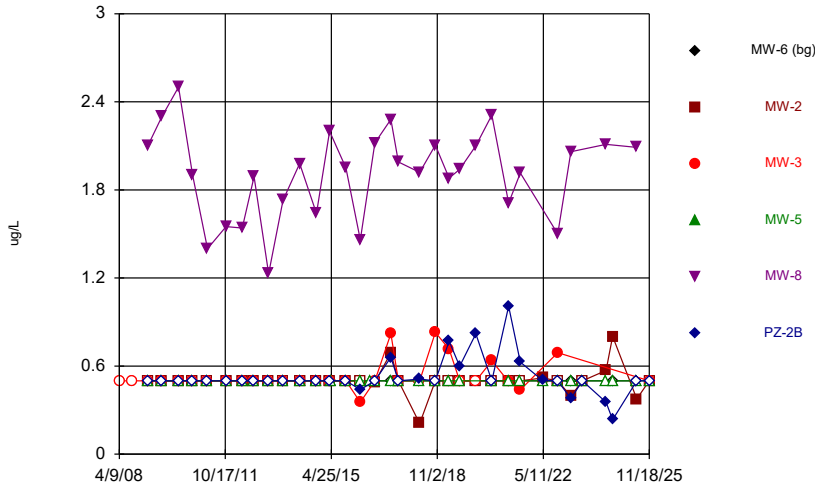
Constituent: Trichlorofluoromethane Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



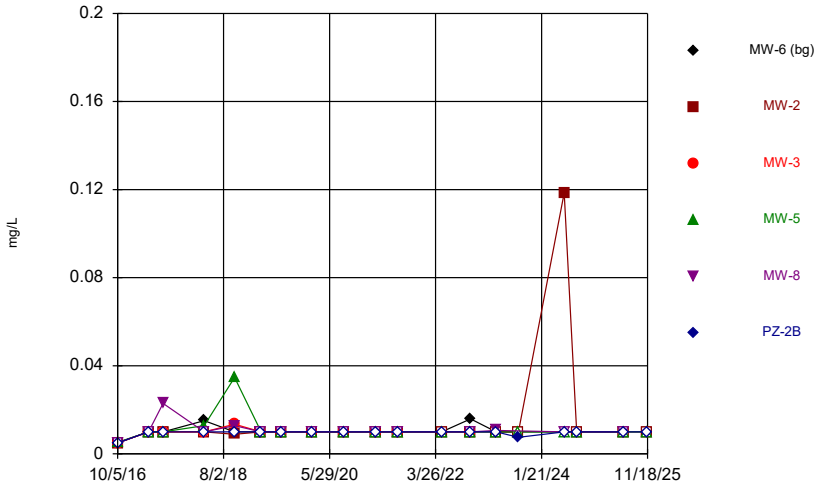
Constituent: Vanadium Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



Constituent: Vinyl Chloride Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Time Series



Constituent: Zinc Analysis Run 12/12/2025 10:00 AM View: 2025\_AWQR-Time\_Series  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

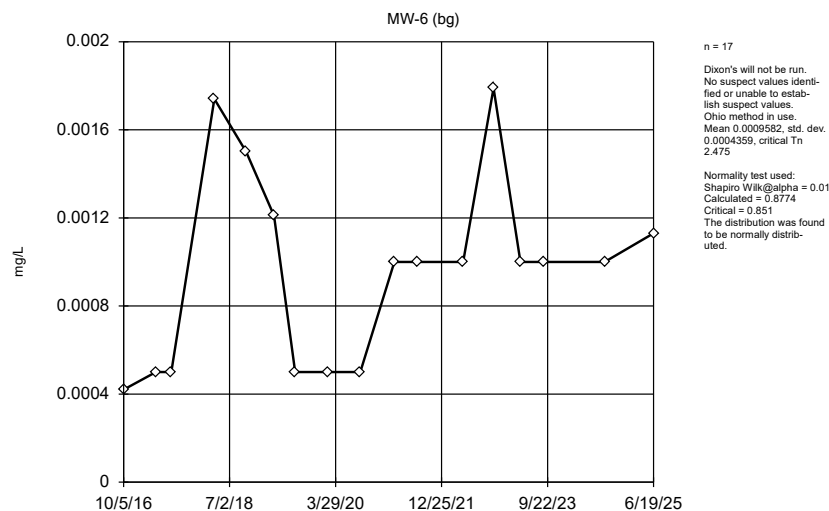
**Outlier Tests Summary Table and Graphs**

# BG Outlier Analysis

Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP Printed 12/11/2025, 3:18 PM

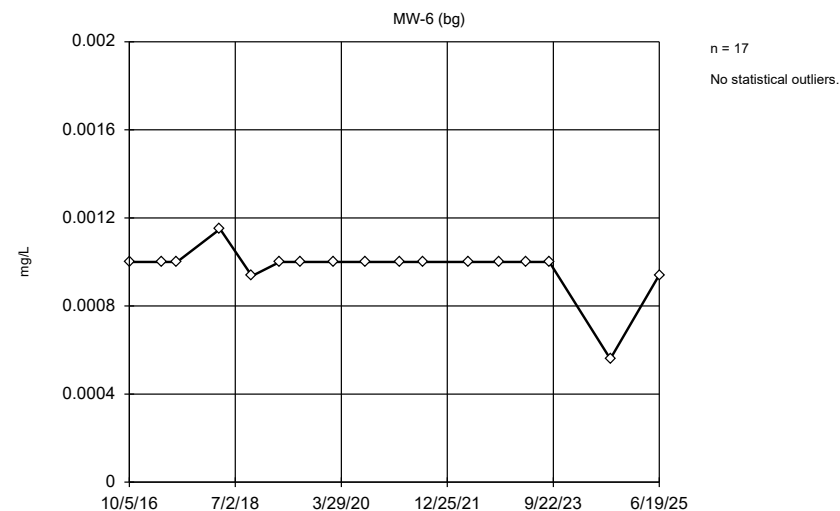
| <u>Constituent</u>     | <u>Well</u>      | <u>Outlier</u> | <u>Value(s)</u>                                    | <u>Date(s)</u>                                  | <u>Method</u>      | <u>Alpha</u> | <u>N</u>  | <u>Mean</u>      | <u>Std. Dev.</u> | <u>Distribution</u> | <u>Normality Test</u> |
|------------------------|------------------|----------------|----------------------------------------------------|-------------------------------------------------|--------------------|--------------|-----------|------------------|------------------|---------------------|-----------------------|
| Antimony (mg/L)        | MW-6 (bg)        | No             | n/a                                                | n/a                                             | EPA/OH             | 0.05         | 17        | 0.0009582        | 0.0004359        | normal              | ShapiroWilk           |
| Arsenic (mg/L)         | MW-6 (bg)        | No             | n/a                                                | n/a                                             | OH                 | NaN          | 17        | 0.0009757        | 0.0001156        | n/a                 | n/a                   |
| Barium (mg/L)          | MW-6 (bg)        | No             | n/a                                                | n/a                                             | EPA/OH             | 0.05         | 17        | 0.4963           | 0.0688           | normal              | ShapiroWilk           |
| Cadmium (mg/L)         | MW-6 (bg)        | No             | n/a                                                | n/a                                             | EPA/OH             | 0.05         | 17        | 0.0001815        | 0.0001374        | ln(x)               | ShapiroWilk           |
| Chromium (mg/L)        | MW-6 (bg)        | No             | n/a                                                | n/a                                             | OH                 | NaN          | 17        | 0.002474         | 0.0001017        | n/a                 | n/a                   |
| Cobalt (mg/L)          | MW-6 (bg)        | No             | n/a                                                | n/a                                             | EPA/OH             | 0.05         | 17        | 0.0005089        | 0.0005927        | ln(x)               | ShapiroWilk           |
| <b>Copper (mg/L)</b>   | <b>MW-6 (bg)</b> | <b>Yes</b>     | <b>0.0014,0.0146,0.0012,0.00792,0.00196,0.0038</b> | <b>10/5/2016,4/2/2018,10/10/2018,11/2/20...</b> | <b>NP (nrm)/OH</b> | <b>NaN</b>   | <b>17</b> | <b>0.003422</b>  | <b>0.003223</b>  | <b>unknown</b>      | <b>ShapiroWilk</b>    |
| Lead (mg/L)            | MW-6 (bg)        | No             | n/a                                                | n/a                                             | NP (nrm)/OH        | NaN          | 17        | 0.0006777        | 0.0007962        | unknown             | ShapiroWilk           |
| Nickel (mg/L)          | MW-6 (bg)        | No             | n/a                                                | n/a                                             | NP (nrm)/OH        | NaN          | 17        | 0.002565         | 0.0007243        | unknown             | ShapiroWilk           |
| Selenium (mg/L)        | MW-6 (bg)        | No             | n/a                                                | n/a                                             | NP (nrm)/OH        | NaN          | 17        | 0.005277         | 0.001946         | unknown             | ShapiroWilk           |
| <b>Thallium (mg/L)</b> | <b>MW-6 (bg)</b> | <b>Yes</b>     | <b>0.001</b>                                       | <b>10/10/2018</b>                               | <b>OH</b>          | <b>NaN</b>   | <b>17</b> | <b>0.0005194</b> | <b>0.0001306</b> | <b>n/a</b>          | <b>n/a</b>            |
| Vanadium (mg/L)        | MW-6 (bg)        | No             | n/a                                                | n/a                                             | EPA/OH             | 0.05         | 17        | 0.002111         | 0.001012         | normal              | ShapiroWilk           |
| Zinc (mg/L)            | MW-6 (bg)        | No             | n/a                                                | n/a                                             | OH                 | NaN          | 17        | 0.01035          | 0.002287         | n/a                 | n/a                   |

## EPA Screening (suspected outliers for Dixon's Test)



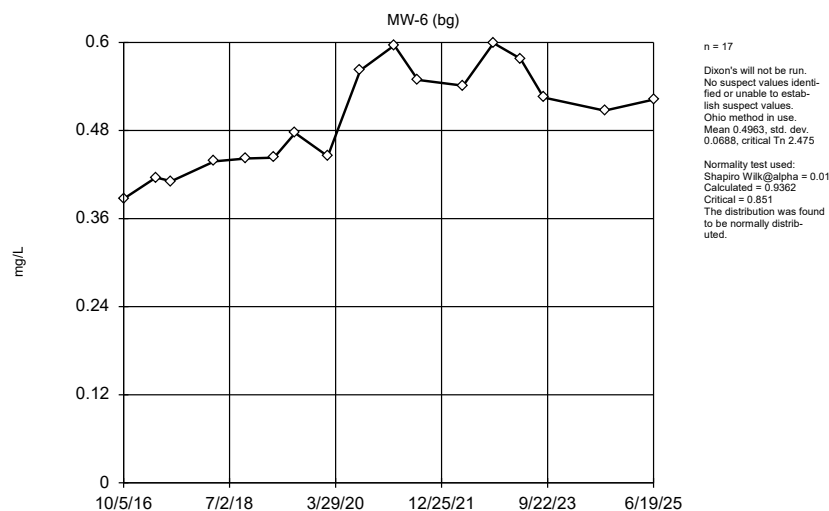
Constituent: Antimony Analysis Run 12/11/2025 3:14 PM View: 2025\_AWQR-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Ohio EPA 0715 Outlier Algorithm



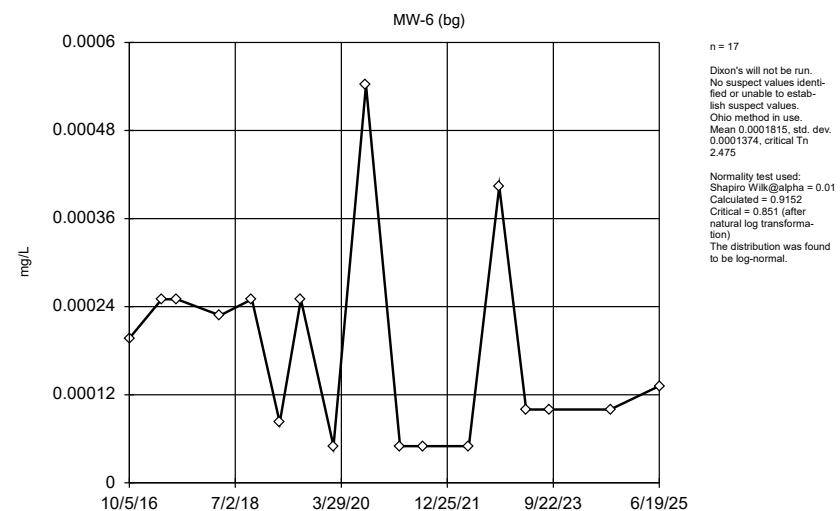
Constituent: Arsenic Analysis Run 12/11/2025 3:14 PM View: 2025\_AWQR-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## EPA Screening (suspected outliers for Dixon's Test)



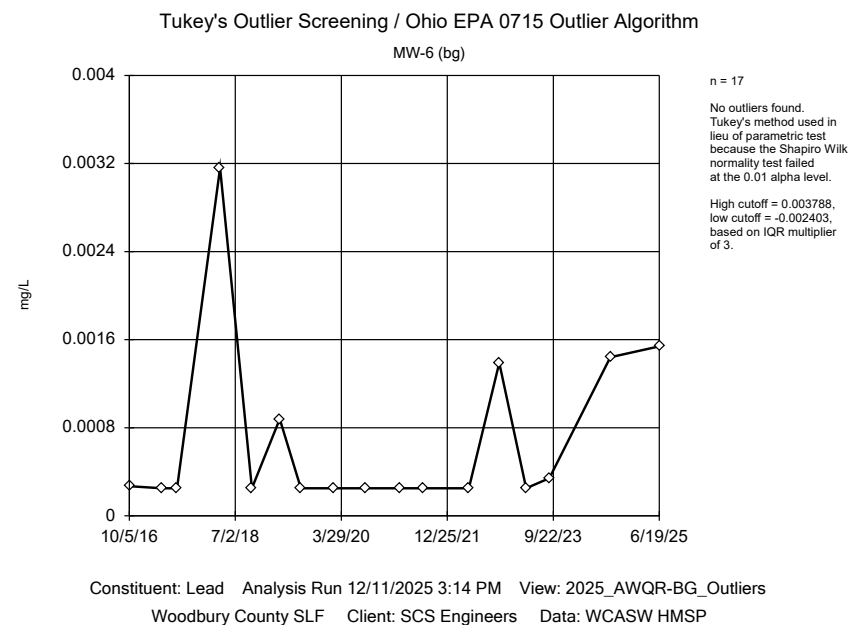
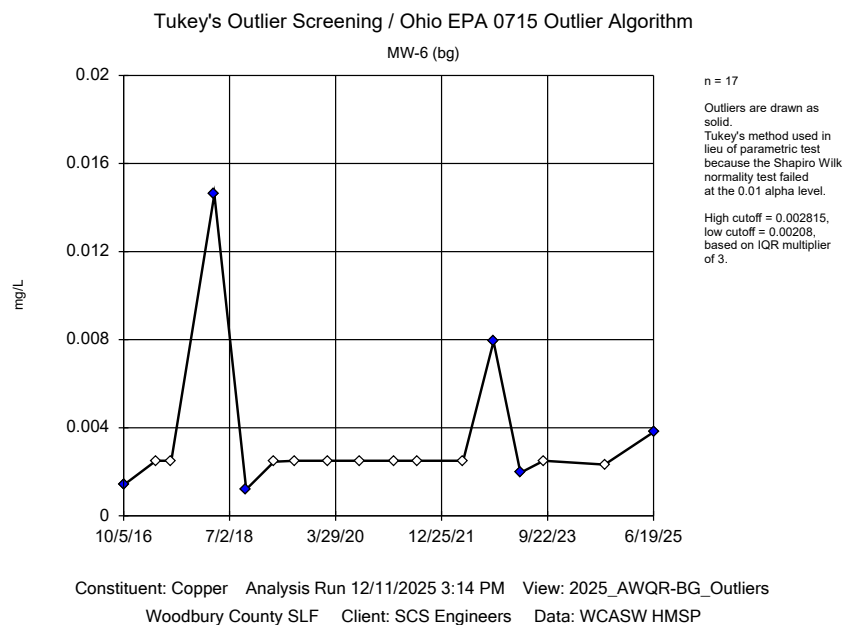
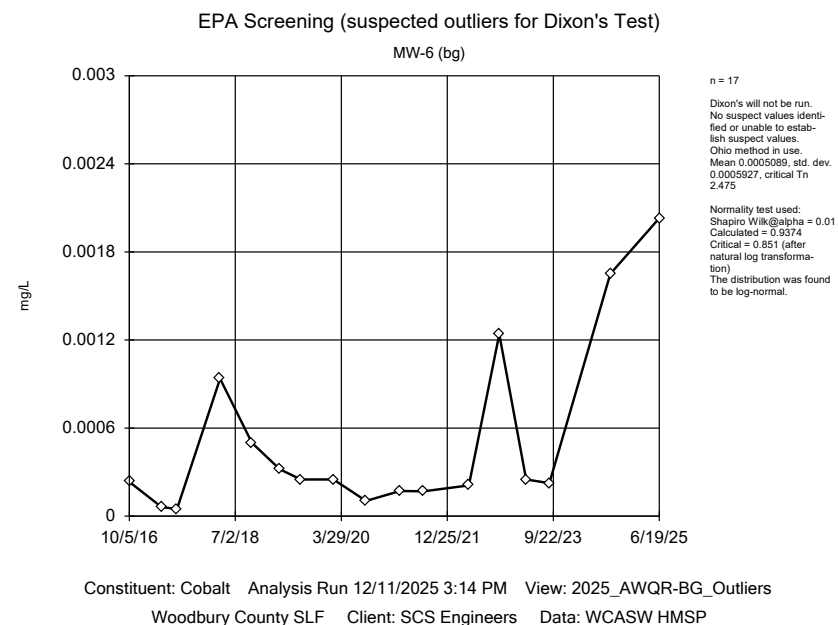
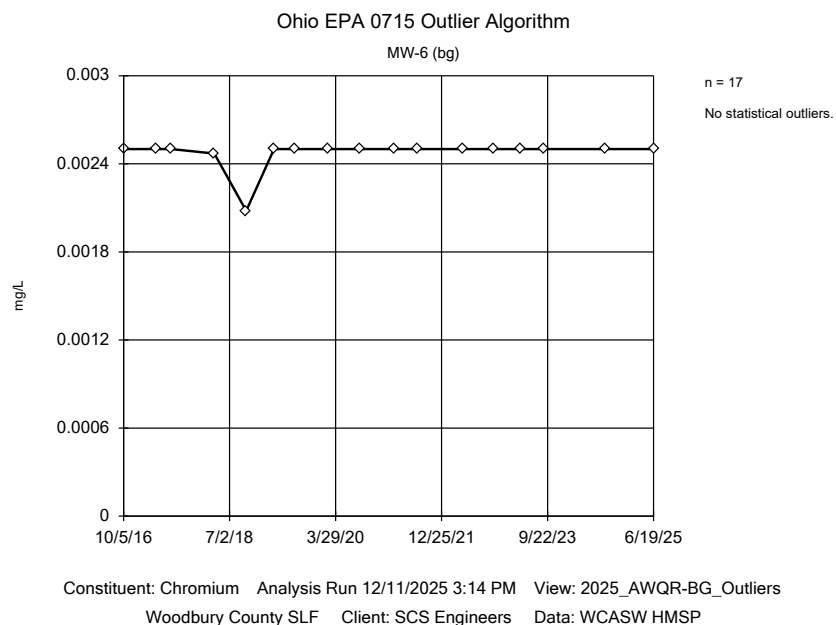
Constituent: Barium Analysis Run 12/11/2025 3:14 PM View: 2025\_AWQR-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## EPA Screening (suspected outliers for Dixon's Test)

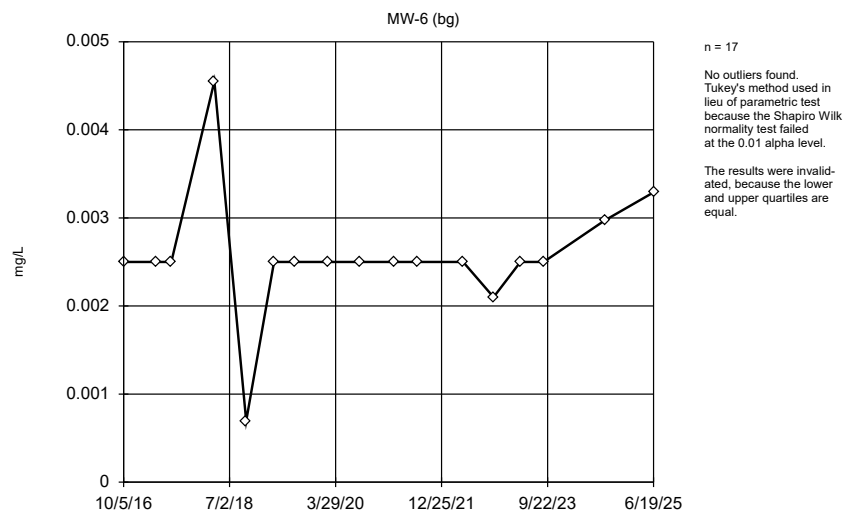


Constituent: Cadmium Analysis Run 12/11/2025 3:14 PM View: 2025\_AWQR-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP



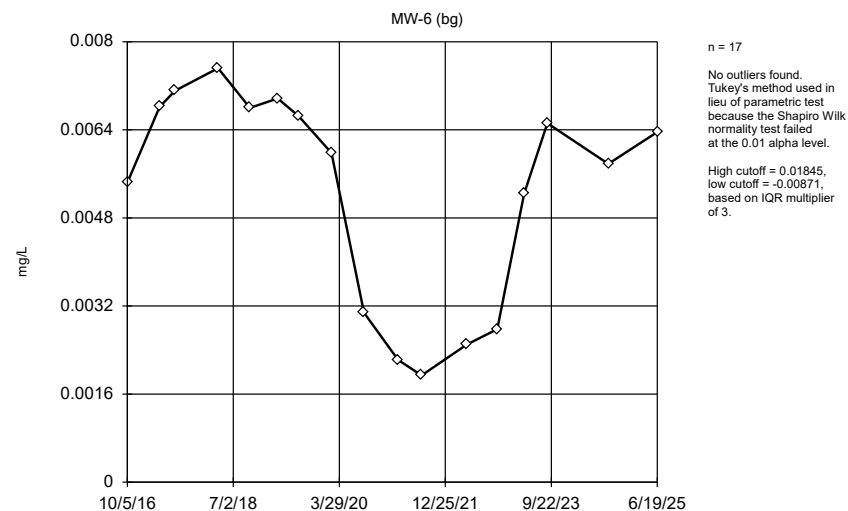


## Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



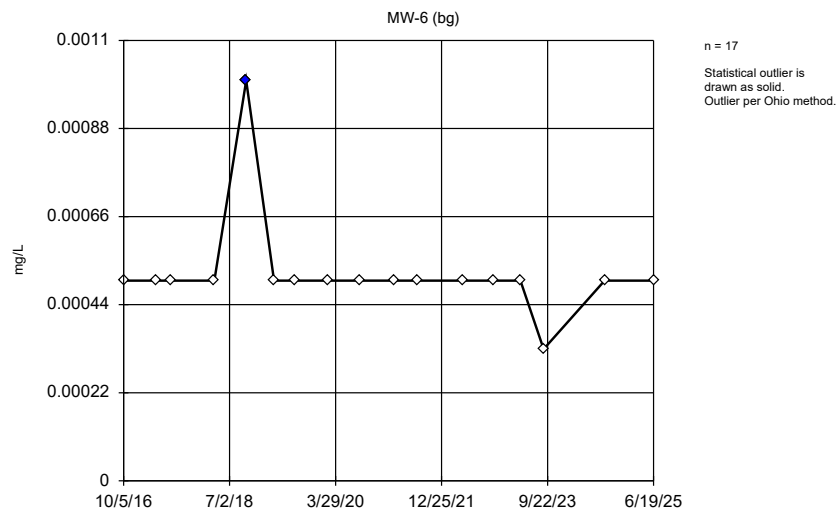
Constituent: Nickel Analysis Run 12/11/2025 3:14 PM View: 2025\_AWQR-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



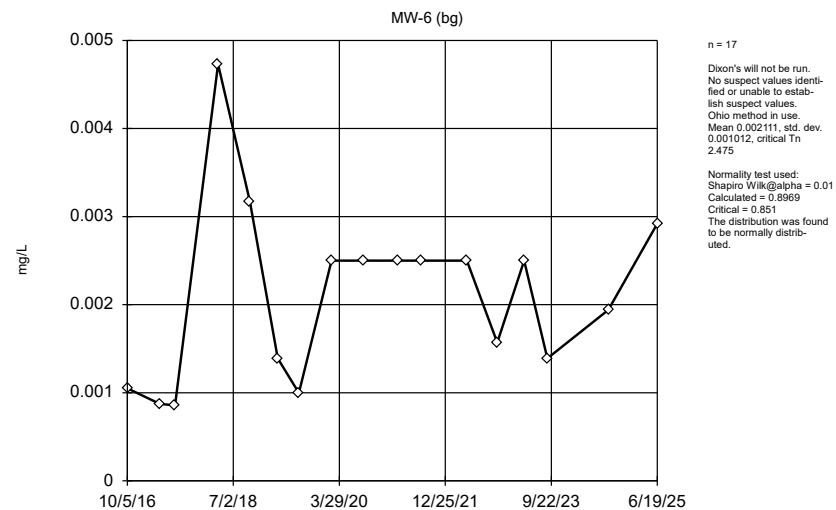
Constituent: Selenium Analysis Run 12/11/2025 3:14 PM View: 2025\_AWQR-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## Ohio EPA 0715 Outlier Algorithm

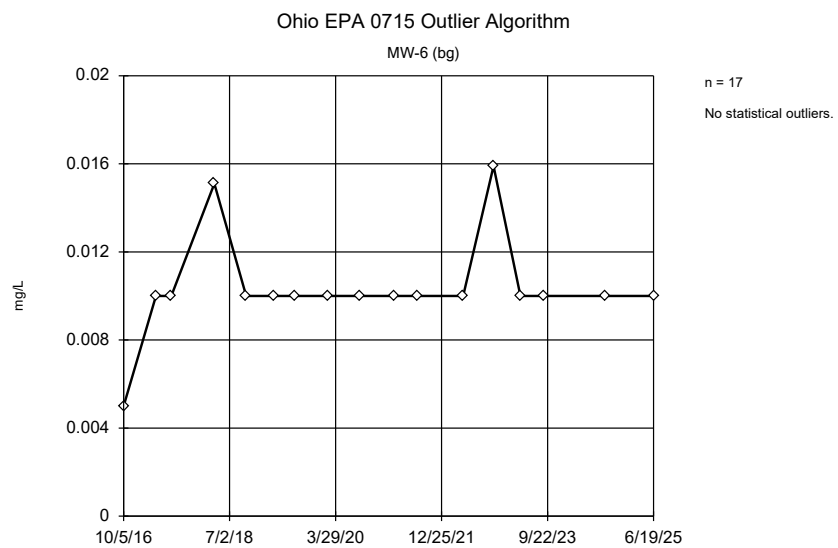


Constituent: Thallium Analysis Run 12/11/2025 3:14 PM View: 2025\_AWQR-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## EPA Screening (suspected outliers for Dixon's Test)



Constituent: Vanadium Analysis Run 12/11/2025 3:14 PM View: 2025\_AWQR-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP



Constituent: Zinc Analysis Run 12/11/2025 3:14 PM View: 2025\_AWQR-BG\_Outliers  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

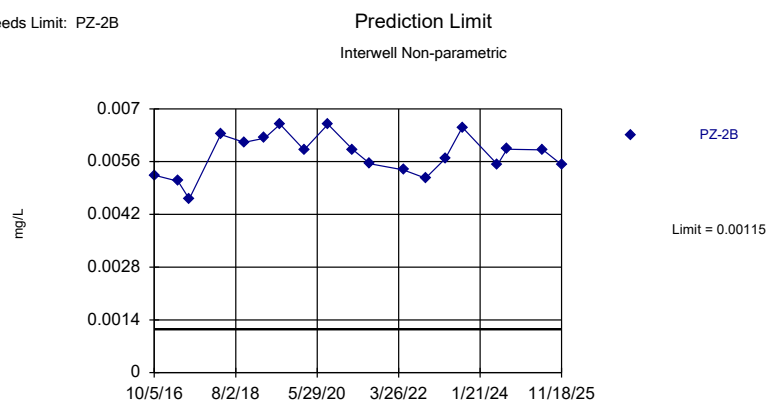
## **Interwell Prediction Limit Summary Table and Graphs**

# Prediction Limit

Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP Printed 12/12/2025, 10:23 AM

| <u>Constituent</u>    | <u>Well</u>  | <u>Upper Lim.</u> | <u>Lower Lim.</u> | <u>Date</u>       | <u>Observ.</u> | <u>Sig.</u> | <u>Bg N</u> | <u>Bg Wells</u> | <u>%NDs</u>  | <u>Transform</u> | <u>Alpha</u>    | <u>Method</u>                |
|-----------------------|--------------|-------------------|-------------------|-------------------|----------------|-------------|-------------|-----------------|--------------|------------------|-----------------|------------------------------|
| <b>Arsenic (mg/L)</b> | <b>PZ-2B</b> | <b>0.00115</b>    | <b>n/a</b>        | <b>11/18/2025</b> | <b>0.00552</b> | <b>Yes</b>  | <b>17</b>   | <b>MW-6</b>     | <b>76.47</b> | <b>n/a</b>       | <b>0.005427</b> | <b>NP Inter (NDs) 1 of 2</b> |
| Barium (mg/L)         | MW-2         | 0.6563            | n/a               | 11/18/2025        | 0.531          | No          | 17          | MW-6            | 0            | No               | 0.0008101       | Param Inter 1 of 2           |
| Barium (mg/L)         | MW-5         | 0.6563            | n/a               | 11/18/2025        | 0.02545        | No          | 17          | MW-6            | 0            | No               | 0.0008101       | Param Inter 1 of 2           |
| Barium (mg/L)         | PZ-2B        | 0.6563            | n/a               | 11/18/2025        | 0.555          | No          | 17          | MW-6            | 0            | No               | 0.0008101       | Param Inter 1 of 2           |
| Cadmium (mg/L)        | MW-2         | 0.000542          | n/a               | 11/18/2025        | 0.000315       | No          | 17          | MW-6            | 64.71        | n/a              | 0.005427        | NP Inter (NDs) 1 of 2        |
| Cobalt (mg/L)         | MW-2         | 0.002223          | n/a               | 11/18/2025        | 0.000896       | No          | 17          | MW-6            | 23.53        | x^(1/3)          | 0.0008101       | Param Inter 1 of 2           |
| Cobalt (mg/L)         | PZ-2B        | 0.002223          | n/a               | 11/18/2025        | 0.000597       | No          | 17          | MW-6            | 23.53        | x^(1/3)          | 0.0008101       | Param Inter 1 of 2           |
| <b>Nickel (mg/L)</b>  | <b>MW-2</b>  | <b>0.00455</b>    | <b>n/a</b>        | <b>11/18/2025</b> | <b>0.00558</b> | <b>Yes</b>  | <b>17</b>   | <b>MW-6</b>     | <b>70.59</b> | <b>n/a</b>       | <b>0.005427</b> | <b>NP Inter (NDs) 1 of 2</b> |

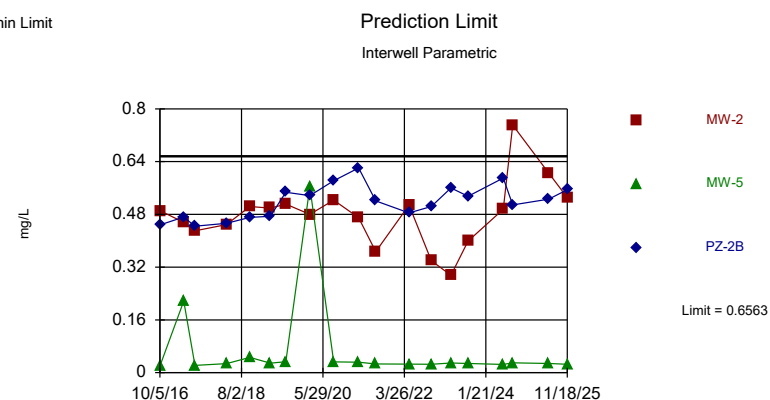
Exceeds Limit: PZ-2B



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 76.47% NDs. Annual per-constituent alpha = 0.05296. Individual comparison alpha = 0.005427 (1 of 2). Assumes 4 future values.

Constituent: Arsenic Analysis Run 12/12/2025 10:22 AM View: 2025\_AWQR-AM\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

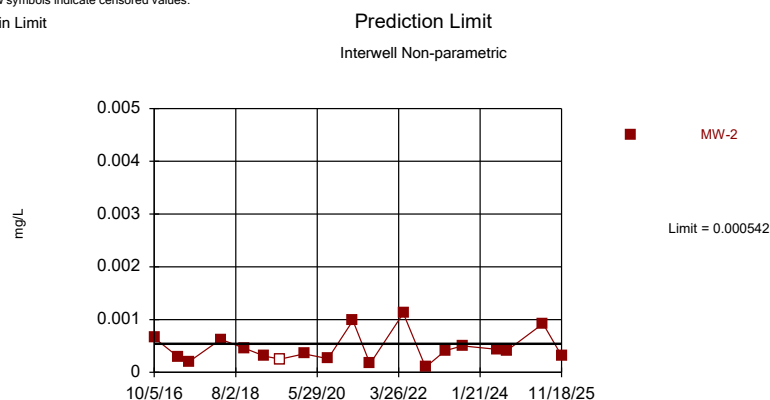
Within Limit



Background Data Summary: Mean=0.4963, Std. Dev.=0.0688, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9362, critical = 0.851. Kappa = 2.326 (c=13, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.004044. Individual comparison alpha = 0.0008101. Comparing 3 points to limit. Assumes 2 future values.

Constituent: Barium Analysis Run 12/12/2025 10:22 AM View: 2025\_AWQR-AM\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

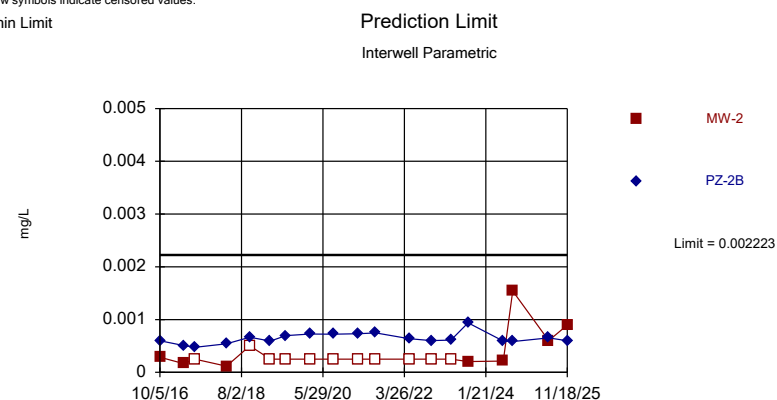
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 64.71% NDs. Annual per-constituent alpha = 0.05296. Individual comparison alpha = 0.005427 (1 of 2). Assumes 4 future values.

Constituent: Cadmium Analysis Run 12/12/2025 10:22 AM View: 2025\_AWQR-AM\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Within Limit



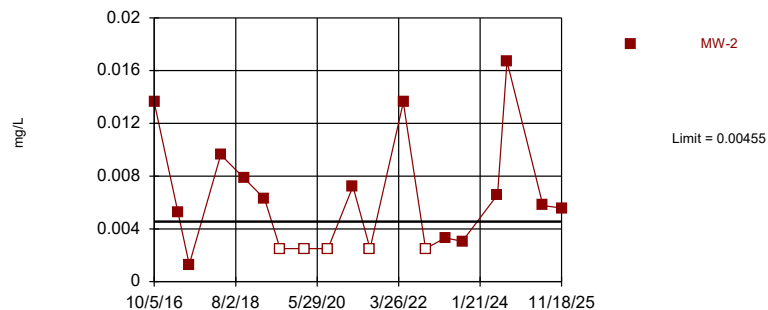
Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.06784, Std. Dev.=0.02695, n=17, 23.53% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8764, critical = 0.851. Kappa = 2.326 (c=13, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.004044. Individual comparison alpha = 0.0008101. Comparing 2 points to limit. Assumes 3 future values.

Constituent: Cobalt Analysis Run 12/12/2025 10:22 AM View: 2025\_AWQR-AM\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

Exceeds Limit: MW-2

## Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 70.59% NDs. Annual per-constituent alpha = 0.05296. Individual comparison alpha = 0.005427 (1 of 2). Assumes 4 future values.

Constituent: Nickel Analysis Run 12/12/2025 10:23 AM View: 2025\_AWQR-AM\_Interwell\_PL  
Woodbury County SLF Client: SCS Engineers Data: WCASW HMSP

## **Mann-Kendall/Sen's Slope Trend Test Summary Table and Graphs**



# Trend Test

Woodbury County SLF

Client: SCS Engineers

Data: WCASW\_AM\_2025\_AWQR

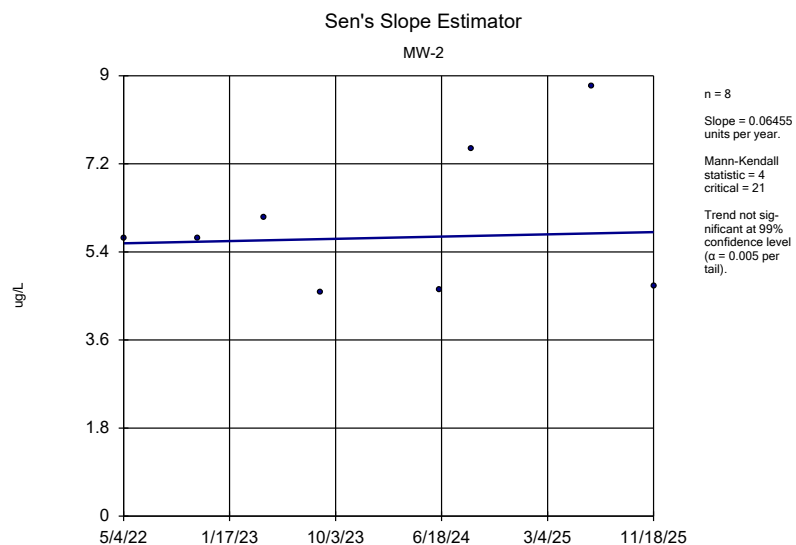
Printed 12/12/2025, 11:32 AM

| <u>Constituent</u>                   | <u>Well</u>  | <u>Slope</u>   | <u>Calc.</u> | <u>Critical</u> | <u>Sig.</u> | <u>N</u> | <u>%NDs</u> | <u>Alpha</u> | <u>Method</u> |
|--------------------------------------|--------------|----------------|--------------|-----------------|-------------|----------|-------------|--------------|---------------|
| 1,1-Dichloroethane (ug/L)            | MW-2         | 0.06455        | 4            | 21              | No          | 8        | 0           | 0.01         | NP            |
| 1,1-Dichloroethane (ug/L)            | MW-3         | 0.2844         | 14           | 21              | No          | 8        | 0           | 0.01         | NP            |
| 1,1-Dichloroethane (ug/L)            | MW-8         | 1.926          | 20           | 21              | No          | 8        | 0           | 0.01         | NP            |
| 1,1-Dichloroethane (ug/L)            | PZ-2B        | -0.2608        | -17          | -21             | No          | 8        | 0           | 0.01         | NP            |
| 1,2-Dichloropropane (ug/L)           | MW-8         | 0.028          | 4            | 21              | No          | 8        | 0           | 0.01         | NP            |
| 2,4-D [2C] (ug/L)                    | MW-3         | 0.001051       | 4            | 21              | No          | 8        | 75          | 0.01         | NP            |
| 2,4-D [2C] (ug/L)                    | MW-8         | 0.08124        | 14           | 21              | No          | 8        | 12.5        | 0.01         | NP            |
| Arsenic (mg/L)                       | MW-3         | 0.00002049     | 0            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Arsenic (mg/L)                       | PZ-2B        | 0.0001116      | 7            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Barium (mg/L)                        | MW-2         | 0.08118        | 12           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Barium (mg/L)                        | MW-3         | -0.01682       | -8           | -21             | No          | 8        | 0           | 0.01         | NP            |
| Barium (mg/L)                        | MW-5         | 0.00001641     | 1            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Barium (mg/L)                        | MW-8         | 0.0243         | 10           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Barium (mg/L)                        | PZ-2B        | 0.015          | 10           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Benzene (ug/L)                       | MW-3         | 0.03976        | 2            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Benzene (ug/L)                       | MW-8         | -0.05289       | -10          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Cadmium (mg/L)                       | MW-2         | -0.00004987    | -2           | -21             | No          | 8        | 0           | 0.01         | NP            |
| Cadmium (mg/L)                       | MW-3         | -0.000008293   | -10          | -21             | No          | 8        | 62.5        | 0.01         | NP            |
| Cadmium (mg/L)                       | PZ-2B        | 0              | -2           | -21             | No          | 8        | 75          | 0.01         | NP            |
| Chloroethane (ug/L)                  | MW-3         | -0.06924       | -2           | -21             | No          | 8        | 12.5        | 0.01         | NP            |
| Chloroethane (ug/L)                  | MW-8         | -0.06          | -4           | -21             | No          | 8        | 12.5        | 0.01         | NP            |
| Chromium (mg/L)                      | MW-8         | 0              | 8            | 21              | No          | 8        | 62.5        | 0.01         | NP            |
| cis-1,2-Dichloroethene (ug/L)        | MW-2         | 0.6816         | 16           | 21              | No          | 8        | 0           | 0.01         | NP            |
| cis-1,2-Dichloroethene (ug/L)        | MW-3         | 1.5            | 11           | 21              | No          | 8        | 0           | 0.01         | NP            |
| <b>cis-1,2-Dichloroethene (ug/L)</b> | <b>MW-8</b>  | <b>0.5784</b>  | <b>24</b>    | <b>21</b>       | <b>Yes</b>  | <b>8</b> | <b>0</b>    | <b>0.01</b>  | <b>NP</b>     |
| cis-1,2-Dichloroethene (ug/L)        | PZ-2B        | -0.18          | -20          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Cobalt (mg/L)                        | MW-2         | 0.0001465      | 9            | 21              | No          | 8        | 37.5        | 0.01         | NP            |
| Cobalt (mg/L)                        | MW-3         | -0.001326      | -14          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Cobalt (mg/L)                        | MW-8         | 0.0001481      | 14           | 21              | No          | 8        | 12.5        | 0.01         | NP            |
| Cobalt (mg/L)                        | PZ-2B        | -0.000007619   | -6           | -21             | No          | 8        | 0           | 0.01         | NP            |
| Copper (mg/L)                        | MW-3         | 0              | -7           | -21             | No          | 8        | 87.5        | 0.01         | NP            |
| Copper (mg/L)                        | MW-8         | 0              | 3            | 21              | No          | 8        | 87.5        | 0.01         | NP            |
| Dichlorodifluoromethane (ug/L)       | MW-2         | -0.5479        | -12          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Dichlorodifluoromethane (ug/L)       | MW-8         | -2.097         | -15          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Dichlorodifluoromethane (ug/L)       | PZ-2B        | -0.4475        | -20          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Lead (mg/L)                          | MW-3         | 0              | -4           | -21             | No          | 8        | 50          | 0.01         | NP            |
| Lead (mg/L)                          | MW-5         | 0              | 3            | 21              | No          | 8        | 87.5        | 0.01         | NP            |
| Lead (mg/L)                          | MW-8         | 0              | 9            | 21              | No          | 8        | 75          | 0.01         | NP            |
| Lead (mg/L)                          | PZ-2B        | 0              | -1           | -21             | No          | 8        | 87.5        | 0.01         | NP            |
| Nickel (mg/L)                        | MW-2         | 0.0009392      | 4            | 21              | No          | 8        | 12.5        | 0.01         | NP            |
| Nickel (mg/L)                        | MW-3         | -0.00316       | -8           | -21             | No          | 8        | 0           | 0.01         | NP            |
| Nickel (mg/L)                        | MW-8         | 0.0005906      | 19           | 21              | No          | 8        | 37.5        | 0.01         | NP            |
| Nickel (mg/L)                        | PZ-2B        | 0              | -1           | -21             | No          | 8        | 87.5        | 0.01         | NP            |
| Sulfide (mg/L)                       | MW-8         | 0              | 1            | 21              | No          | 8        | 87.5        | 0.01         | NP            |
| Tetrachloroethene (ug/L)             | MW-2         | 0.88           | 8            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Tetrachloroethene (ug/L)             | MW-3         | -0.1357        | -20          | -21             | No          | 8        | 50          | 0.01         | NP            |
| Tetrachloroethene (ug/L)             | MW-8         | 0.1106         | 16           | 21              | No          | 8        | 0           | 0.01         | NP            |
| <b>Tetrachloroethene (ug/L)</b>      | <b>PZ-2B</b> | <b>-0.8112</b> | <b>-22</b>   | <b>-21</b>      | <b>Yes</b>  | <b>8</b> | <b>0</b>    | <b>0.01</b>  | <b>NP</b>     |
| <b>Trichloroethene (ug/L)</b>        | <b>MW-2</b>  | <b>1.147</b>   | <b>22</b>    | <b>21</b>       | <b>Yes</b>  | <b>8</b> | <b>0</b>    | <b>0.01</b>  | <b>NP</b>     |
| Trichloroethene (ug/L)               | MW-3         | -0.7547        | -6           | -21             | No          | 8        | 0           | 0.01         | NP            |

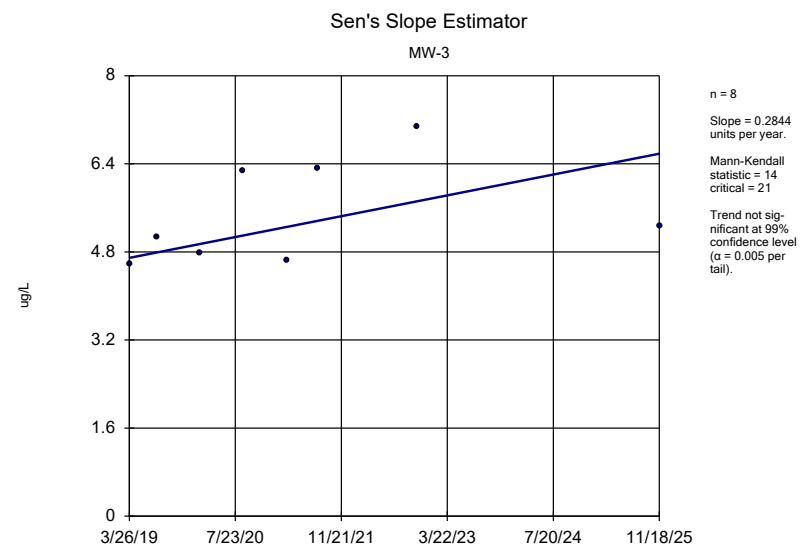
# Trend Test

Woodbury County SLF   Client: SCS Engineers   Data: WCASW\_AM\_2025\_AWQR   Printed 12/12/2025, 11:32 AM

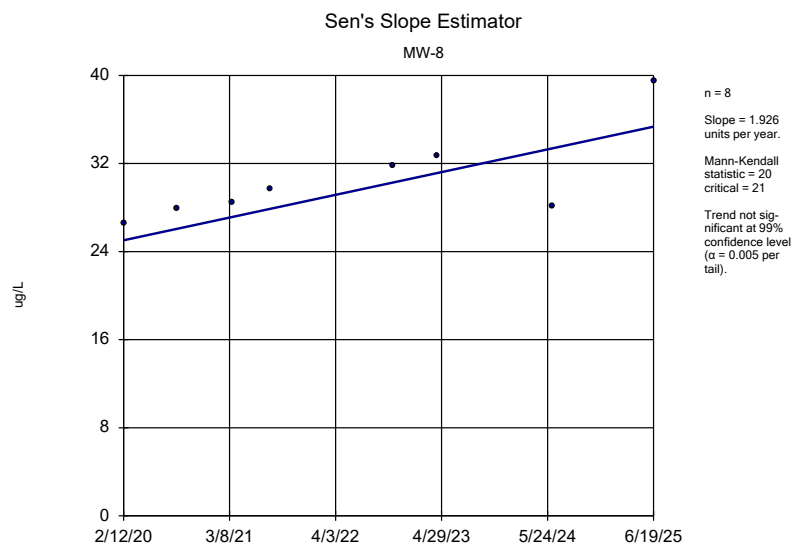
| <u>Constituent</u>     | <u>Well</u> | <u>Slope</u> | <u>Calc.</u> | <u>Critical</u> | <u>Sig.</u> | <u>N</u> | <u>%NDs</u> | <u>Alpha</u> | <u>Method</u> |
|------------------------|-------------|--------------|--------------|-----------------|-------------|----------|-------------|--------------|---------------|
| Trichloroethene (ug/L) | MW-8        | 0.5584       | 15           | 21              | No          | 8        | 0           | 0.01         | NP            |
| Trichloroethene (ug/L) | PZ-2B       | -0.6704      | -19          | -21             | No          | 8        | 0           | 0.01         | NP            |
| Vanadium (mg/L)        | MW-8        | 0.0002301    | 14           | 21              | No          | 8        | 12.5        | 0.01         | NP            |
| Vinyl Chloride (ug/L)  | MW-8        | 0.0002196    | 0            | 21              | No          | 8        | 0           | 0.01         | NP            |
| Zinc (mg/L)            | MW-2        | 0            | 1            | 21              | No          | 8        | 87.5        | 0.01         | NP            |



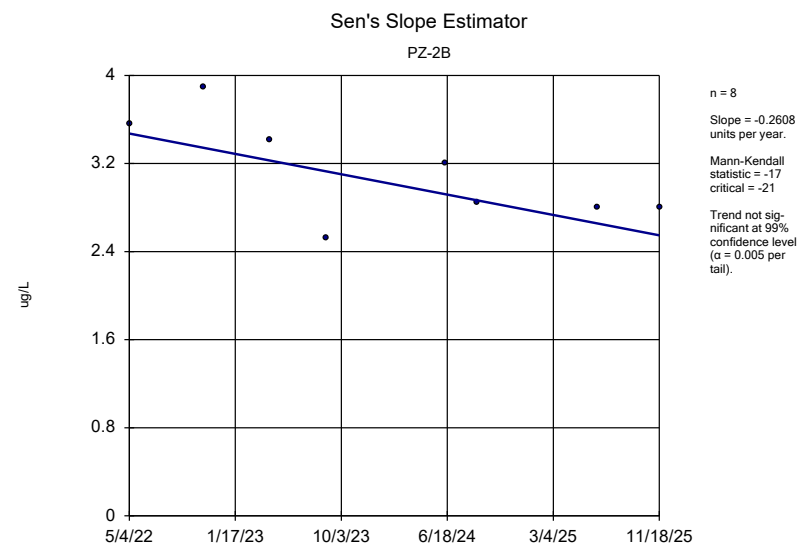
Constituent: 1,1-Dichloroethane Analysis Run 12/12/2025 11:29 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



Constituent: 1,1-Dichloroethane Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



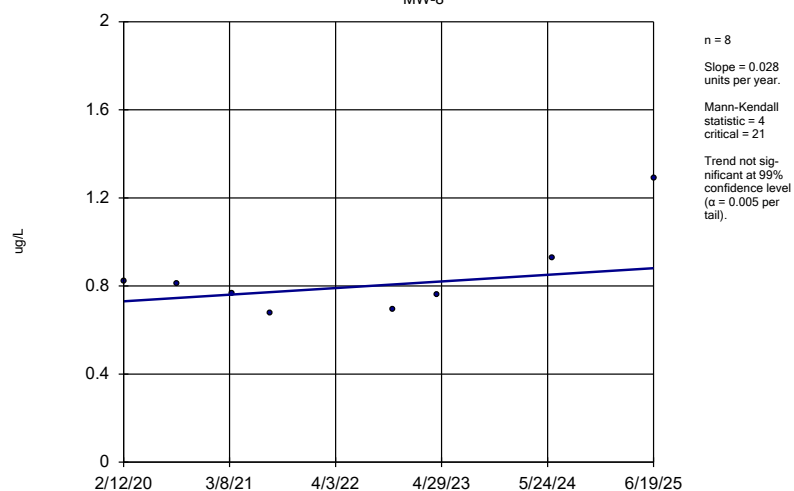
Constituent: 1,1-Dichloroethane Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



Constituent: 1,1-Dichloroethane Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

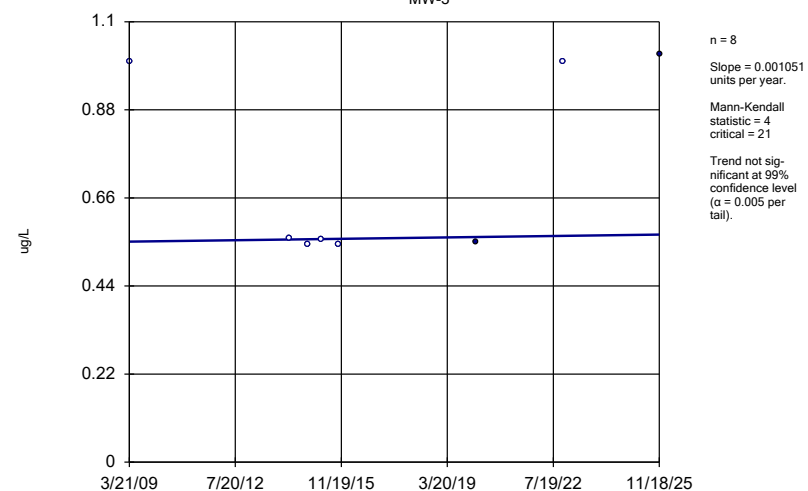
MW-8



Constituent: 1,2-Dichloropropane Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

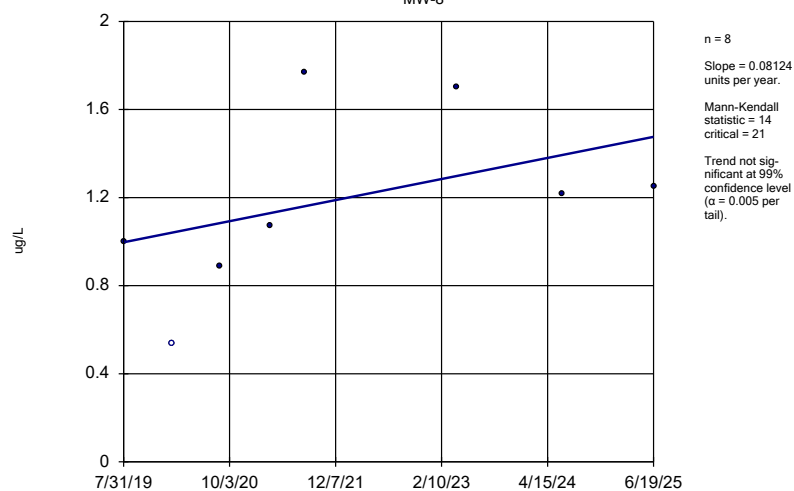
MW-3



Constituent: 2,4-D [2C] Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

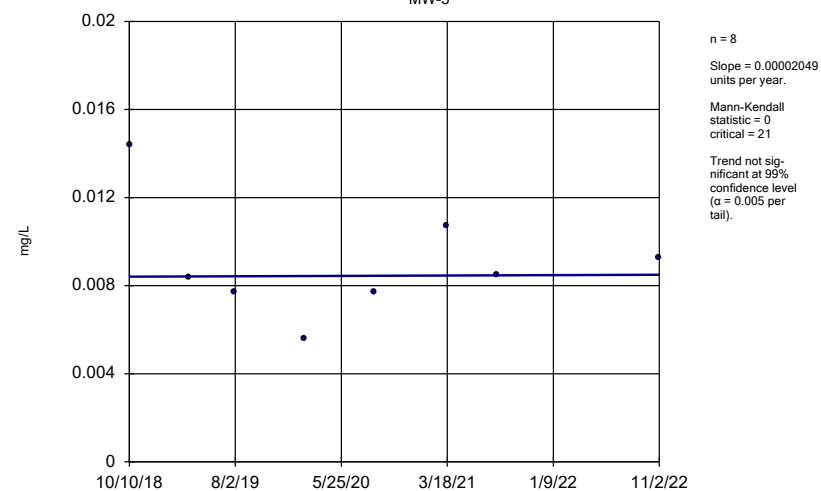
MW-8



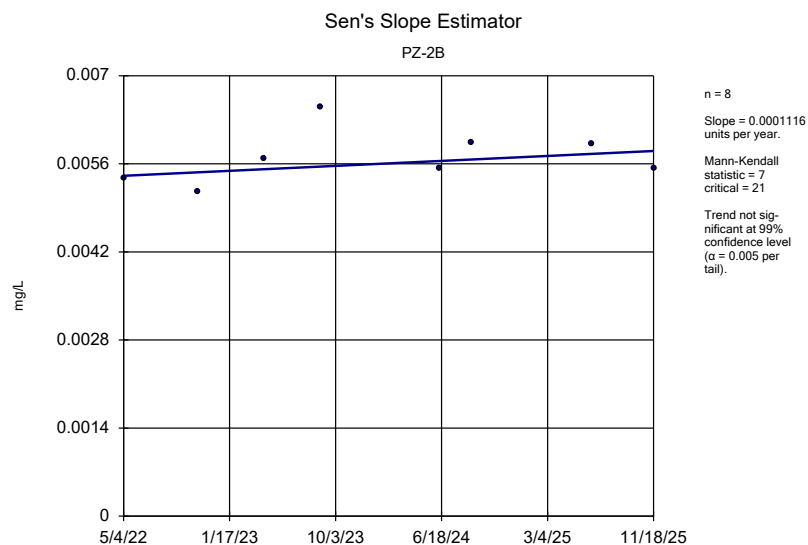
Constituent: 2,4-D [2C] Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

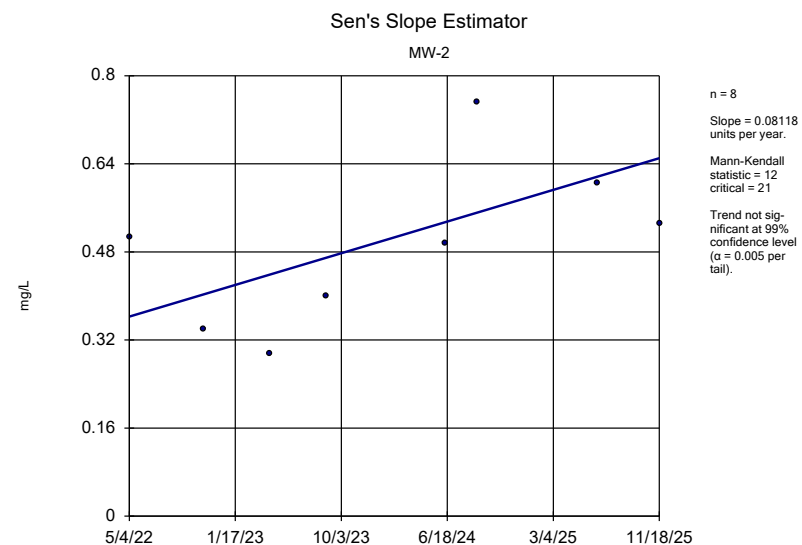
MW-3



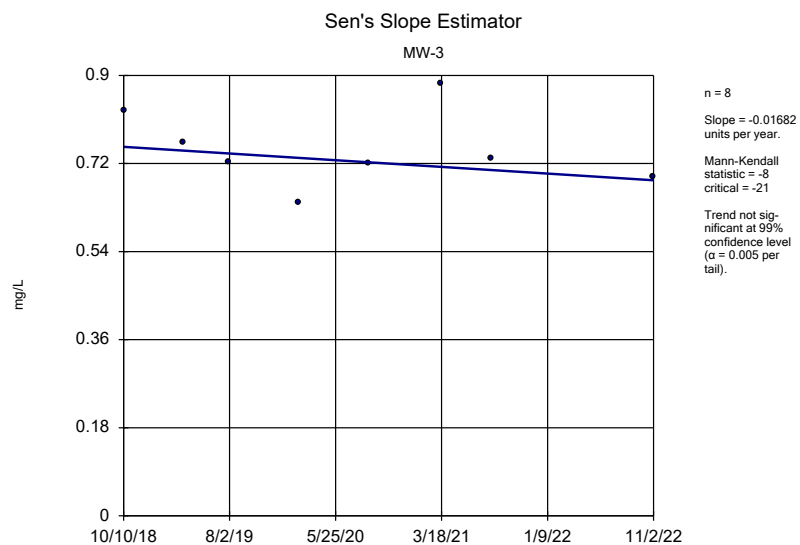
Constituent: Arsenic Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



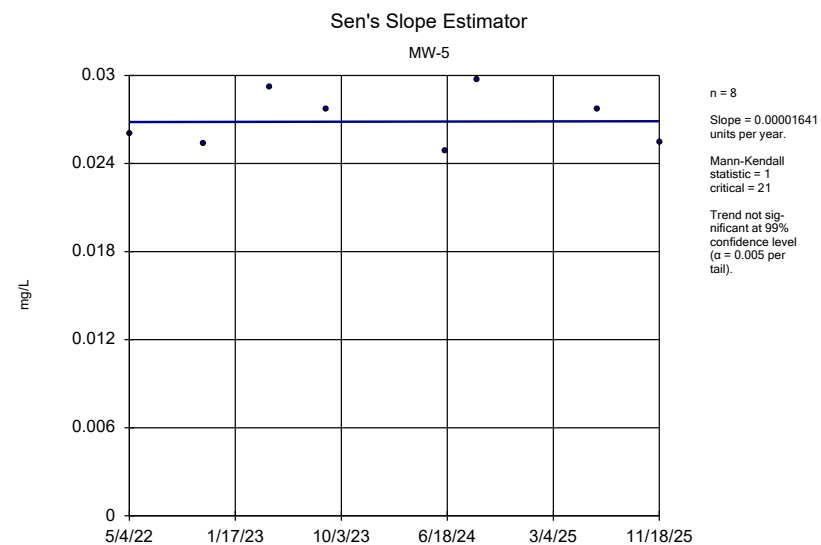
Constituent: Arsenic Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



Constituent: Barium Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



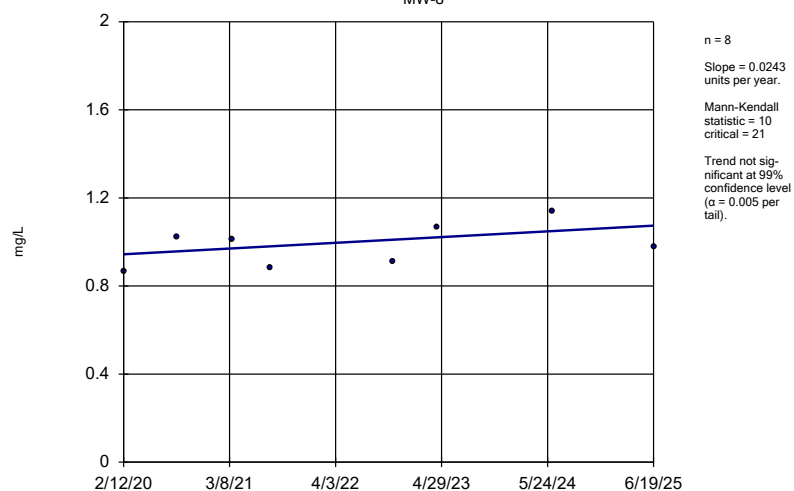
Constituent: Barium Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



Constituent: Barium Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

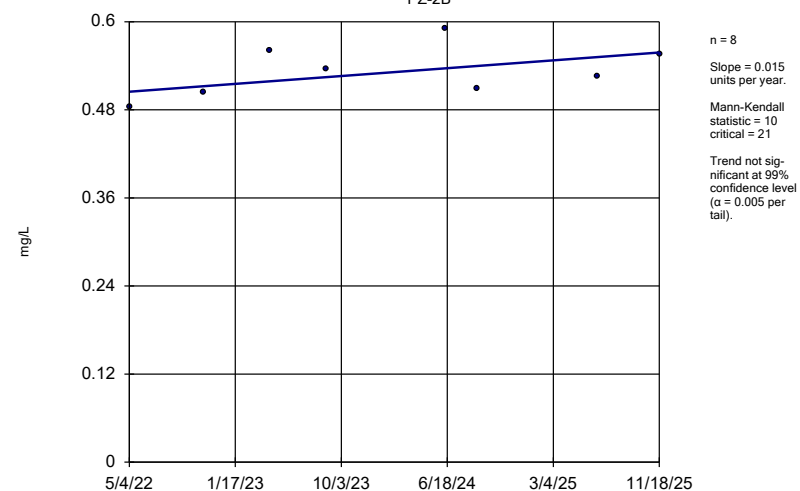
MW-8



Constituent: Barium Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

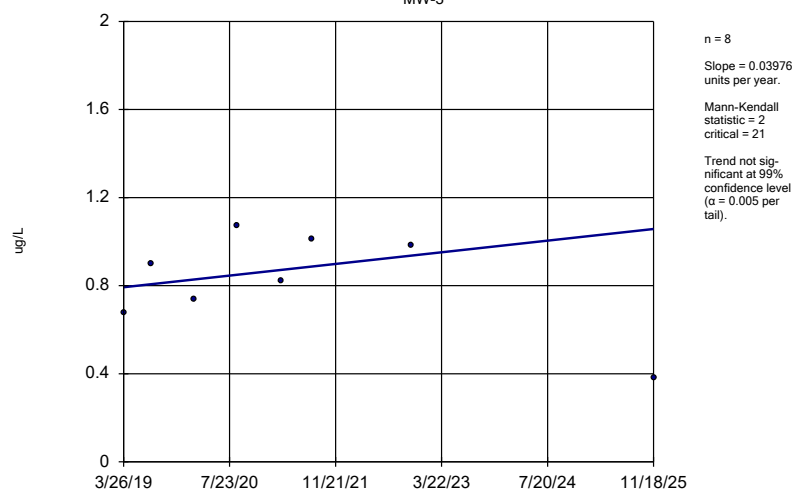
PZ-2B



Constituent: Barium Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

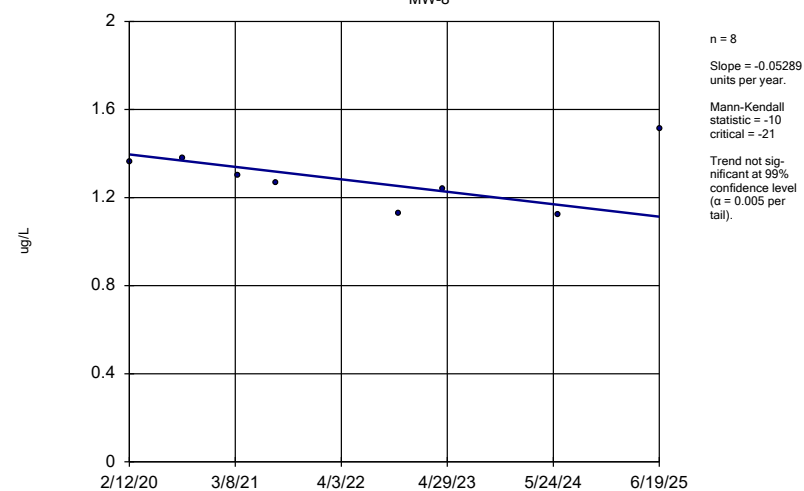
MW-3



Constituent: Benzene Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

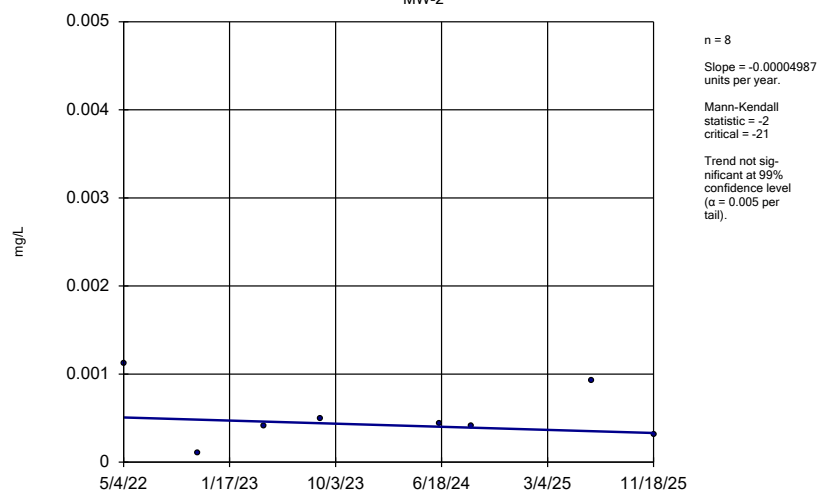
MW-8



Constituent: Benzene Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

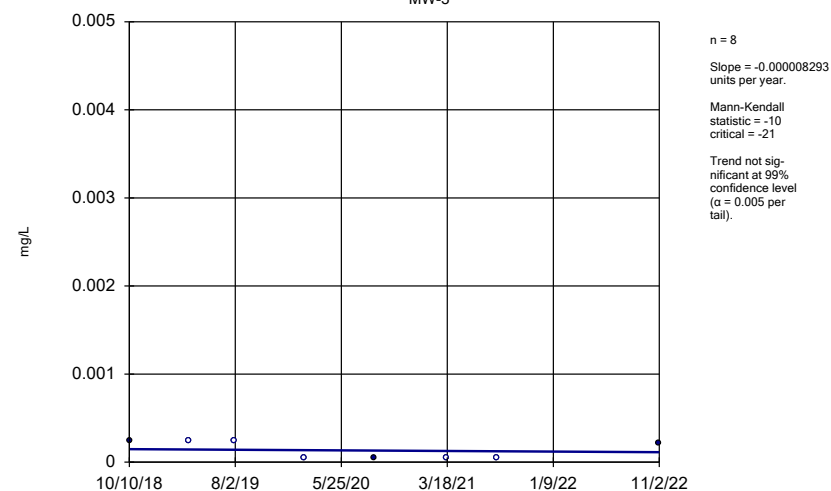
MW-2



Constituent: Cadmium Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

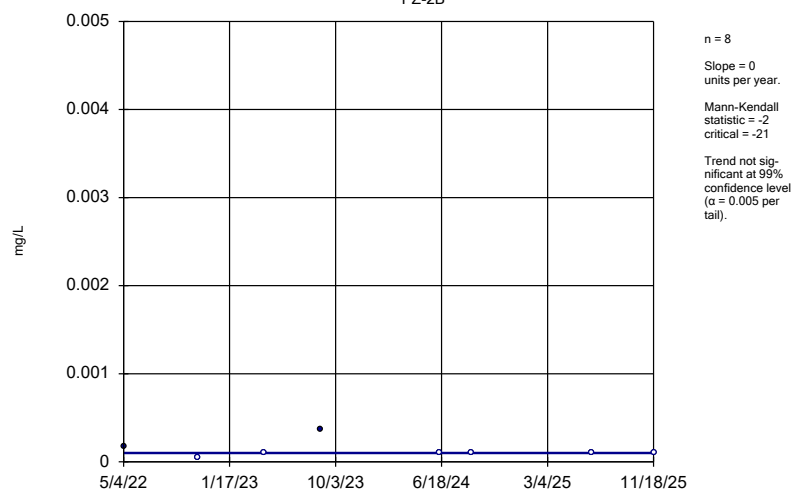
MW-3



Constituent: Cadmium Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

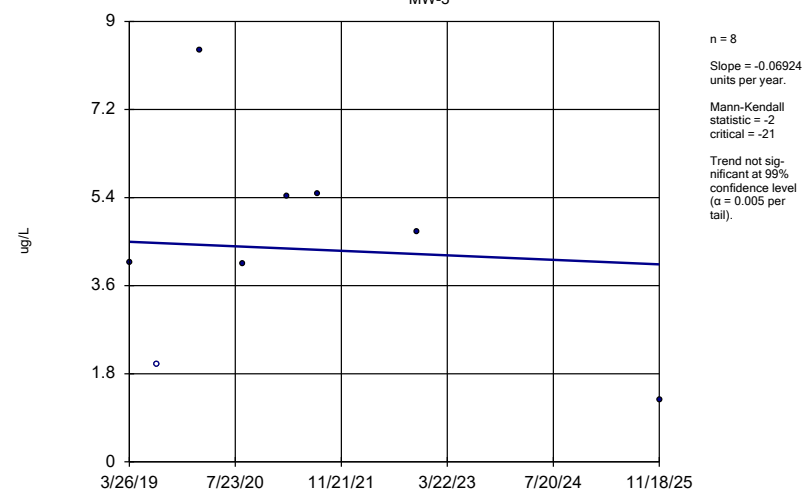
PZ-2B



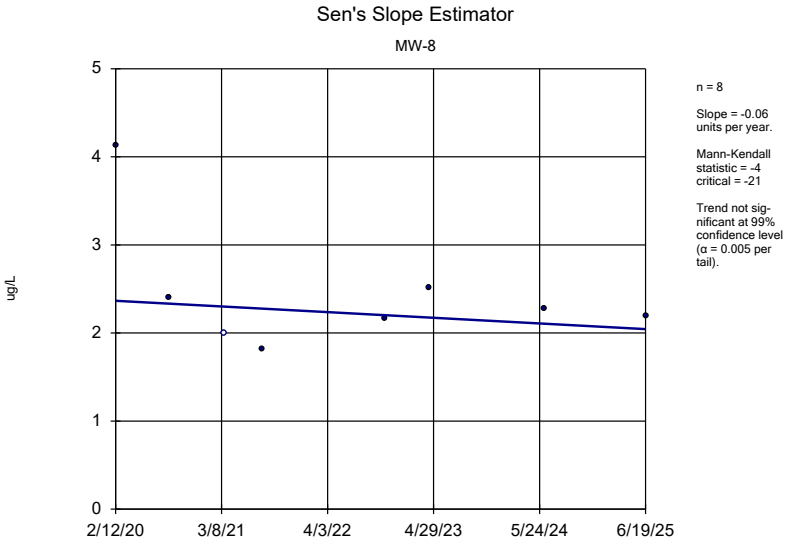
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Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Sen's Slope Estimator

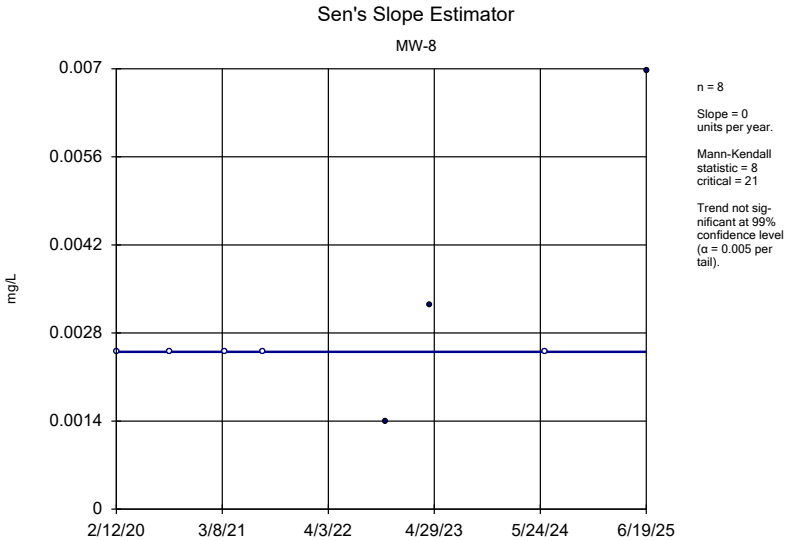
MW-3



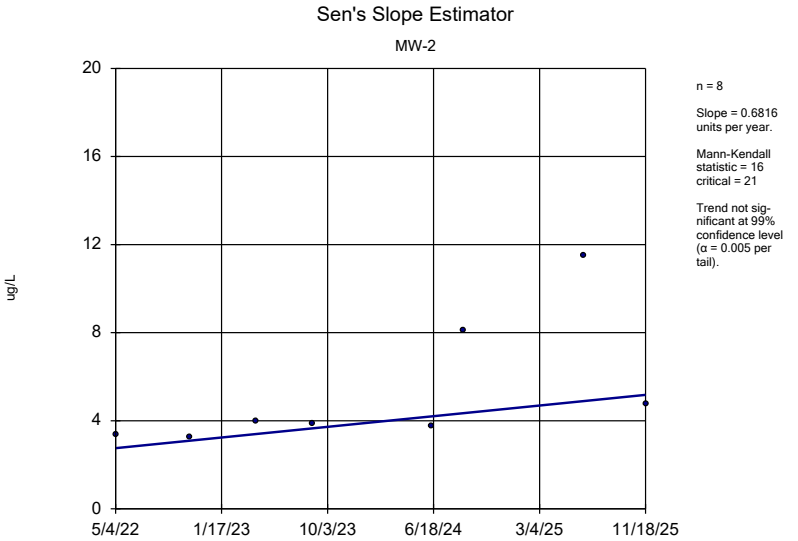
Constituent: Chloroethane Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



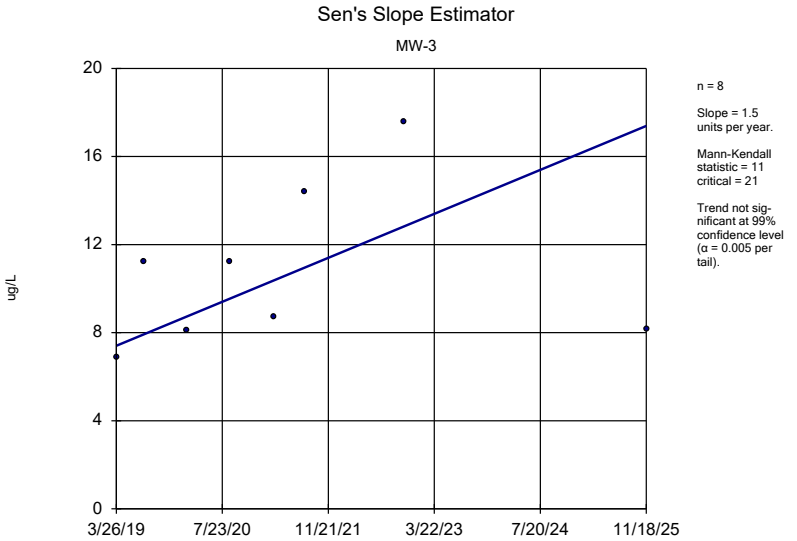
Constituent: Chloroethane Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



Constituent: Chromium Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

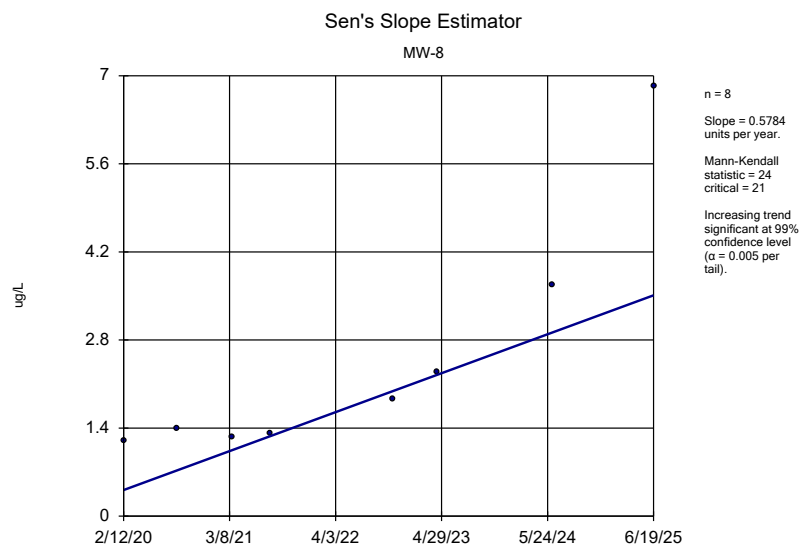


Constituent: cis-1,2-Dichloroethene Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

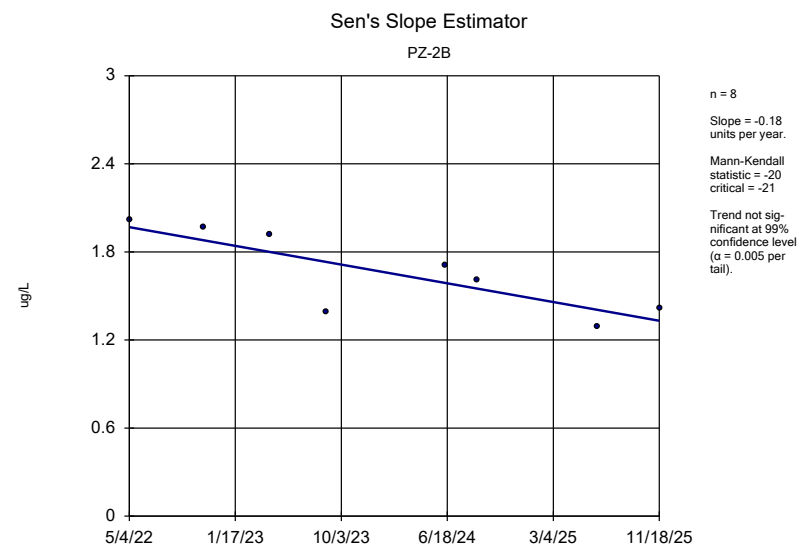


Constituent: cis-1,2-Dichloroethene Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

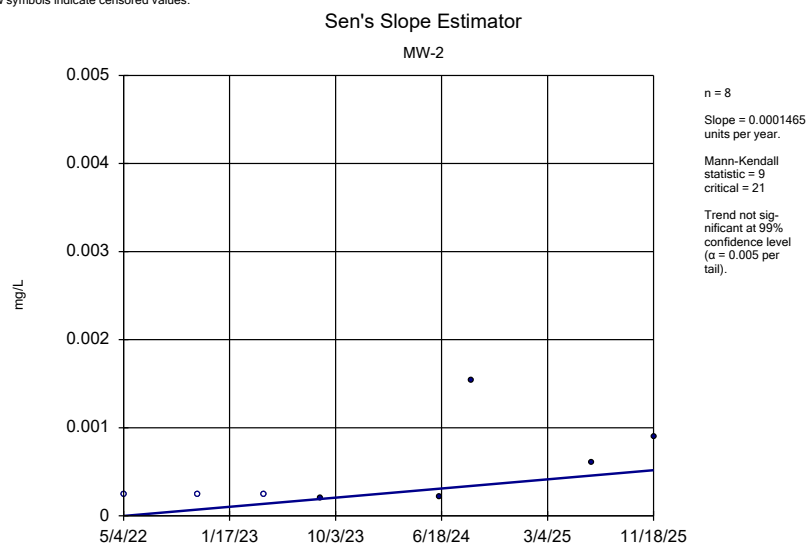




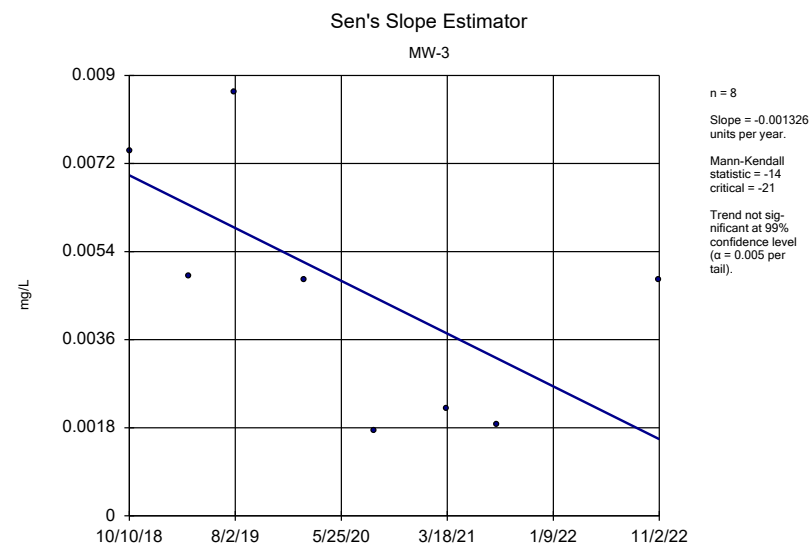
Constituent: cis-1,2-Dichloroethene Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendal  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



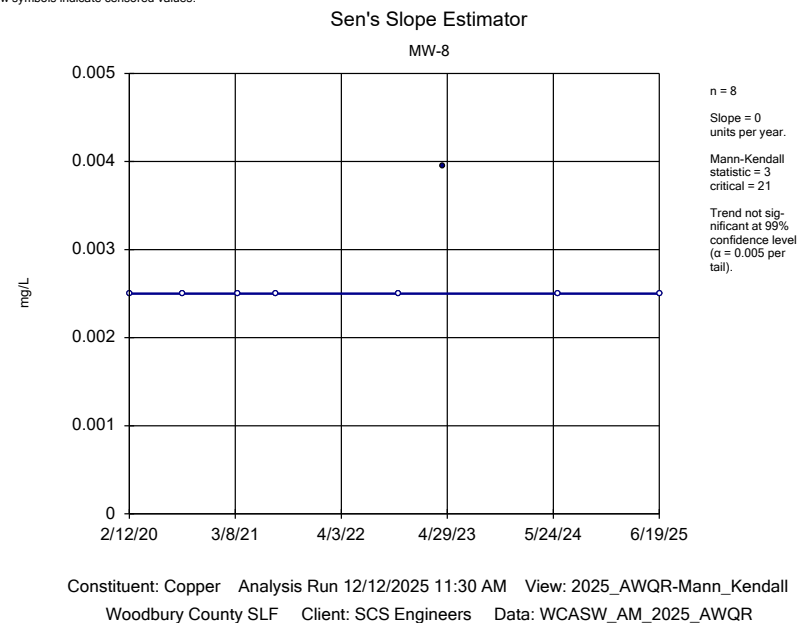
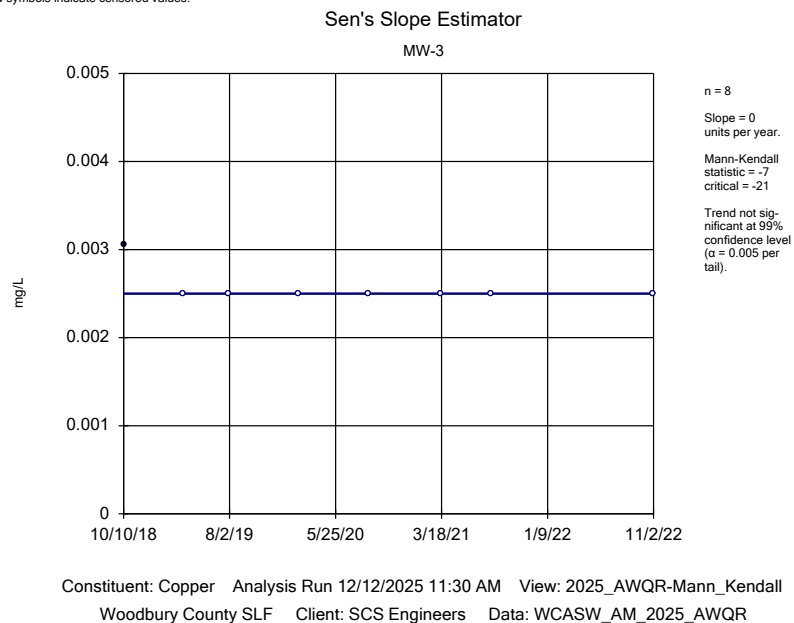
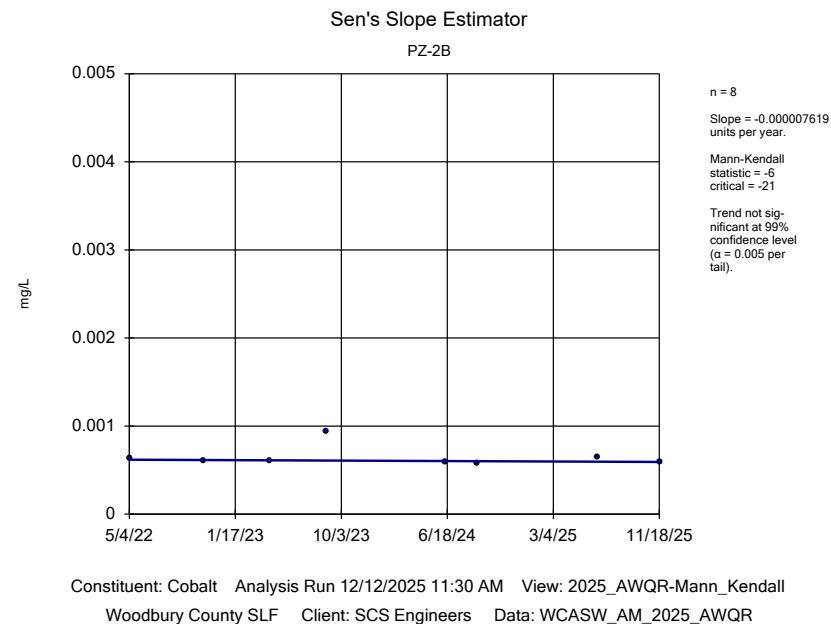
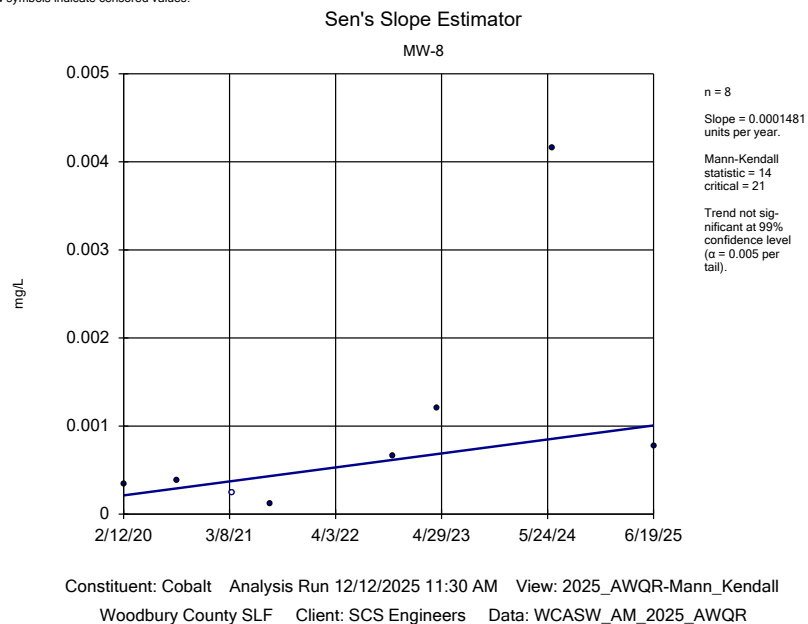
Constituent: cis-1,2-Dichloroethene Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendal  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

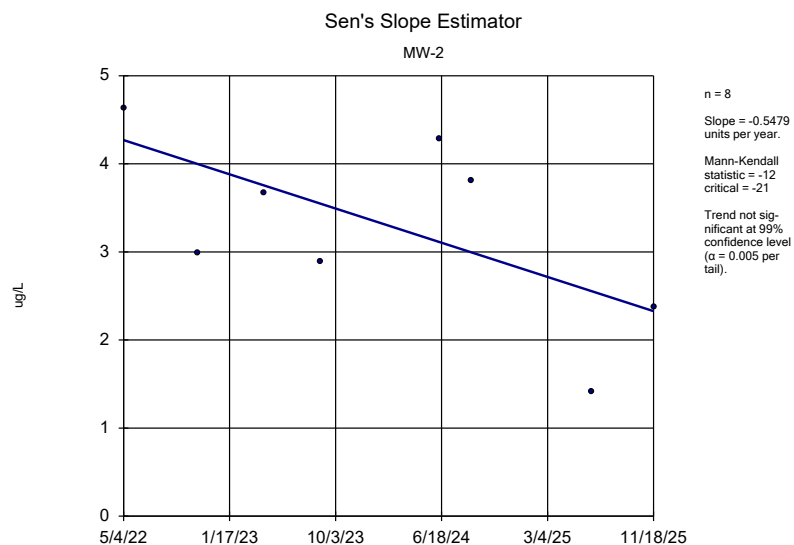


Constituent: Cobalt Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendal  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

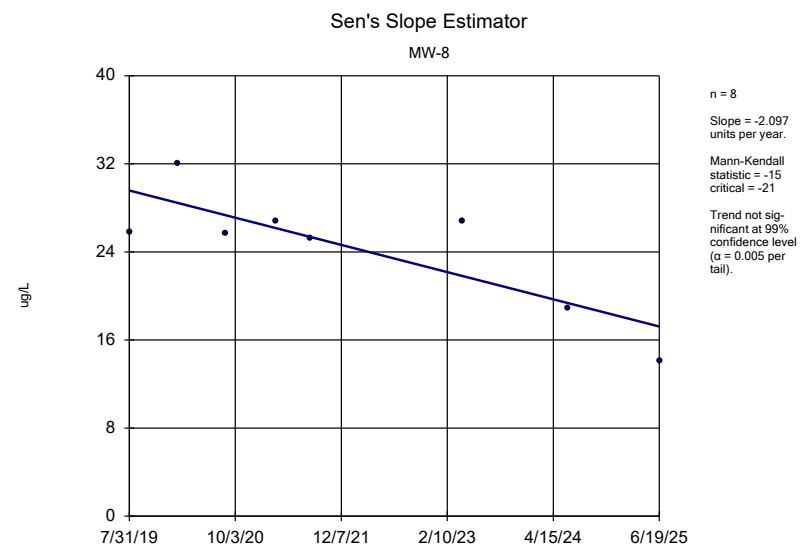


Constituent: Cobalt Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendal  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

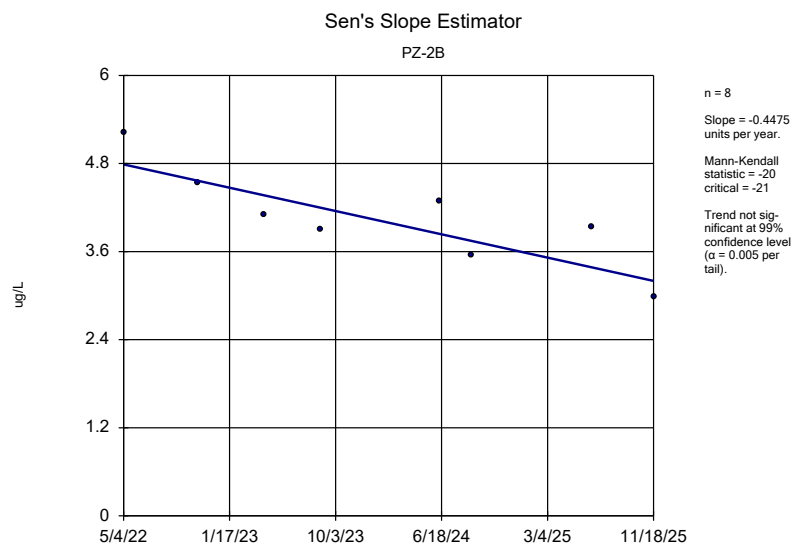




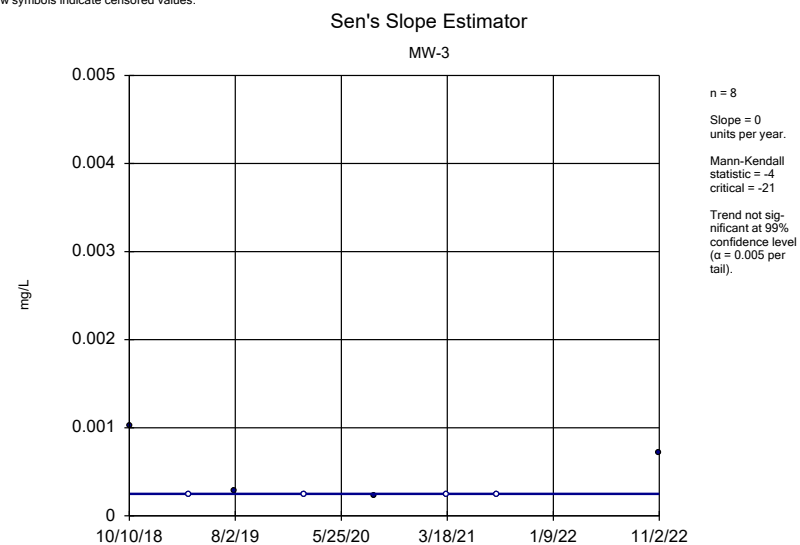
Constituent: Dichlorodifluoromethane Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Ken  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



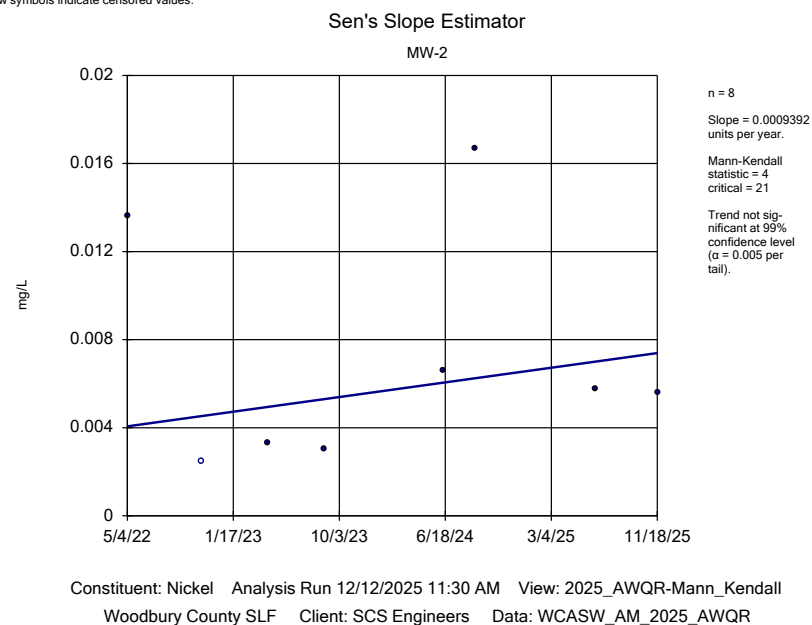
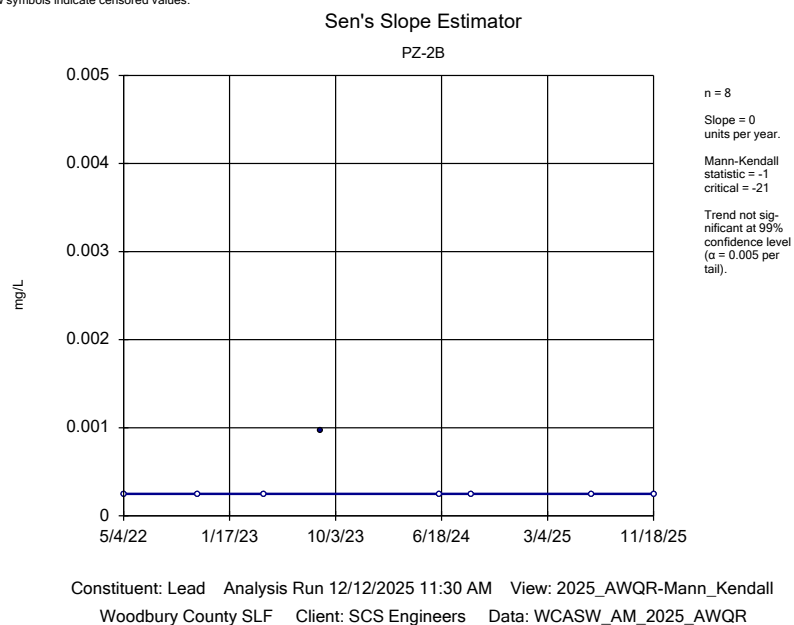
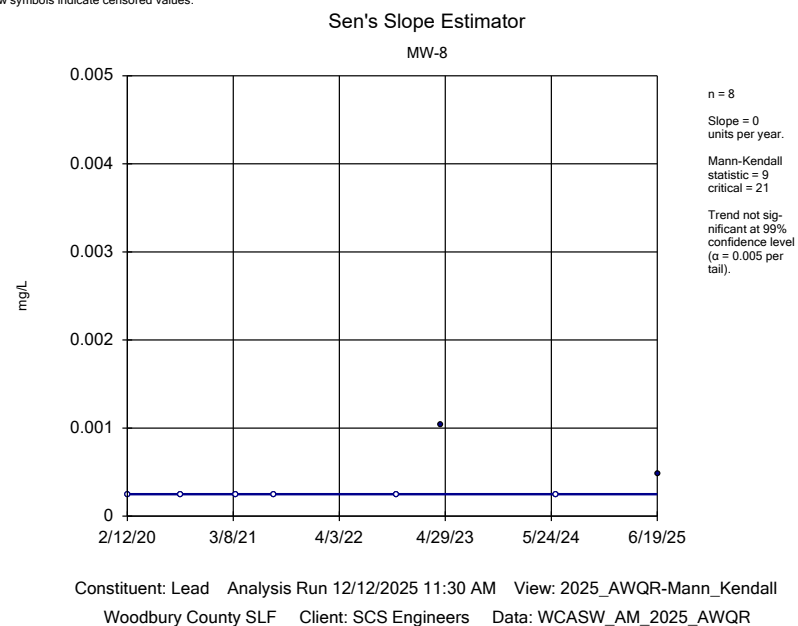
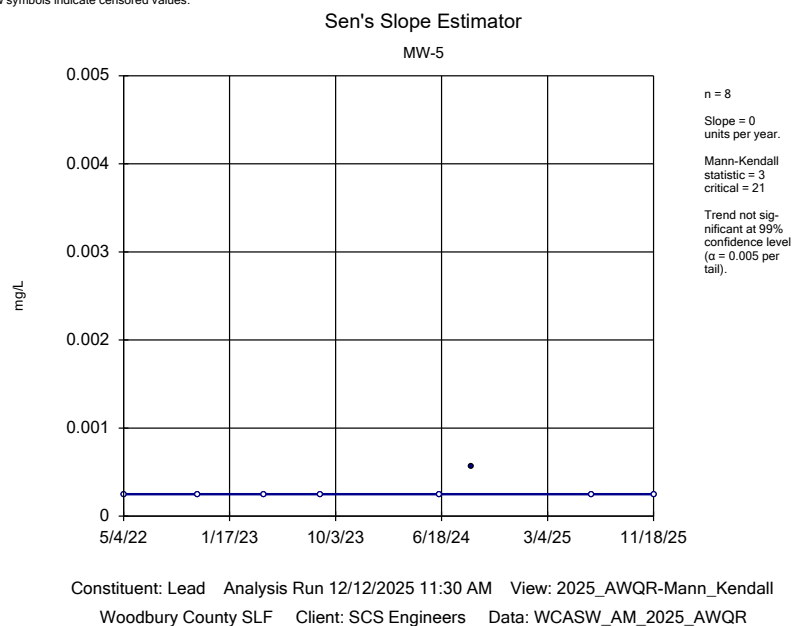
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Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

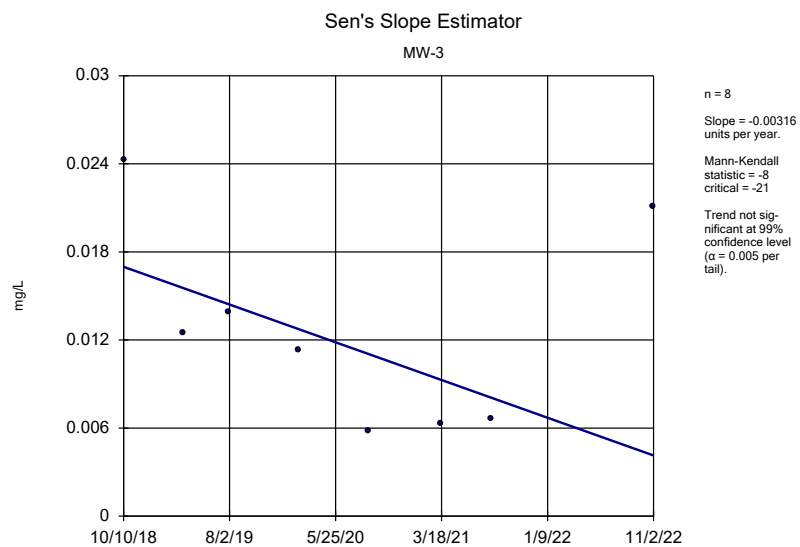


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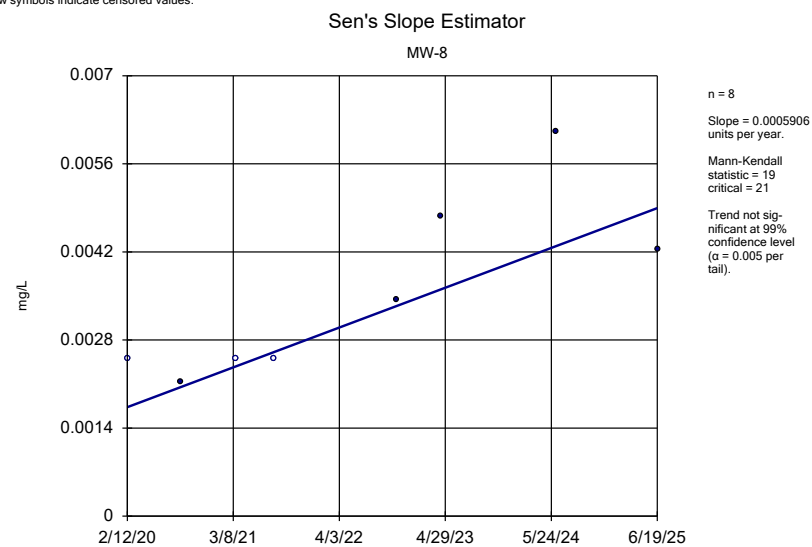


Constituent: Lead Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

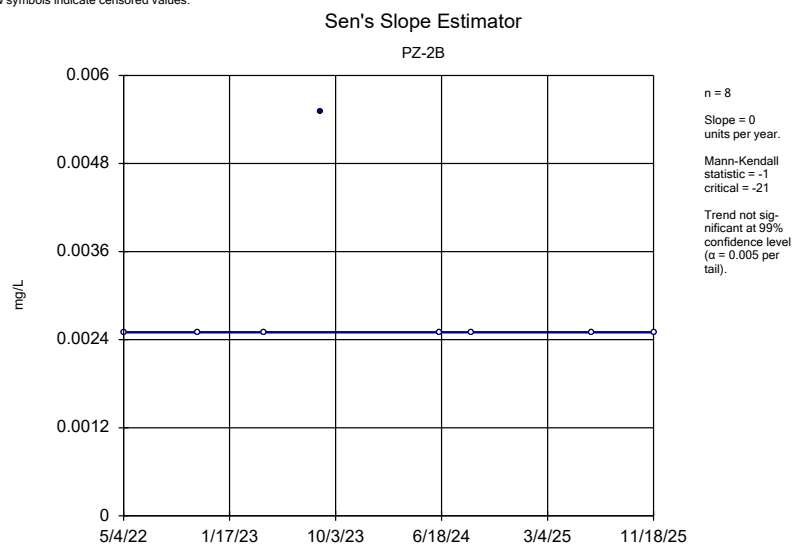




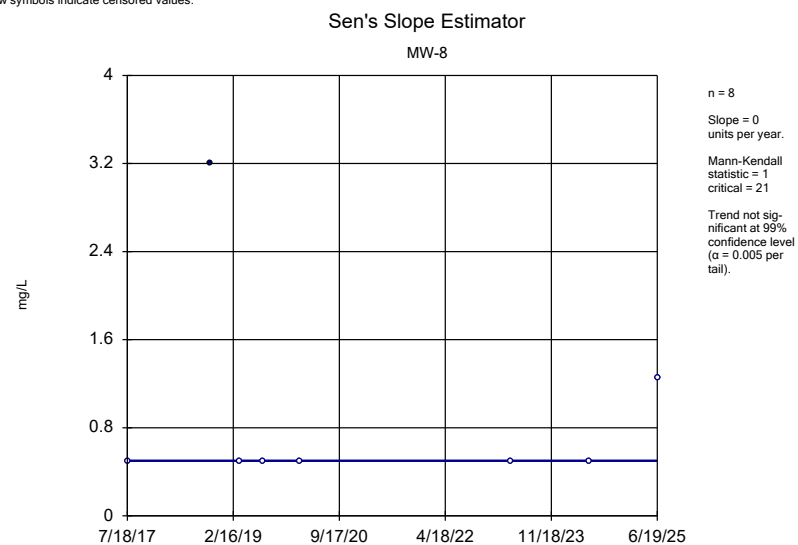
Constituent: Nickel Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



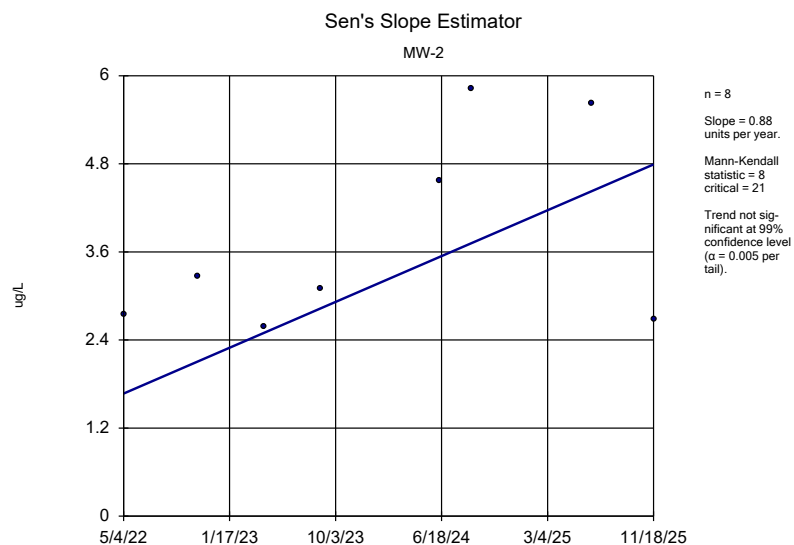
Constituent: Nickel Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



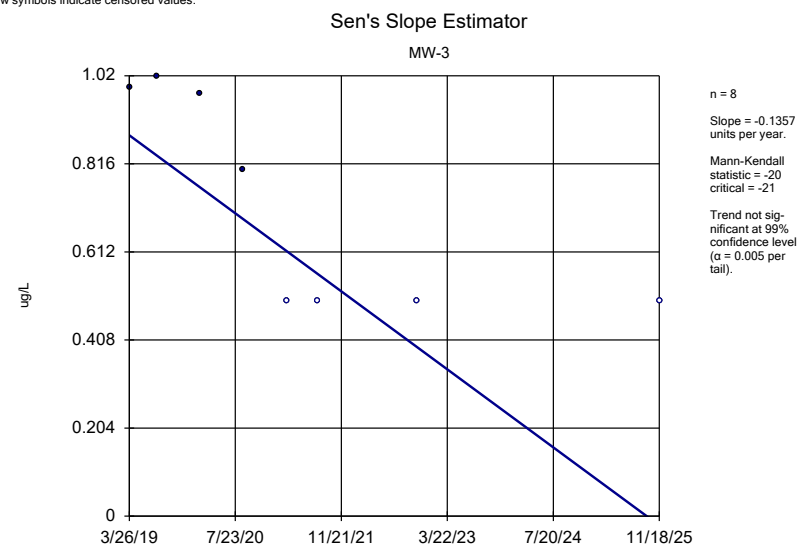
Constituent: Nickel Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



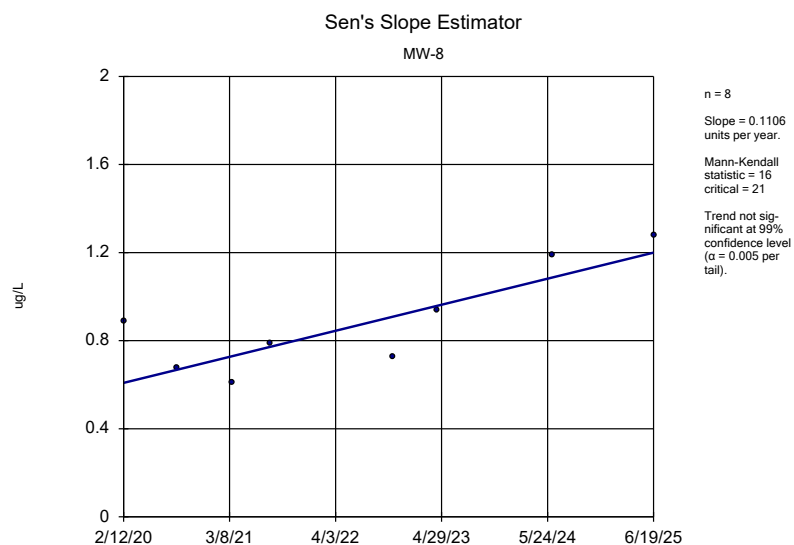
Constituent: Sulfide Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



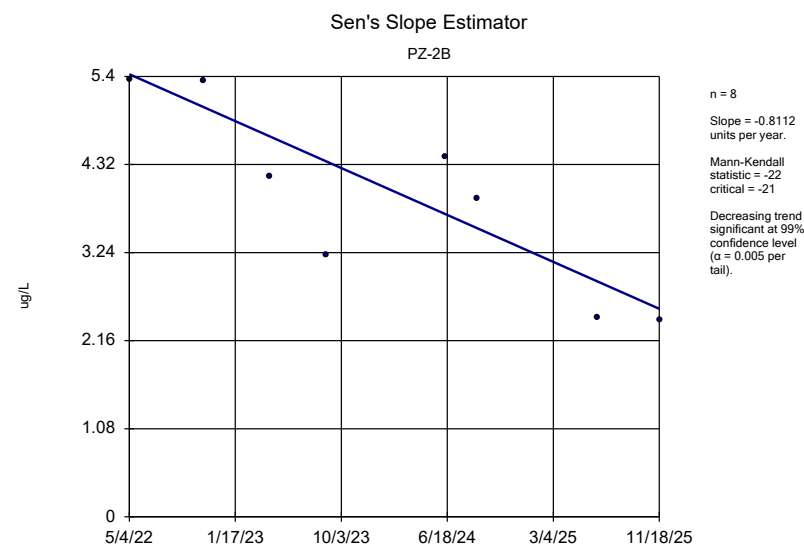
Constituent: Tetrachloroethene Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



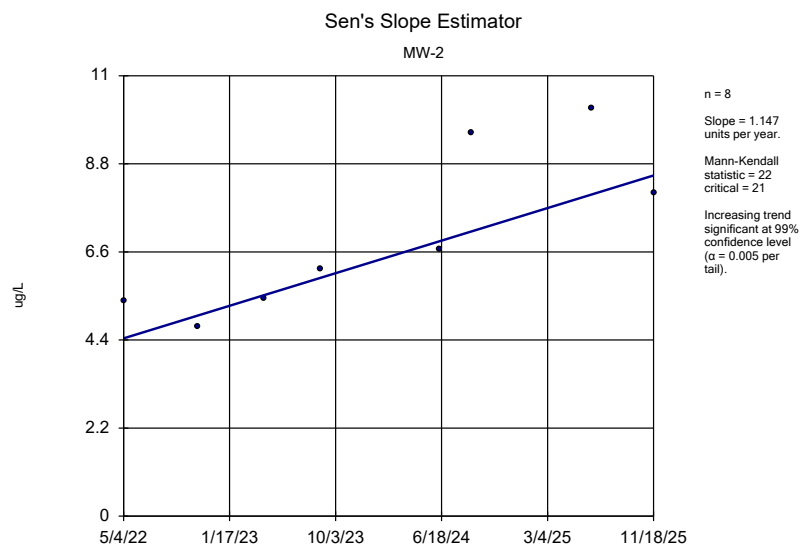
Constituent: Tetrachloroethene Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



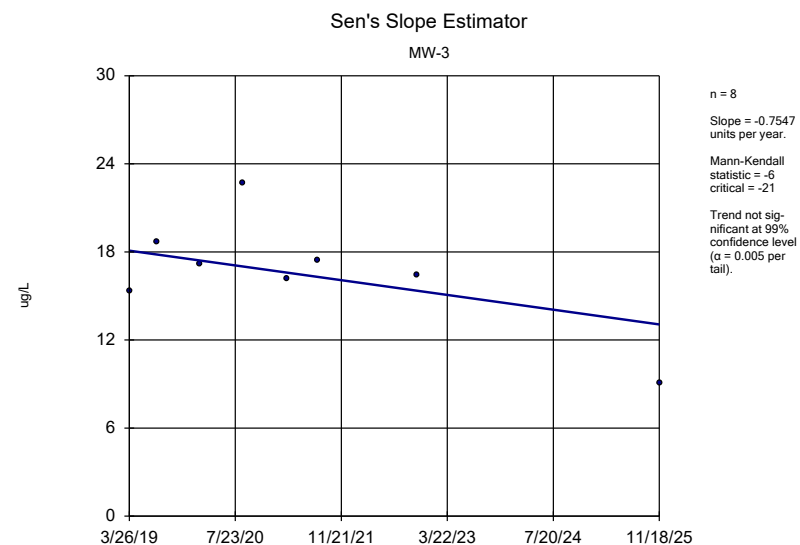
Constituent: Tetrachloroethene Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



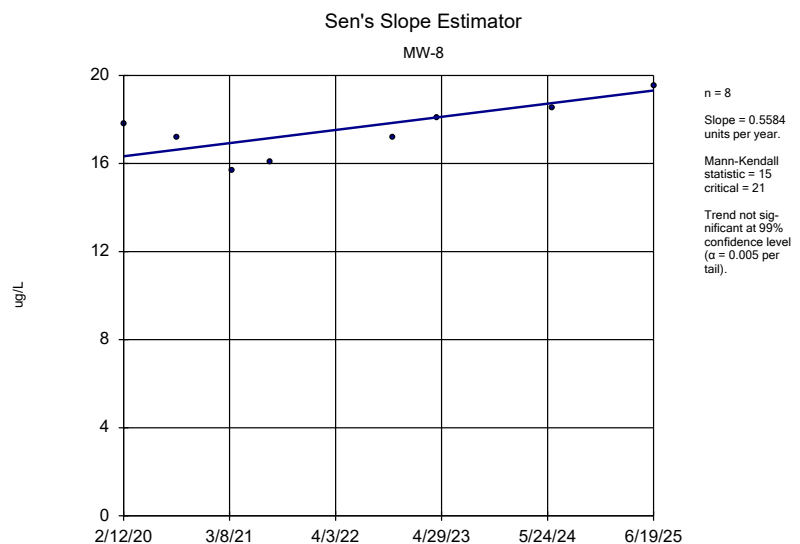
Constituent: Tetrachloroethene Analysis Run 12/12/2025 11:30 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



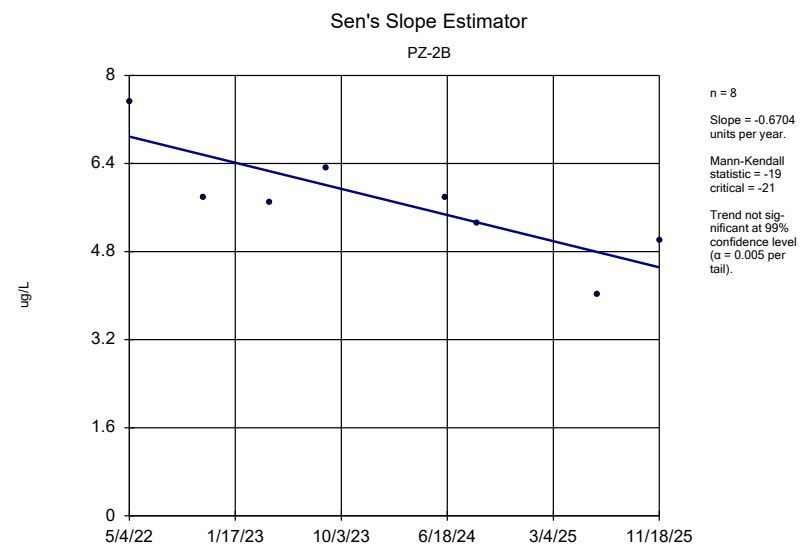
Constituent: Trichloroethene Analysis Run 12/12/2025 11:31 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



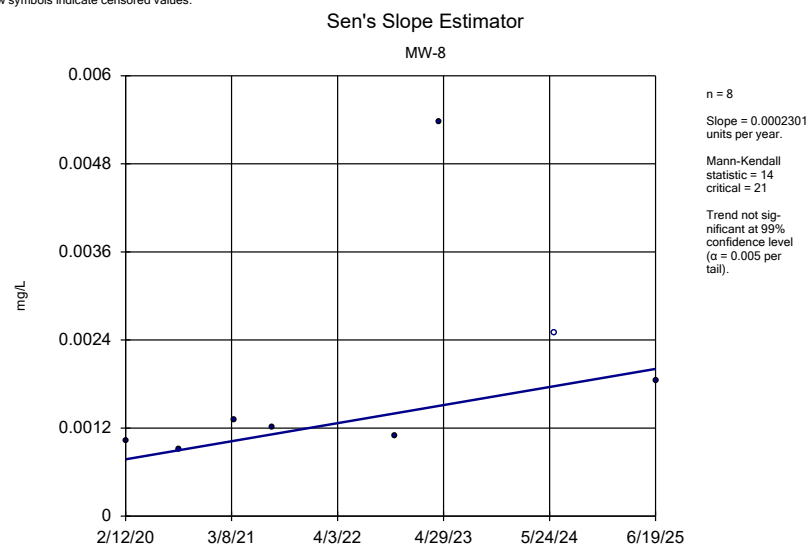
Constituent: Trichloroethene Analysis Run 12/12/2025 11:31 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



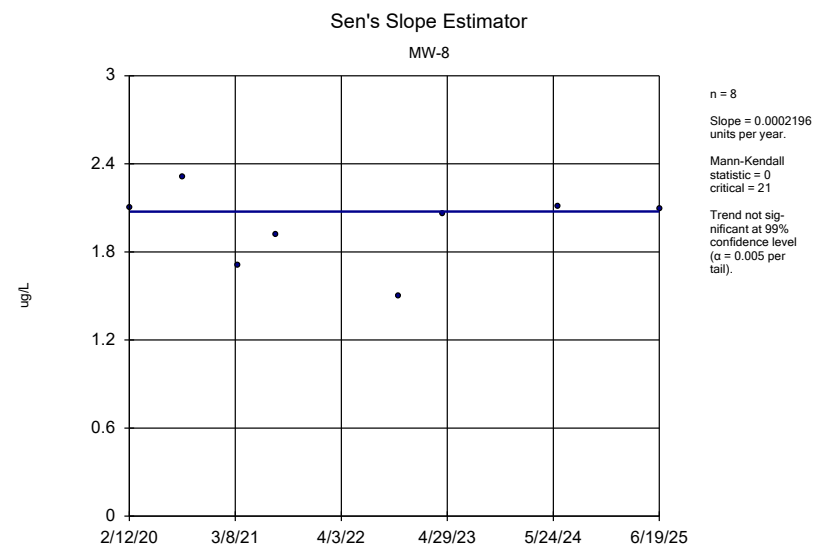
Constituent: Trichloroethene Analysis Run 12/12/2025 11:31 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



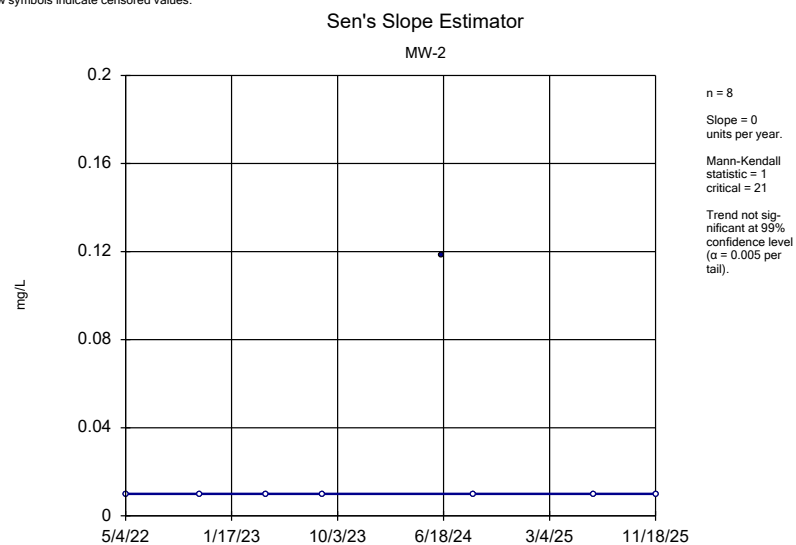
Constituent: Trichloroethene Analysis Run 12/12/2025 11:31 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



Constituent: Vanadium Analysis Run 12/12/2025 11:31 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



Constituent: Vinyl Chloride Analysis Run 12/12/2025 11:31 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



Constituent: Zinc Analysis Run 12/12/2025 11:31 AM View: 2025\_AWQR-Mann\_Kendall  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR



## **Confidence Interval Summary Table and Graphs**

# Confidence Interval

Woodbury County SLF

Client: SCS Engineers

Data: WCASW\_AM\_2025\_AWQR

Printed 12/12/2025, 3:10 PM

| <u>Constituent</u>             | <u>Well</u> | <u>Upper Lim.</u> | <u>Lower Lim.</u> | <u>Compliance</u> | <u>Sig.</u> | <u>N</u> | <u>%NDs</u> | <u>Transform</u> | <u>Alpha</u> | <u>Method</u>  |
|--------------------------------|-------------|-------------------|-------------------|-------------------|-------------|----------|-------------|------------------|--------------|----------------|
| 1,1-Dichloroethane (ug/L)      | MW-2        | 7.553             | 4.363             | 140               | No          | 8        | 0           | No               | 0.01         | Param.         |
| 1,1-Dichloroethane (ug/L)      | MW-3        | 6.494             | 4.514             | 140               | No          | 8        | 0           | No               | 0.01         | Param.         |
| 1,1-Dichloroethane (ug/L)      | MW-8        | 34.99             | 26.21             | 140               | No          | 8        | 0           | No               | 0.01         | Param.         |
| 1,1-Dichloroethane (ug/L)      | PZ-2B       | 3.622             | 2.636             | 140               | No          | 8        | 0           | No               | 0.01         | Param.         |
| 1,2-Dichloropropane (ug/L)     | MW-8        | 1.053             | 0.6352            | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| 2,4-D [2C] (ug/L)              | MW-3        | 1.02              | 0.545             | 70                | No          | 8        | 75          | No               | 0.004        | NP (NDs)       |
| 2,4-D [2C] (ug/L)              | MW-8        | 1.613             | 0.7456            | 70                | No          | 8        | 12.5        | No               | 0.01         | Param.         |
| Arsenic (mg/L)                 | MW-3        | 0.0118            | 0.006276          | 0.01              | No          | 8        | 0           | No               | 0.01         | Param.         |
| Arsenic (mg/L)                 | PZ-2B       | 0.006142          | 0.00526           | 0.01              | No          | 8        | 0           | No               | 0.01         | Param.         |
| Barium (mg/L)                  | MW-2        | 0.6468            | 0.3343            | 2                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Barium (mg/L)                  | MW-3        | 0.8296            | 0.6663            | 2                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Barium (mg/L)                  | MW-5        | 0.02895           | 0.02505           | 2                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Barium (mg/L)                  | MW-8        | 1.084             | 0.8838            | 2                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Barium (mg/L)                  | PZ-2B       | 0.5694            | 0.4964            | 2                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Benzene (ug/L)                 | MW-3        | 1.061             | 0.5845            | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Benzene (ug/L)                 | MW-8        | 1.427             | 1.151             | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Cadmium (mg/L)                 | MW-2        | 0.0008784         | 0.0001743         | 0.005             | No          | 8        | 0           | No               | 0.01         | Param.         |
| Cadmium (mg/L)                 | MW-3        | 0.00025           | 0.00005           | 0.005             | No          | 8        | 62.5        | No               | 0.004        | NP (NDs)       |
| Cadmium (mg/L)                 | PZ-2B       | 0.000367          | 0.00005           | 0.005             | No          | 8        | 75          | No               | 0.004        | NP (NDs)       |
| Chloroethane (ug/L)            | MW-3        | 6.769             | 2.076             | 2800              | No          | 8        | 12.5        | No               | 0.01         | Param.         |
| Chloroethane (ug/L)            | MW-8        | 4.13              | 1.82              | 2800              | No          | 8        | 12.5        | No               | 0.004        | NP (normality) |
| Chromium (mg/L)                | MW-8        | 0.00698           | 0.00139           | 0.1               | No          | 8        | 62.5        | No               | 0.004        | NP (NDs)       |
| cis-1,2-Dichloroethene (ug/L)  | MW-2        | 11.5              | 3.24              | 70                | No          | 8        | 0           | No               | 0.004        | NP (normality) |
| cis-1,2-Dichloroethene (ug/L)  | MW-3        | 14.66             | 6.909             | 70                | No          | 8        | 0           | No               | 0.01         | Param.         |
| cis-1,2-Dichloroethene (ug/L)  | PZ-2B       | 1.966             | 1.365             | 70                | No          | 8        | 0           | No               | 0.01         | Param.         |
| Cobalt (mg/L)                  | MW-2        | 0.00154           | 0.000204          | 0.002223          | No          | 8        | 37.5        | No               | 0.004        | NP (normality) |
| Cobalt (mg/L)                  | MW-3        | 0.007289          | 0.001839          | 0.002223          | No          | 8        | 0           | No               | 0.01         | Param.         |
| Cobalt (mg/L)                  | MW-8        | 0.00416           | 0.0001185         | 0.002223          | No          | 8        | 12.5        | No               | 0.004        | NP (normality) |
| Cobalt (mg/L)                  | PZ-2B       | 0.000939          | 0.000583          | 0.002223          | No          | 8        | 0           | No               | 0.004        | NP (normality) |
| Copper (mg/L)                  | MW-3        | 0.00306           | 0.0025            | 1.3               | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Copper (mg/L)                  | MW-8        | 0.003945          | 0.0025            | 1.3               | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Dichlorodifluoromethane (ug/L) | MW-2        | 4.376             | 2.139             | 1000              | No          | 8        | 0           | No               | 0.01         | Param.         |
| Dichlorodifluoromethane (ug/L) | MW-8        | 30.22             | 18.61             | 1000              | No          | 8        | 0           | No               | 0.01         | Param.         |
| Dichlorodifluoromethane (ug/L) | PZ-2B       | 4.767             | 3.362             | 1000              | No          | 8        | 0           | No               | 0.01         | Param.         |
| Lead (mg/L)                    | MW-3        | 0.00103           | 0.0002355         | 0.015             | No          | 8        | 50          | No               | 0.004        | NP (normality) |
| Lead (mg/L)                    | MW-5        | 0.000567          | 0.00025           | 0.015             | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Lead (mg/L)                    | MW-8        | 0.001035          | 0.00025           | 0.015             | No          | 8        | 75          | No               | 0.004        | NP (NDs)       |
| Lead (mg/L)                    | PZ-2B       | 0.000974          | 0.00025           | 0.015             | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Nickel (mg/L)                  | MW-2        | 0.01267           | 0.001611          | 0.1               | No          | 8        | 12.5        | No               | 0.01         | Param.         |
| Nickel (mg/L)                  | MW-3        | 0.02005           | 0.0054            | 0.1               | No          | 8        | 0           | No               | 0.01         | Param.         |
| Nickel (mg/L)                  | MW-8        | 0.005265          | 0.002652          | 0.1               | No          | 8        | 37.5        | No               | 0.01         | Param.         |
| Nickel (mg/L)                  | PZ-2B       | 0.0055            | 0.0025            | 0.1               | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Sulfide (mg/L)                 | MW-8        | 3.2               | 0.5               | 1                 | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)       |
| Tetrachloroethene (ug/L)       | MW-2        | 5.22              | 2.38              | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Tetrachloroethene (ug/L)       | MW-3        | 1.029             | 0.845             | 5                 | No          | 8        | 50          | No               | 0.01         | Param.         |
| Tetrachloroethene (ug/L)       | MW-8        | 1.143             | 0.6333            | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| <b>Trichloroethene (ug/L)</b>  | <b>MW-3</b> | <b>20.63</b>      | <b>12.61</b>      | <b>5</b>          | <b>Yes</b>  | <b>8</b> | <b>0</b>    | <b>No</b>        | <b>0.01</b>  | <b>Param.</b>  |
| <b>Trichloroethene (ug/L)</b>  | <b>MW-8</b> | <b>18.83</b>      | <b>16.19</b>      | <b>5</b>          | <b>Yes</b>  | <b>8</b> | <b>0</b>    | <b>No</b>        | <b>0.01</b>  | <b>Param.</b>  |
| Trichloroethene (ug/L)         | PZ-2B       | 6.749             | 4.615             | 5                 | No          | 8        | 0           | No               | 0.01         | Param.         |
| Vanadium (mg/L)                | MW-8        | 0.005375          | 0.000911          | 0.035             | No          | 8        | 12.5        | No               | 0.004        | NP (normality) |

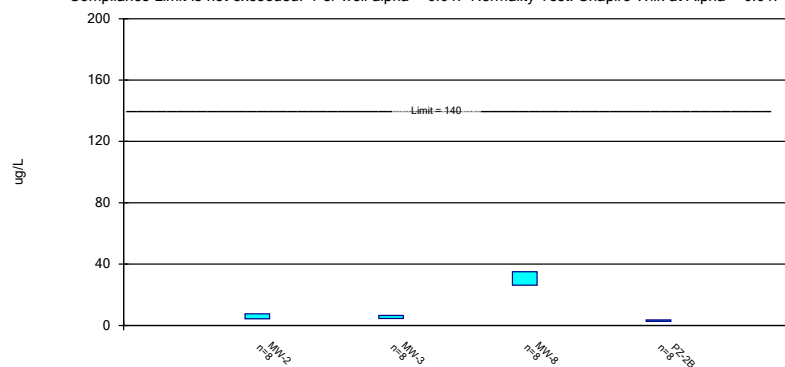
# Confidence Interval

Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR Printed 12/12/2025, 3:10 PM

| <u>Constituent</u>    | <u>Well</u> | <u>Upper Lim.</u> | <u>Lower Lim.</u> | <u>Compliance</u> | <u>Sig.</u> | <u>N</u> | <u>%NDs</u> | <u>Transform</u> | <u>Alpha</u> | <u>Method</u> |
|-----------------------|-------------|-------------------|-------------------|-------------------|-------------|----------|-------------|------------------|--------------|---------------|
| Vinyl Chloride (ug/L) | MW-8        | 2.248             | 1.701             | 2                 | No          | 8        | 0           | No               | 0.01         | Param.        |
| Zinc (mg/L)           | MW-2        | 0.1185            | 0.01              | 2                 | No          | 8        | 87.5        | No               | 0.004        | NP (NDs)      |

## Parametric Confidence Interval

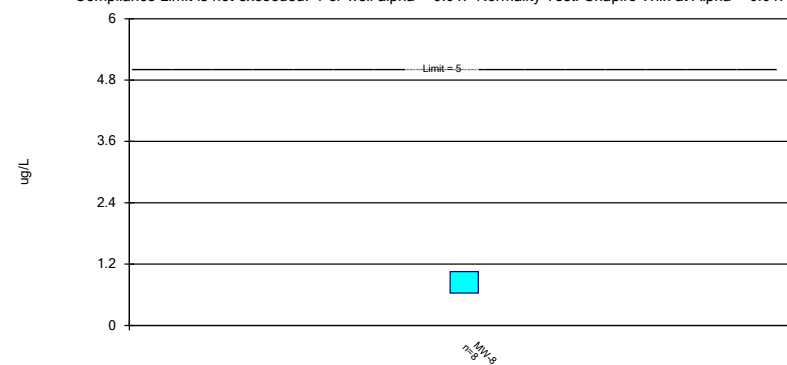
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,1-Dichloroethane Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interv  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric Confidence Interval

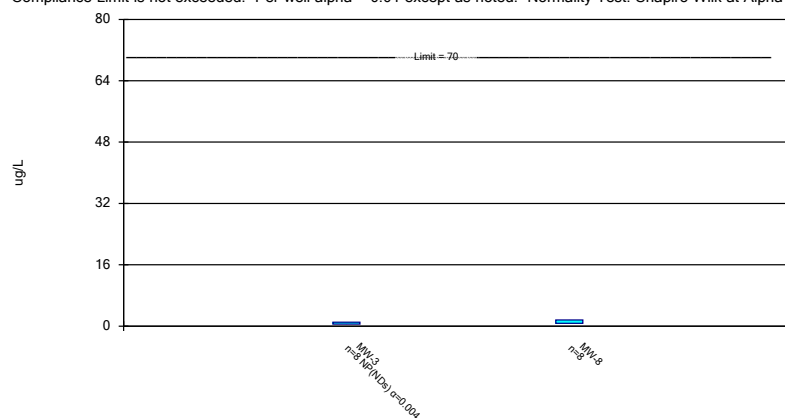
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Constituent: 1,2-Dichloropropane Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interv  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric and Non-Parametric (NP) Confidence Interval

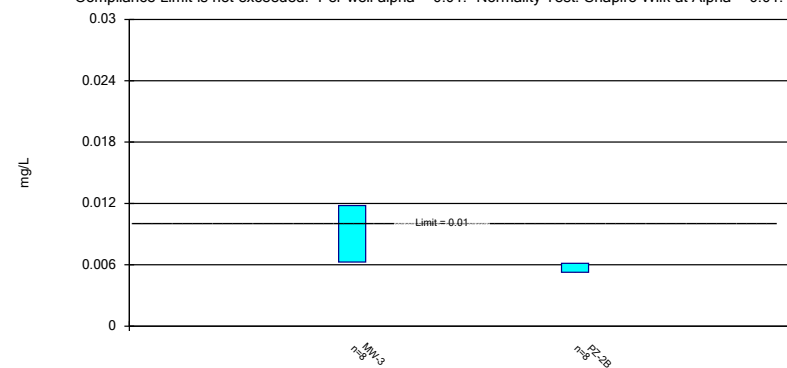
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 2,4-D [2C] Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interv  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric Confidence Interval

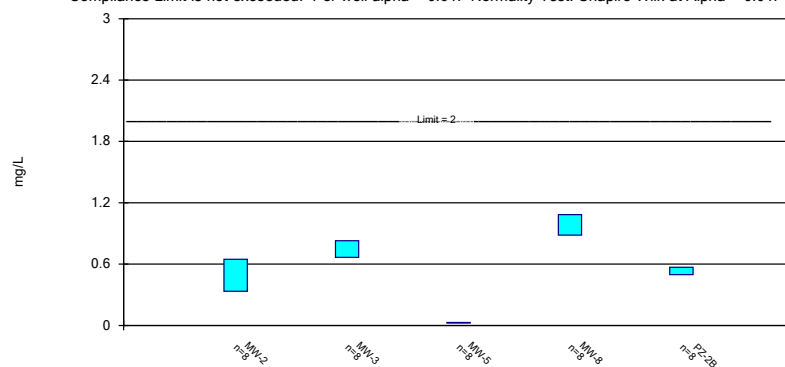
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Constituent: Arsenic Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interv  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric Confidence Interval

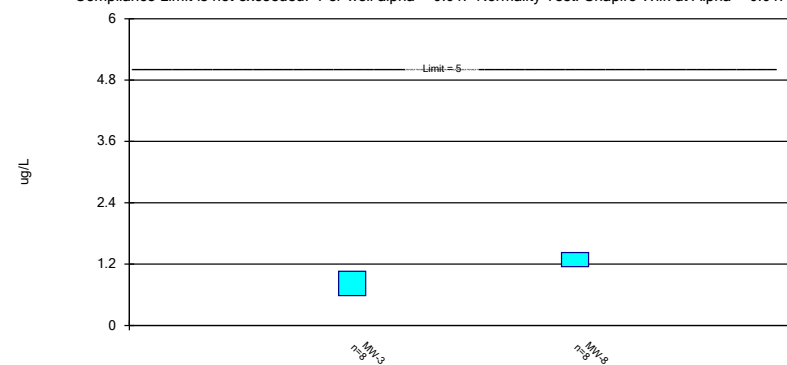
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Constituent: Barium Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric Confidence Interval

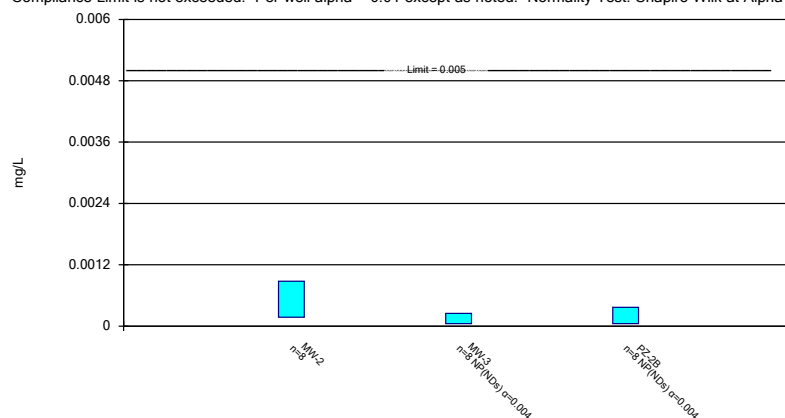
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Constituent: Benzene Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric and Non-Parametric (NP) Confidence Interval

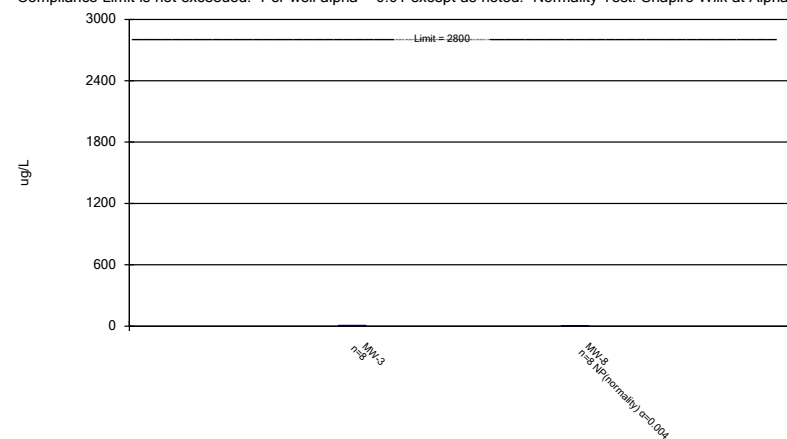
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cadmium Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric and Non-Parametric (NP) Confidence Interval

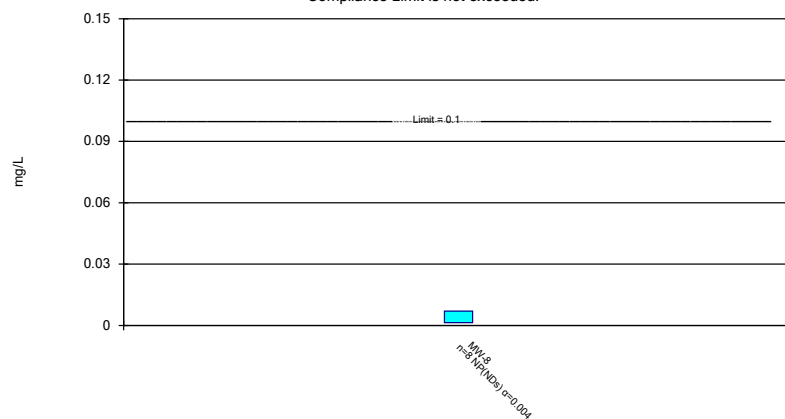
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chloroethane Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Non-Parametric Confidence Interval

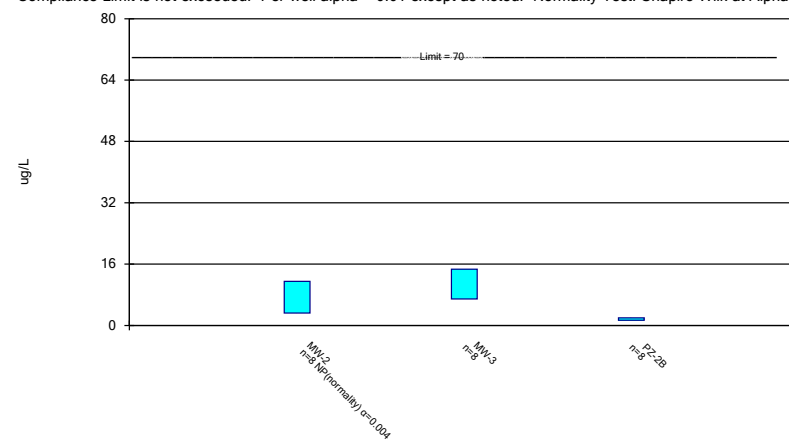
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric and Non-Parametric (NP) Confidence Interval

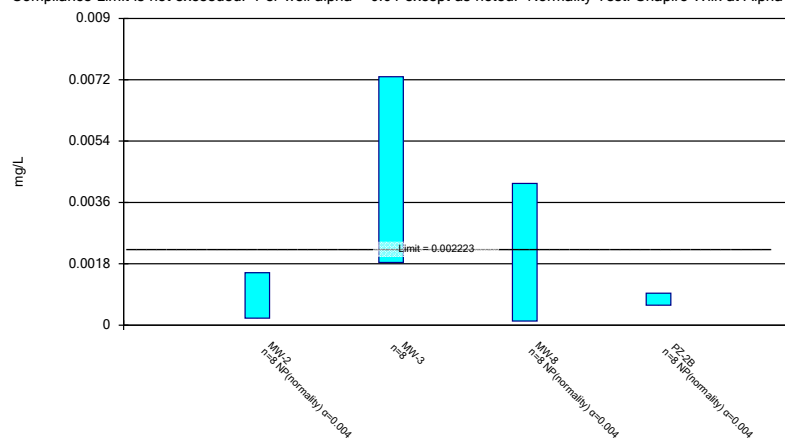
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: cis-1,2-Dichloroethene Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Int  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric and Non-Parametric (NP) Confidence Interval

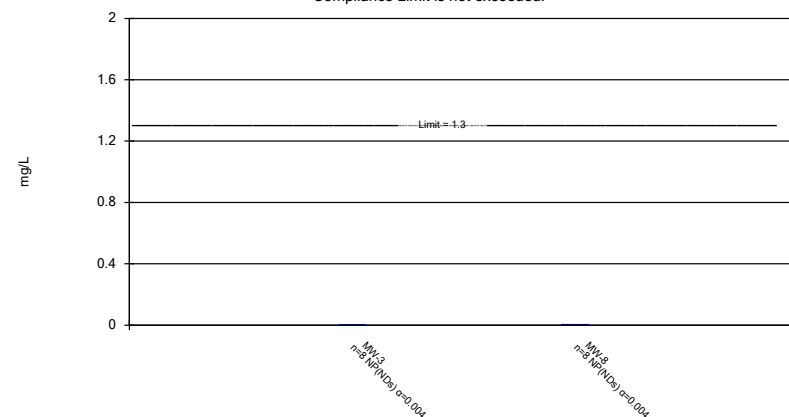
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Non-Parametric Confidence Interval

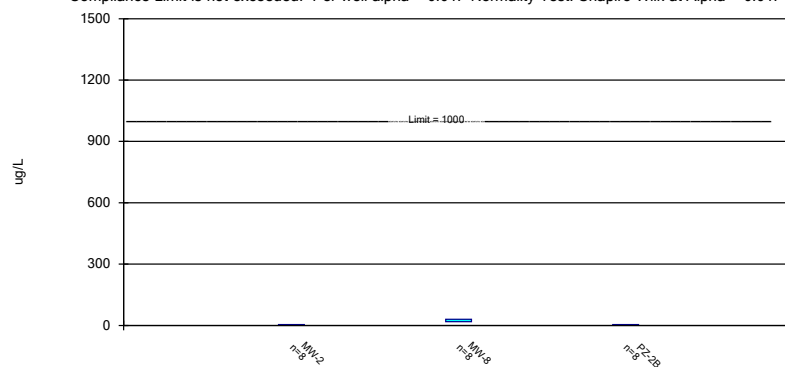
Compliance Limit is not exceeded.



Constituent: Copper Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric Confidence Interval

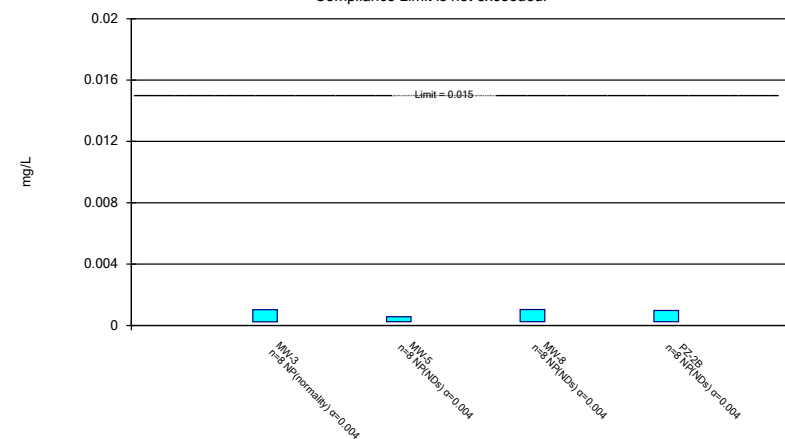
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Dichlorodifluoromethane Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_I  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Non-Parametric Confidence Interval

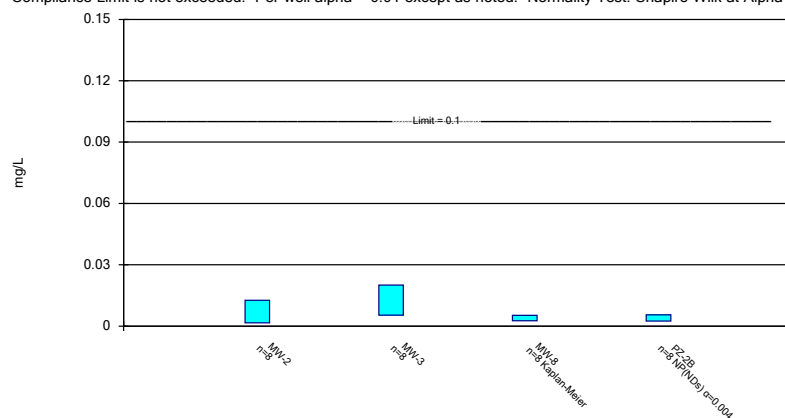
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric and Non-Parametric (NP) Confidence Interval

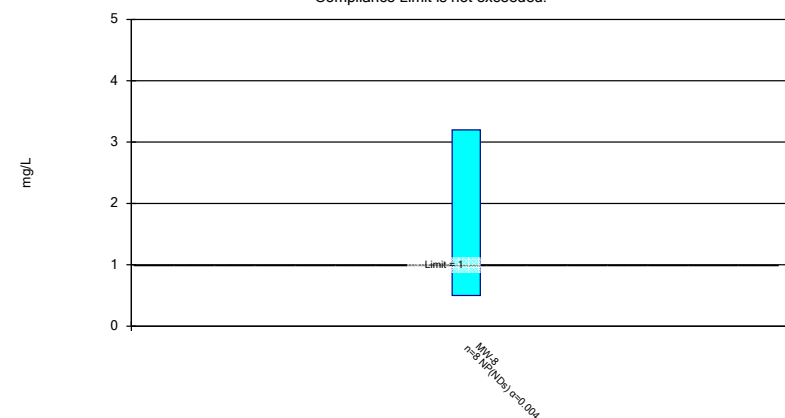
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Non-Parametric Confidence Interval

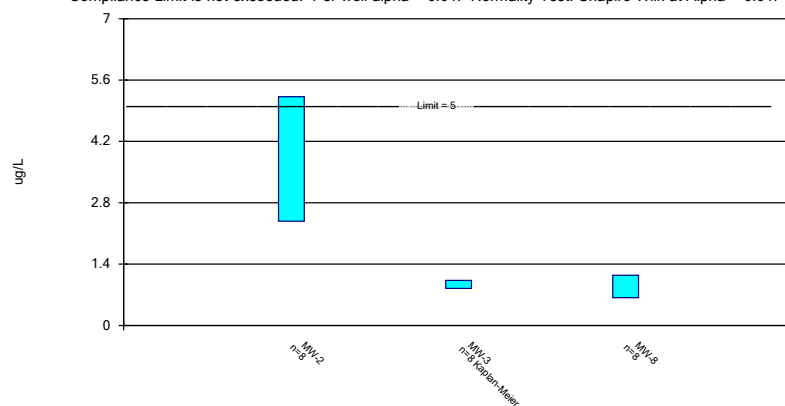
Compliance Limit is not exceeded.



Constituent: Sulfide Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric Confidence Interval

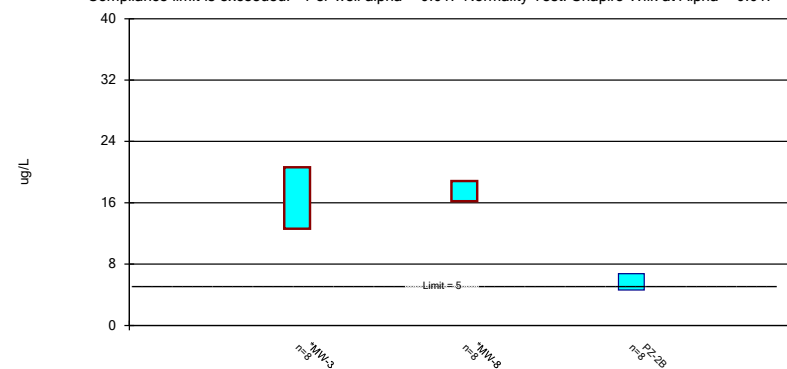
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Tetrachloroethene Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interv  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Parametric Confidence Interval

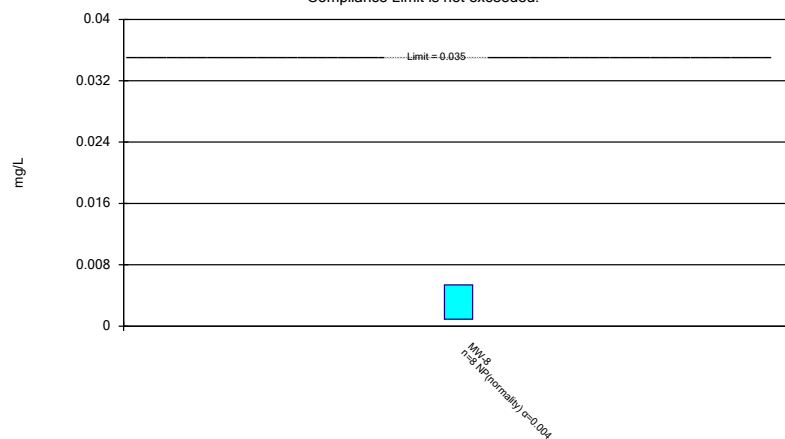
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Trichloroethene Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

## Non-Parametric Confidence Interval

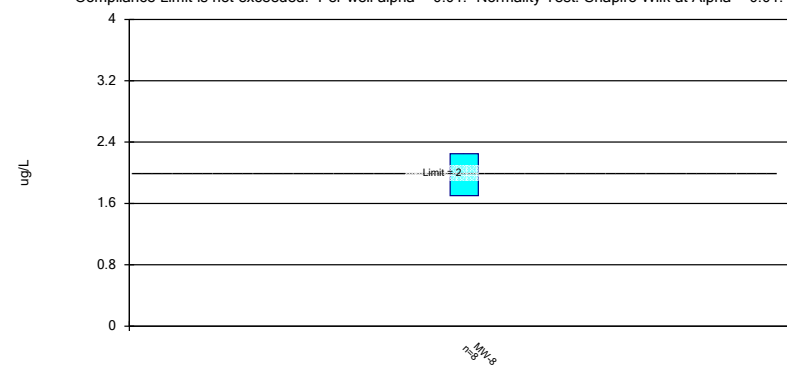
Compliance Limit is not exceeded.



Constituent: Vanadium Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR

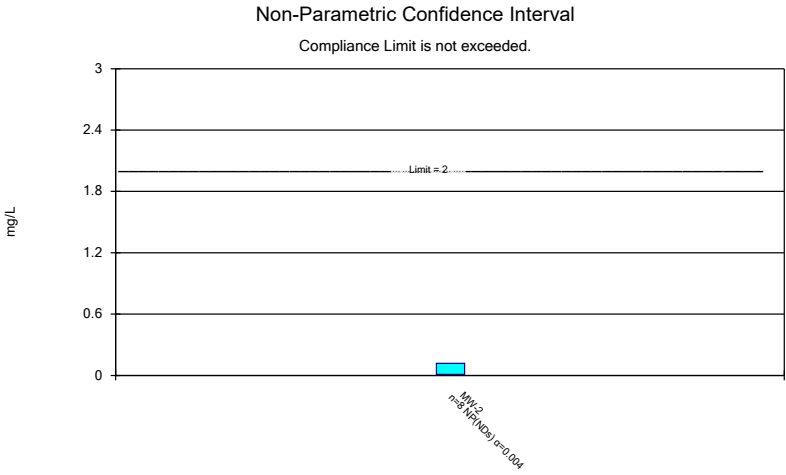
## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Vinyl Chloride Analysis Run 12/12/2025 3:09 PM View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF Client: SCS Engineers Data: WCASW\_AM\_2025\_AWQR





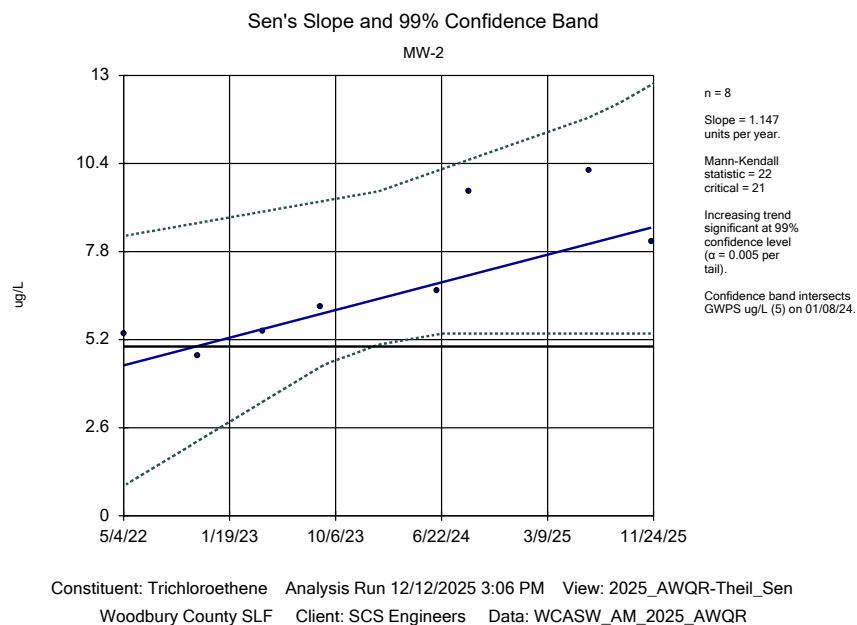
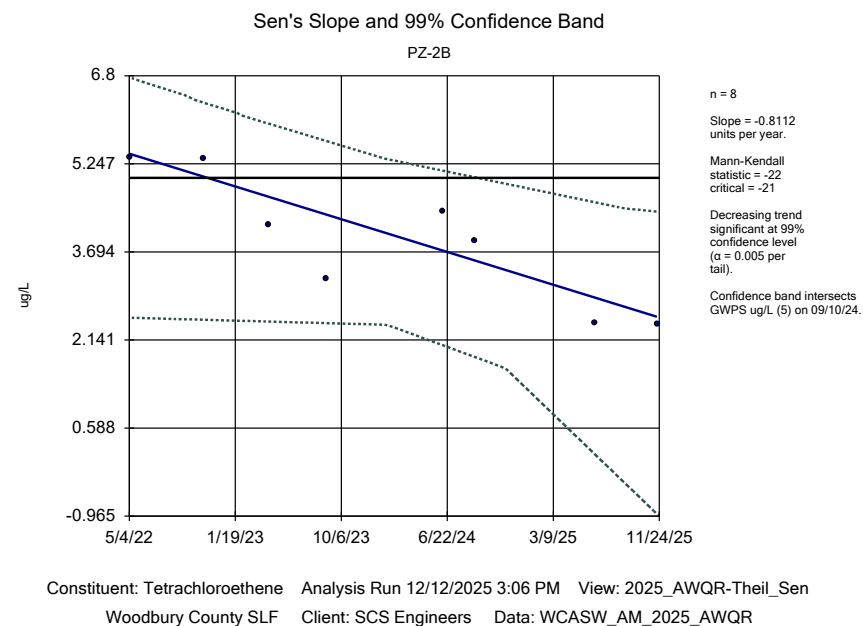
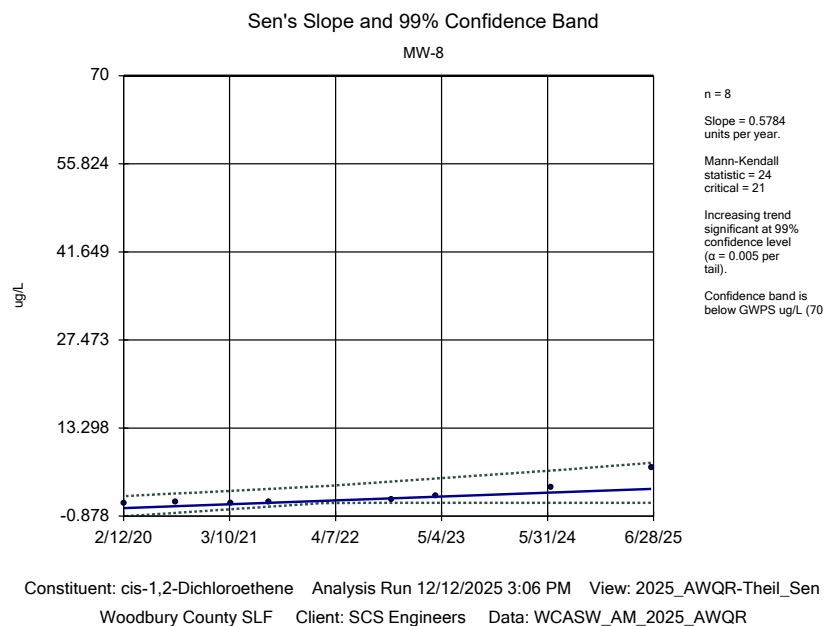
Constituent: Zinc    Analysis Run 12/12/2025 3:09 PM    View: 2025\_AWQR-Confidence\_Interval  
Woodbury County SLF    Client: SCS Engineers    Data: WCASW\_AM\_2025\_AWQR

**Thiel-Sen Trend Line Summary Table and Confidence Band Graphs**

# Theil Sen/Trend Test

Woodbury County SLF    Client: SCS Engineers    Data: WCASW\_AM\_2025\_AWQR    Printed 12/12/2025, 3:07 PM

| <u>Constituent</u>            | <u>Well</u> | <u>Slope</u> | <u>Calc.</u> | <u>Critical</u> | <u>Sig.</u> | <u>N</u> | <u>%NDs</u> | <u>Alpha</u> | <u>Method</u> |
|-------------------------------|-------------|--------------|--------------|-----------------|-------------|----------|-------------|--------------|---------------|
| cis-1,2-Dichloroethene (ug/L) | MW-8        | 0.5784       | 24           | 21              | Yes         | 8        | 0           | 0.01         | NP            |
| Tetrachloroethene (ug/L)      | PZ-2B       | -0.8112      | -22          | -21             | Yes         | 8        | 0           | 0.01         | NP            |
| Trichloroethene (ug/L)        | MW-2        | 1.147        | 22           | 21              | Yes         | 8        | 0           | 0.01         | NP            |





## Appendix E

### 2025 Leachate Control System Performance Evaluation Report

**Table 12**  
**Leachate Management Summary**  
**2025 Leachate Control System Performance Evaluation Report**  
**Woodbury County Sanitary Landfill**  
**Permit No. 97-SDP-02-75C**

| Month              | Leachate Level Measurements (ft) |             |             | Discharged to<br>POTW (gal) | Precipitation<br>(in) |
|--------------------|----------------------------------|-------------|-------------|-----------------------------|-----------------------|
|                    | LW-1                             | LW-2        | LW-3        |                             |                       |
| January 2025       | NM                               | NM          | NM          | 0                           | 0.18                  |
| February 2025      | NM                               | NM          | NM          | 0                           | 0.37                  |
| March 2025         | Dry (39.17)                      | Dry (33.15) | Dry (47.10) | 0                           | 2.95                  |
| April 2025         | NM                               | NM          | NM          | 0                           | 1.72                  |
| May 2025           | NM                               | NM          | NM          | 0                           | 1.91                  |
| June 2025          | Dry (39.62)                      | Dry (33.51) | Dry (43.90) | 0                           | 4.64                  |
| July 2025          | NM                               | NM          | NM          | 0                           | 6.62                  |
| August 2025        | Dry(39.28)                       | Dry(33.90)  | Dry (41.97) | 0                           | 4.01                  |
| September 2025     | NM                               | NM          | NM          | 0                           | 2.05                  |
| October 2025       | NM                               | NM          | NM          | 0                           | 1.22                  |
| November 2025      | Dry (39.34)                      | Dry (33.71) | Dry (42.27) | 0                           | 1.25                  |
| December 2025      | NM                               | NM          | NM          | 0                           | 0.61                  |
| <b>2025 Totals</b> |                                  |             |             | 0                           | 27.53                 |

Notes:

- 1) Measured total depths of the leachate piezometers are in parentheses. Leachate piezometers are likely broken or kinked and may not be providing accurate leachate head measurements. Installed depths of the piezometers are unknown due to a lack of historical records (Doc #88500).
  - 2) A request to forego the installation of a replacement leachate piezometer was submitted on May 7, 2018 (Doc #92312) and approved in correspondence dated May 14, 2018 (Doc #92347).
  - 3) Precipitation data obtained from:  
[https://mesonet.agron.iastate.edu/ASOS/reports/mon\\_prec.php?network=IA\\_ASOS&year=2025](https://mesonet.agron.iastate.edu/ASOS/reports/mon_prec.php?network=IA_ASOS&year=2025) for Sioux City, Iowa.
- NM: Not Measured; Leachate measurements are completed quarterly in accordance with the closure permit (Doc #20953).

Comments:

**Reporting Period:** January - December 2025.

**Recommended Changes to Leachate Collection System:** None.

**Maintenance Performed on Leachate Collection System:** None.

**Last Date of Cleaning and Inspection:** There is no leachate collection system at the Landfill.

**Date for Next Cleaning and Inspection:** Not applicable.

**Volume of Leachate Recirculated:** None.

**Volume of Leachate Treated On-Site:** None.

**Volume of Leachate Treated Off-Site:** None.

**Leachate Quality Testing Results:** None.





## Leachate Measurement Locations

### Legend

- |                                                                                     |                               |                                                                                       |                             |                                                                                       |                               |
|-------------------------------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|-------------------------------|
|  | Leachate Measurement Location |  | Gas Monitoring Point        |  | Located Waste Boundary        |
|  | Monitoring Well               |  | Approximate Waste Boundary  |  | Approximate Property Boundary |
|  | Groundwater Piezometer        |  | Interpolated Waste Boundary |  | Stream                        |





Appendix F

2025 Landfill Gas Annual Report



**Table 13**  
**Gas Monitoring Summary**  
**2025 Gas Monitoring Report**  
**Woodbury County Sanitary Landfill**  
**Permit No. 97-SDP-02-75C**

| Monitoring Points            |            |                                                                             |           |         |           |         |           |         |            |         |
|------------------------------|------------|-----------------------------------------------------------------------------|-----------|---------|-----------|---------|-----------|---------|------------|---------|
| Name                         | Type       | Description                                                                 | 3/17/2025 | S (Y/N) | 6/19/2025 | S (Y/N) | 8/28/2025 | S (Y/N) | 11/18/2025 | S (Y/N) |
| LFGW-1                       | Subsurface | North of the landfill                                                       | 0%        | X       | 0%        | X       | 0%        | X       | 0%         | X       |
| LFGW-2                       | Subsurface | West of the landfill                                                        | >100%     | X       | 0%        | X       | 70%       | X       | 0%         | X       |
| LFGW-4                       | Subsurface | South of landfill                                                           | 5%        | X       | 44%       | X       | 0%        | X       | 0%         | X       |
| LFGW-5                       | Subsurface | West of the landfill beyond the property boundary                           | 0%        | X       | 1%        | X       | 0%        | X       | 0%         | X       |
| GV-4                         | Subsurface | Passive gas vent south of the landfill                                      | 11%       | X       | 3%        | X       | 1%        | X       | 0%         | X       |
| GV-5                         | Subsurface | Passive gas vent south of the landfill                                      | 15%       | X       | >100%     | X       | 0%        | X       | 0%         | X       |
| GV-6                         | Subsurface | Passive gas vent south of the landfill                                      | 0%        | X       | 0%        | X       | 0%        | X       | 0%         | X       |
| GV-7                         | Subsurface | Passive gas vent south of the landfill                                      | 27%       | X       | 1%        | X       | 26%       | X       | 0%         | X       |
| GV-8                         | Subsurface | Passive gas vent south of the landfill                                      | 0%        | X       | 1%        | X       | 0%        | X       | 0%         | X       |
| GV-9                         | Subsurface | Passive gas vent south of the landfill                                      | 0%        | X       | 42%       | X       | 7%        | X       | 0%         | X       |
| GV-10S                       | Subsurface | Passive gas vent southeast of the landfill                                  | 0%        | X       | 4%        | X       | 0%        | X       | 0%         | X       |
| GV-10W                       | Subsurface | Passive gas vent west of the landfill                                       | 0%        | X       | >100%     | X       | 0%        | X       | 0%         | X       |
| GV-11                        | Subsurface | Passive gas vent west of the landfill                                       | 0%        | X       | 95%       | X       | 0%        | X       | 0%         | X       |
| GV-12                        | Subsurface | Passive gas vent west of the landfill                                       | >100%     | X       | 91%       | X       | 0%        | X       | 0%         | X       |
| GV-13                        | Subsurface | Passive gas vent west of the landfill                                       | 63%       | X       | 5%        | X       | 0%        | X       | 0%         | X       |
| GV-14                        | Subsurface | Passive gas vent west of the landfill                                       | >100%     | X       | 48%       | X       | 0%        | X       | 0%         | X       |
| GV-15                        | Subsurface | Passive gas vent west of the landfill                                       | 15%       | X       | >100%     | X       | 0%        | X       | 0%         | X       |
| GV-16                        | Subsurface | Passive gas vent west of the landfill                                       | 0%        | X       | NM        | X       | 0%        | X       | 0%         | X       |
| GV-17                        | Subsurface | Passive gas vent southeast of the landfill                                  | >100%     | X       | >100%     | X       | 0%        | X       | 0%         | X       |
| GV-18                        | Subsurface | Passive gas vent southeast of the landfill                                  | >100%     | X       | >100%     | X       | 3%        | X       | 0%         | X       |
| GV-19                        | Subsurface | Passive gas vent southeast of the landfill                                  | >100%     | X       | 3%        | X       | 0%        | X       | 0%         | X       |
| GV-20                        | Subsurface | Passive gas vent southeast of the landfill                                  | >100%     | X       | 4%        | X       | 0%        | X       | 0%         | X       |
| GV-21                        | Subsurface | Passive gas vent southeast of the landfill                                  | >100%     | X       | >100%     | X       | 0%        | X       | 0%         | X       |
| GV-22                        | Subsurface | Passive gas vent southeast of the landfill                                  | >100%     | X       | >100%     | X       | 10%       | X       | 0%         | X       |
| GV-23                        | Subsurface | Passive gas vent southeast of the landfill                                  | >100%     | X       | >100%     | X       | 44%       | X       | 0%         | X       |
| GV-24                        | Subsurface | Passive gas vent southeast of the landfill                                  | >100%     | X       | >100%     | X       | 5%        | X       | 0%         | X       |
| GV-25                        | Subsurface | Passive gas vent south of the landfill                                      | >100%     | X       | >100%     | X       | 0%        | X       | 0%         | X       |
| GV-26                        | Subsurface | Passive gas vent south of the landfill                                      | 7%        | X       | 1%        | X       | 0%        | X       | 0%         | X       |
| Scale House                  | Indoor     | Northwest corner of the facility property, inside scale house               | 0%        | X       | 0%        | X       | 0%        | X       | 0%         | X       |
| Transfer Station             | Indoor     | Northwest corner of the facility property, inside transfer station building | 0%        | X       | 0%        | X       | 0%        | X       | 0%         | X       |
| Building East of Scale House | Indoor     | Northwest corner of the facility property, building east of scale house     | 0%        | X       | 0%        | X       | 0%        | X       | 0%         | X       |

Notes:

S(Y/N) - Was screen submerged, yes or no or blank is non-applicable

NM - Indicates not measured; gas vent was inadvertently missed during sampling event.

The exceedance of the LEL measured in landfill gas well LFGW-2 during the March 2025 measurement event was bracketed by the non-detect measured at landfill gas well LFGW-5.



C:\Users\hmadson\OneDrive\... SCC - Engineers\Desktop\GIS\Woodbury\Office\Site Maps\WCSA\Woodbury\_2022\_AWOB.dwg  
Path: C:\Users\hmadson\OneDrive\... SCC - Engineers\Desktop\GIS\Woodbury\Office\Site Maps\WCSA\Woodbury\_2022\_AWOB.dwg  
User: hmadson  
Date Saved: 2/5/2025 11:09 AM



| Monitoring Point | Description                                                                                                |
|------------------|------------------------------------------------------------------------------------------------------------|
| #1               | LFGW-1 Subsurface North of the landfill                                                                    |
| #2               | LFGW-2 Subsurface West of the landfill                                                                     |
| #3               | LFGW-4 Subsurface South of landfill                                                                        |
| #4               | LFGW-5 Subsurface West of landfill, beyond property boundary                                               |
| #5               | GV-4 Subsurface Delineation vent for methane south of the landfill                                         |
| #6               | GV-5 Subsurface Delineation vent for methane south of the landfill                                         |
| #7               | GV-6 Subsurface Delineation vent for methane south of the landfill                                         |
| #8               | GV-7 Subsurface Delineation vent for methane south of the landfill                                         |
| #9               | GV-8 Subsurface Delineation vent for methane south of the landfill                                         |
| #10              | GV-9 Subsurface Delineation vent for methane south of the landfill                                         |
| #11              | GV-10S Subsurface Delineation vent for methane southeast of the landfill                                   |
| #12              | GV-10W Subsurface Delineation vent for methane west of the landfill                                        |
| #13              | GV-11 Subsurface Delineation vent for methane west of the landfill                                         |
| #14              | GV-12 Subsurface Delineation vent for methane west of the landfill                                         |
| #15              | GV-13 Subsurface Delineation vent for methane west of the landfill                                         |
| #16              | GV-14 Subsurface Delineation vent for methane west of the landfill                                         |
| #17              | GV-15 Subsurface Delineation vent for methane west of the landfill                                         |
| #18              | GV-16 Subsurface Delineation vent for methane west of the landfill                                         |
| #19              | GV-17 Subsurface Delineation vent for methane southeast of the landfill                                    |
| #20              | GV-18 Subsurface Delineation vent for methane southeast of the landfill                                    |
| #21              | GV-19 Subsurface Delineation vent for methane southeast of the landfill                                    |
| #22              | GV-20 Subsurface Delineation vent for methane southeast of the landfill                                    |
| #23              | GV-21 Subsurface Delineation vent for methane southeast of the landfill                                    |
| #24              | GV-22 Subsurface Delineation vent for methane southeast of the landfill                                    |
| #25              | GV-23 Subsurface Delineation vent for methane southeast of the landfill                                    |
| #26              | GV-24 Subsurface Delineation vent for methane southeast of the landfill                                    |
| #27              | GV-25 Subsurface Delineation vent for methane south of the landfill                                        |
| #28              | GV-26 Subsurface Delineation vent for methane south of the landfill                                        |
| #29              | Scale House Indoor Northwest corner of the facility property, inside scalehouse                            |
| #30              | Transfer Station Indoor Northwest corner of the facility property, inside transfer station building        |
| #31              | Building East of Scale House Indoor Northwest corner of the facility property, building east of scalehouse |



# Methane Monitoring Network

- Methane Monitoring Location

Monitoring Well

Groundwater Piezometer
- Leachate Well

Gas Monitoring Point

Approximate Waste Boundary

Interpolated Waste Boundary
- Located Waste Boundary

Approximate Property Boundary

Stream

Woodbury County Sanitary Landfill  
Pierson, Iowa  
Project No: 27225337.26  
Drawing Date: January 2026

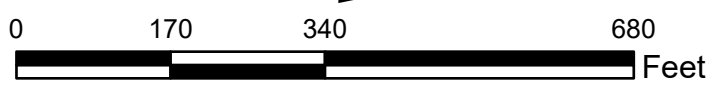
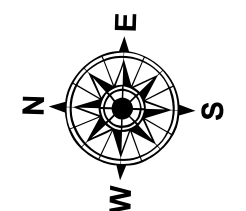


Figure 1

ESRI, COGNIS, USGS, Sources: Esri, TomTom, Garmin, FRC, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, USDA NARS, Iowa State University GIS Facility





## Appendix G

### Standards History Graphs

