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PERIODIC REVIEW REPORT

FORMER GE COURT STREET BUILDING 5 SITE (NO.734070)

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PERIODIC REVIEW REPORT
FORMER GE COURT STREET BUILDING 5 SITE (NO.734070)

Project no.	**1940112129**
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1. EXECUTIVE SUMMARY

1.1 Executive Summary

This Periodic Review Report (PRR) is being submitted by Lockheed Martin Corporation (Lockheed Martin) for the remedial activities conducted at the Former General Electric (GE) Court Street Building 5 site (herein referred to as the "site"). The PRR covers the period from December 10, 2022 through December 10, 2025 (reporting period). Historical manufacturing operations at this location resulted in chlorinated solvent impacts to soil and groundwater northwest of Building 5. Lockheed Martin installed a groundwater collection and treatment (GCT) system [operated as an Interim Remedial Measure (IRM) since 1998] and conducts periodic operation and maintenance (O&M) activities. A Record of Decision (ROD) was issued by the New York State Department of Environmental Conservation (NYSDEC) for the site in March 1999 selecting No Further Action as the remedy for the site. The remedy consists of the continued O&M of the GCT system and monitoring of site conditions.

The GCT system was completed at the site to prevent migration of residual volatile organic compounds (VOCs) in the groundwater towards Sanders Creek and the South Branch of Ley Creek, and to reduce the mass of VOCs in the groundwater. The GCT system removes VOCs from collected groundwater using an air stripper and has operated consistently since February 11, 1998. Figure 1 is a site plan showing the location of the GCT system, including the collection trench and treatment building, and Building 5.

1.2 Effectiveness of Remedial Programs

During this periodic reporting period, the GCT system has operated consistently, experiencing minimal shut-down periods with no significant operational concerns. The GCT system has successfully established and maintained hydraulic control preventing migration of the VOC-impacted shallow groundwater toward the South Branch of Ley Creek and Sanders Creek. In addition, the GCT system has continued to remove VOCs from groundwater, pursuant to the objective of reducing the level of residual VOCs in the shallow groundwater.

1.3 Compliance

No areas of non-compliance have been identified with this remedial program.

1.4 Recommendations

No additional remedial measures or other improvements are recommended at this time. In the past, Lockheed Martin conducted an additional investigation at the site to collect additional information to evaluate other potential remedial options. This investigation was performed through 2017 with a revised report of findings provided to the NYSDEC on June 15, 2018. In continuing to review alternative or additional remedial options, in 2020 Lockheed Martin initiated a Phytoremediation Pilot Test. This Pilot construction phase was completed in 2020 with monitoring and reporting being conducted since, including throughout 2023, 2024 and 2025. Routine OM&M activities for the phytoremediation pilot test will continue in accordance with the approved Phytoremediation Pilot Test Work Plan (PTWP). Based on the review of pilot data collected to date, Lockheed Martin submitted a request to, and was approved by, the NYSDEC for seasonal operation of the treatment system (*i.e.*, shut the system down during the summer and fall months, when the water level elevations and trench flow rate are the lowest). The approval was for a four month seasonal shut-down between July1st through November 1st. Based on

performance data from the current seasonal operation, Lockheed Martin is requesting the seasonal shutdown be extended by one month through December 1st. In addition, Lockheed Martin requests the NYSDEC consider reducing the frequency of the PRRs from every three years to every five years.

2. SITE OVERVIEW

The site is located at 6437 Deere Road in the Town of Dewitt, New York. Former manufacturing operations and activities at this location resulted in chlorinated solvent impacts to soil and groundwater northwest of Building 5. Building 5 is situated on an approximately 10-acre parcel and the current use of the building is now associated with manufacturing of hardwood flooring (operations planned for the building include cutting, molding, and planning of lumber) by Premier Hardwood Products, Inc. Figure 1 provides a site plan showing the location of the GCT system, including the collection trench and treatment building, and Building 5.

The GCT system was installed on-site in January/February of 1998 and operated as an IRM. The groundwater collection trench associated with the GCT system is approximately 830 feet in total length with a collection sump at the northeast end. Based on variations in the ground surface elevation, the final depth of the collection trench ranges from 8 to 14 feet below grade. Pumps located within the collection sump transfer groundwater to the treatment building where it is discharged into the air stripper designed to remove VOCs. The treated water flows by gravity from the air stripper to a catch basin (CB 2) and ultimately through storm sewer piping to Sanders Creek (OF 01A).

A ROD for the site was issued by the NYSDEC in March of 1999 selecting No Further Action as the remedy for the site. The remedial goals specified in the ROD for the site (NYSDEC, March 1999) are identified as follows:

- Prevent the migration of VOC impacted shallow groundwater to the South Branch of Ley Creek and to Sanders Creek, to the extent feasible considering site conditions;
- Reduce the level of residual VOCs in the shallow groundwater to attain NYSDEC groundwater standards (6 NYCRR Part 703), to the extent feasible considering site conditions, currently available technology, implementability, and cost-effectiveness; and
- Reduce the level of residual VOCs in site soils to attain NYSDEC Soil Cleanup Objectives (NYSDEC Technical and Administrative Guidance Memorandum 4046), to the extent feasible considering site conditions, currently available technology, implementability, and cost-effectiveness.

As discussed in the Feasibility Study prepared for the site by EMCON in January 1999, it is anticipated that groundwater quality at portions of the site (*e.g.*, near former source areas) will not achieve groundwater standards, criteria, and guidelines (SCGs) (6 NYCRR Part 703) for a number of decades. It is also anticipated that shutdown of the GCT system may be appropriate prior to achieving groundwater quality SCGs across the site. O&M of the GCT system will continue until groundwater concentrations of site-related VOCs have achieved asymptotic levels at a relatively low concentration over the majority of the site, significant quantities of contaminants are no longer being removed, or it can be demonstrated that the full-scale phytoremediation system and/or natural attenuation of VOCs will be protective of water quality in the South Branch of Ley Creek and Sanders Creek.

Recent additional site investigations and system enhancements have included the following:

- As required by NYSDEC as set forth in a letter from the NYSDEC to Lockheed Martin, dated December 9, 2009, Lockheed Martin has continued the slab inspection program for Building 5 associated with the soil vapor intrusion assessment performed at the site. Lockheed Martin has continued to perform the slab inspections of Building 5 annually, including years 2023 through 2025. The slab inspection purpose was to identify new slab breaches since the first inspection performed in 2010 and the last round of soil vapor intrusion sampling that was conducted during the 2008/2009 heating season. As outlined in the inspection program requirements, the results of the inspection were submitted to the NYSDEC in separate annual reports.

- Construction of the Phytoremediation Pilot system began during March 2020. Inspections of the hybrid poplar stand were completed every two months during the growing season of each year to date (2020-2025). Each Pilot Test Report contains the inspection reports, including observations, tree measurements and photographs documenting the tree stand development. The Pilot Reports are provided within Appendix H of the corresponding Annual O&M Report.

3. EVALUATION OF PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

The GCT system has operated consistently, experiencing minimal shut-down periods with no significant operational concerns during the reporting period. The GCT system has successfully established hydraulic control preventing migration of the VOC-impacted shallow groundwater toward the South Branch of Ley Creek and Sanders Creek, and has continued to remove VOCs from groundwater, pursuant to the objective of reducing the level of residual VOCs in the shallow groundwater. Additional information pertaining to the performance and effectiveness of the GCT systems with respect to NYSDEC established remedial objectives are provided in Appendix A, Appendix B and Appendix C, the 2023, 2024 and 2025 Annual Operation and Maintenance Reports for the Building 5 GCT System, respectively. Each of these reports provides summaries of the data collected and interpretation of the results.

As an overview, Lockheed Martin performs the following periodic system monitoring:

- Collected groundwater quality was monitored quarterly by collecting and analyzing influent samples prior to treatment within the GCT treatment building
- Groundwater effluent discharge was monitored quarterly by collecting and analyzing effluent samples from GCT system piping located within the GCT system treatment building following treatment
- Groundwater elevations were measured from shallow monitoring wells, staff gauges and the collection trench clean-out risers. Groundwater elevation monitoring data was collected semi-annually (March and September)
- A storm sewer outfall sample was collected and analyzed from outfall OF-02 in April of each year. The sample was collected during a “dry weather” period, meaning that surface water was not flowing into the catch basins at the time of sample collection

In March, groundwater samples are collected and analyzed from monitoring wells MW-1S, MW-2S, MW-8S, MW-10, MW-11R, MW-12, MW-16A, MW-17A, MW-18A and MW-19S. Groundwater monitoring well analytical results showing detected concentrations of VOCs using EPA Method 8260 is presented in Appendix E of each Annual Report attached.

4. IC/EC PLAN COMPLIANCE REPORT

4.1 IC/EC Plan Requirements and Compliance

Institutional controls and engineering controls (IC/EC) at the site consist of the GCT system as described above. The objective of the IC/ECs on site are described in Section 2 and include preventing the migration of VOC impacted shallow groundwater into nearby waterways and the reduction in level of residual VOCs in the shallow groundwater. Effectiveness and performance of the GCT system is evaluated through measurements collected and activities performed in accordance with the site's O&M Plan. Additional details and evaluations of the GCT performance for each year during the reporting period are provided in the attached Annual Operation and Maintenance Reports.

4.2 IC/EC Certification

The NYSDEC Institutional and Engineering Controls Certification Form for Period December 10, 2022 through December 10, 2025 is provided in Appendix D. The NYSDEC Institutional and Engineering Controls Certification Form is signed and certified by a site representative from Lockheed Martin and a New York State Licensed Professional Engineer from Ramboll Americas Engineering Solutions, Inc.

5. MONITORING PLAN COMPLIANCE REPORT

Various aspects of the site and components of the GCT system are monitored to ensure proper system operation. Measurements and samples are collected, and O&M activities are performed in accordance with the site's O&M Plan. A brief description of the monitoring requirements is provided below. Additional details and summaries of the measurements and data collected during the reporting period are provided in the attached Annual Operation and Maintenance Reports. In accordance with the site's O&M Plan, the following monitoring activities were conducted on-site:

- Annual groundwater monitoring/ sampling from existing shallow monitoring wells for VOCs
- Annual dry weather monitoring/ sampling of Outfall OF-02 for VOCs
- Semi-annual groundwater elevation monitoring
- Quarterly GCT system influent and effluent monitoring/ sampling for VOCs
- Quarterly monitoring of total groundwater collected and treated by GCT system

6. OPERATION AND MAINTENANCE PLAN COMPLIANCE

During the reporting period, continued O&M of the GCT system and monitoring of site conditions was conducted by Ramboll personnel. System shut-downs and alarms occurred infrequently during the reporting period, and initial assessment and corrective action typically occurred in accordance with the O&M Plan.

Groundwater is collected annually from existing shallow monitoring wells and analyzed for VOCs by USEPA Method 8260. Groundwater data are used to evaluate current site conditions for consistency with historical site data. In addition, during dry weather conditions, one groundwater sample is collected from Outfall OF-02 and analyzed for VOCs. Annual sampling was completed in accordance with the site's O&M Plan for each respective year and summarized in the attached Annual Operation and Maintenance Reports.

Groundwater elevation data from existing shallow monitoring wells, staff gauges and collection trench clean-out risers are collected semi-annually. Elevation data are used to evaluate whether the GCT system has continued to maintain hydraulic control of the VOC-impacted shallow groundwater. Semi-annual groundwater elevation measurements were collected in accordance with the site's O&M Plan for each year during the reporting period. Additional details and an evaluation of the treatment system hydraulic control are provided in each of the attached Annual Operation and Maintenance Reports.

GCT system influent and effluent samples are collected quarterly and analyzed for VOCs by USEPA Method 8260. Additionally, the quantity of groundwater collected and treated is monitored by totaling flow meters located within the GCT system treatment building on a quarterly basis. The data that are collected quarterly are used to estimate VOC mass removal during the period and evaluate overall treatment system performance. Quarterly sampling and measurements were conducted in accordance with the site's O&M Plan for each year during the reporting period. Additional details and summaries of the VOC removal and treatment system performance are provided in the attached Annual Operation and Maintenance Reports.

Based on a review of the data collected and activities performed in accordance with the site's O&M Plan, the current O&M activities are sufficient for providing information required to evaluate the GCT system operation with respect to NYSDEC's remedial objectives. No deficiencies were identified during this reporting period.

7. PERIODIC REVIEW REPORT CONCLUSIONS AND RECOMMENDATIONS

Areas of non-compliance were not identified with this remedial program during the reporting period. Routine O&M activities for the phytoremediation pilot test will continue in 2026 in accordance with the approved PTWP. Based on the review of pilot data collected to date, Lockheed Martin has submitted a request within the 2025 Annual O&M Report (dated January 21, 2026) to NYSDEC to extend the seasonal shutdown of the treatment system (*i.e.,* shut the system down during the summer and fall months, when the water level elevations and trench flow rate are the lowest) from four to five months.

Based on the type of system operating at the site and the relatively low level of VOC contamination, Lockheed Martin is requesting that the frequency of PRRs be decreased to every five years.

FIGURE 1
SITE PLAN

N

DEERE ROAD

298

FORMER SG-1

CREEK

SANDERS

BUILDING 5

BUILDING 5A

EXISTING STORM SEWER LINES AND EXISTING EFFLUENT LINE (COMBINED FROM CB-2)

COLLECTION SUMP

MW-19S

INFLUENT LINES

SG-2

MW-3S

CB-3

CB-2

MW-1S

CLEANOUT RISER (CR-SOUTH)

MW-12

OF-02

CREEK

(SOUTH BRANCH)

FORMER SG-5

MW-6S

MW-2S

TREATMENT BUILDING

CB-20

MW-4S

OF-01A

CB-4

MW-16A

MW-11R

MW-18A

MW-7S

SG-6

FLOW

LEY

MW-8S

MW-9

MW-10

ROUTE

SG-8

MW-13

FORMER SG-4

LOCATION OF GROUNDWATER COLLECTION SYSTEM TRENCH

SG-3

MW-17A

SG-9

FORMER EFFLUENT LINE

MW-15

CLEANOUT RISER (CR-NORTH)

SG-7

0 120 240

SCALE IN FEET

1" 1/2" 0" 1"

LEGEND:

- MONITORING WELL (ONLY THOSE WELLS INCLUDED IN PERIODIC HYDRAULIC OR GROUNDWATER MONITORING ARE SHOWN)
- STAFF GAUGE
- OUTFALL
- CATCH BASIN
- EXISTING STORM SEWER LINES
- YARD PIPING (APPROXIMATE LOCATIONS COLLECTION TRENCH AND INFLUENT LINE)
- FORMER EFFLUENT LINE
- EXISTING EFFLUENT LINE

NOTE: ORIGINAL BASED ON EMCON DRAWING DATED 2/1998

FIGURE 1

ANNUAL OPERATIONS AND MAINTENANCE REPORT
FORMER GE COURT STREET BUILDING 5

SITE PLAN

APPENDIX A
2023 ANNUAL OPERATIONS AND MAINTENANCE REPORT

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2023 ANNUAL OPERATIONS AND MAINTENANCE REPORT
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1. INTRODUCTION

1.1 2023 Highlights

Highlights of remedial activities during 2023 at the Former GE Court Street Building 5 site (herein referred to as the "site") are listed below:

- Compliance with the Effluent Limitations and Monitoring Requirements issued by the New York State Department of Environmental Conservation (NYSDEC) on December 6, 1999.
- On January 12, 2023, Lockheed Martin Corporation (Lockheed Martin) submitted the 2022 Annual Operation and Maintenance (O&M) Report, including the Year 3 Phytoremediation Pilot Test Report included as an appendix, and the Site Management Periodic Review Report (PRR) for the 2020-2023 operational years.
- On January 12, 2023, NYSDEC confirmed receipt of the O&M Report and Site Management PRR.
- On January 24, 2023, Lockheed Martin submitted the 2022 Annual O&M Report to the document repository (East Syracuse Free Library).
- On March 23, 2023, NYSDEC provided documentation of acceptance of the Site Management PRR with note that the next PRR is due on January 9, 2026.
- During May, July, and September of 2023, in accordance with the Work Plan approved in 2020, Lockheed Martin continued management of the hybrid poplar poles, including stand inspections. The Year 4 Phytoremediation Pilot Test Report is included as an attachment to this report.
- On November 20, 2023, Lockheed Martin performed the annual slab inspection of Building 5. This was the 13th annual slab inspection to identify potential new slab breaches since the inspection performed in 2010 and the last round of soil vapor intrusion sampling that was conducted during the 2008/2009 heating season. As outlined in the inspection program, the results of the inspection are included within this report.

1.2 Background

This report has been prepared to provide an overview of the O&M activities conducted to implement the remedial program during 2023 at the site. The Record of Decision (ROD) was issued by the NYSDEC for the site in March 1999. The ROD selected No Further Action as the remedy for the site. The remedy consists of the continued O&M of the groundwater and collection treatment (GCT) system [operated as an Interim Remedial Measure (IRM) since January 1998], and monitoring of site conditions.

In January 1998, the construction of the GCT system was completed at the site to prevent migration of residual volatile organic compounds (VOCs) in the groundwater towards Sanders Creek and the South Branch of Ley Creek, and to reduce the mass of VOCs in the groundwater. The GCT system began treating groundwater collected from the collection trench on February 11, 1998 and has operated consistently since that time.

The following summarizes the history of the Firms associated with the O&M of the GCT system on behalf of Lockheed Martin:

- Initial start-up to April 13, 2000 - Parsons Engineering Science, Inc.
- April 14, 2000 to December 31, 2002 - Bergmann Associates

- January 1, 2003 to September 14, 2003 - ENSR
- September 15, 2003 to current – Ramboll Americas Engineering Solutions, Inc (formerly O'Brien & Gere Engineers, Inc. – pre 2019)

Figure 1 is a site plan showing the location of the GCT system, including the collection trench and treatment building. The GCT system removes VOCs from collected groundwater using an air stripper. A Carbtrol multistage diffuser air stripper was used since startup of the GCT until being replaced in 2008 with a new QED EZ-Stacker Low Profile Air Stripper system. After treatment, the collected groundwater is discharged to Sanders Creek in accordance with effluent limitations and monitoring requirements issued by the NYSDEC.

In 2006, the Building 5 property was owned by DE&JD Associates, Inc., and was used as an active warehouse and distribution facility (operated by Climax) until its sale to B&B Family Limited Partnership in the summer of 2006. Current use of the building is now associated with manufacturing of hardwood flooring (operations planned for the building include cutting, molding, and planing of lumber) by Premier Hardwood Products, Inc. The Building 5A property is owned by G&A Properties, LLC and is occupied by WJW Associates and Raymond Corporation. In December 1999, the NYSDEC granted a petition by G&A Properties, LLC to modify the site boundary to exclude the area where Building 5A is located. The site area was reduced from approximately 14 acres to approximately 10 acres as a result.

In June 1999, the NYSDEC reclassified the site from Class 3 to Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites. A Class 4 site is a site that has been properly closed, but requires continued operation, maintenance and/or monitoring.

1.3 Report Overview

This Annual O&M Report contains a summary of:

- GCT system operations
- GCT system performance
- Storm sewer outfall quality
- Groundwater quality
- Building slab inspection

2. GCT SYSTEMS OPERATIONAL SUMMARY

Construction of the GCT system was completed in January 1998 and has since operated consistently through 2023. This section briefly describes the GCT system, system shut-down and alarm conditions encountered, modifications made to the GCT system process and monitoring requirements, and other miscellaneous site O&M activities completed during the year.

2.1 GCT System Description

The GCT system includes a collection trench and sump from which groundwater is pumped to a treatment system as shown on Figure 1. The collection trench and treatment system is briefly described in this section. Details regarding the operation and installation of the GCT system are available in the Interim Remedial Measures Work Plan for the Groundwater Collection and Treatment System (EMCON, November 1997), the Certification Report for the Groundwater Collection and Treatment System Installation (Blasland, Bouck & Lee, Inc., Revised May 1998), and the Operations and Maintenance Plan for the Groundwater Collection and Treatment System (IT Corporation, Revised January 2000). The January 2000 O&M Plan was accepted by the NYSDEC in March 2000.

The groundwater collection trench is approximately 830 feet in total length, with a collection pipe slope of 0.2 percent and a collection sump at the northeast end. Based on variations in the ground surface elevation, the final depth of the collection trench ranges from 8 to 14 feet below grade. Pumps are located within the collection sump to transfer groundwater to the treatment building.

The groundwater is discharged into the air stripper designed to remove VOCs. The treated water flows by gravity from the air stripper to a catch basin (CB 2) and ultimately through storm sewer piping to Sanders Creek (OF 01A).

2.2 System Shut-Down and Alarm Conditions

GCT system shut-downs and alarms periodically occurred during the operation of the GCT system. For each alarm response, an initial assessment and corrective action occurred within four hours. In 2023, there were no major unscheduled shut down events. Minor shut-downs and alarms occurred throughout the year due to either high water level in the collection sump due to area flooding or high blower temperatures due to spring or summer weather conditions. In addition, there were no scheduled system shut-downs in 2023.

Overall, the GCT system has operated consistently with no significant operational concerns.

2.3 GCT System Monitoring and Process Modifications

During 2023, no major GCT system monitoring and process modifications were performed. However, as described in the following sections, the Phytoremediation Pilot Study continued throughout the year at the site.

2.4 Miscellaneous Site O&M Activities

The following additional site O&M activities were completed or performed in 2023:

- Throughout the year, the Phytoremediation Pilot Test was continued from 2020. Stand inspections were completed in May, July and September of 2023 with reports issued for each. Copies of these reports are included within the Year 4 Phytoremediation Pilot Test Report located in Appendix H. Activities conducted in 2023, in addition to the documented inspections, included tree watering, tree pruning and removal of ground vegetation.
- As required by NYSDEC as set forth in a letter from the NYSDEC to Lockheed Martin, dated December 9, 2009, Lockheed Martin instituted a slab inspection program for Building 5 associated with the soil vapor intrusion assessment performed at the Site. On November 20, 2023, Lockheed Martin performed the slab inspection of Building 5. This was the 13th annual slab inspection to identify new slab breaches since the first inspection performed in 2010 and the last round of soil vapor intrusion sampling that was conducted during the 2008/2009 heating season. As outlined in the inspection program, the results of the inspection are included within Appendix F.

3. GCT SYSTEM PERFORMANCE SUMMARY

This section addresses the performance of the GCT system with brief discussions on the quantity and quality of the groundwater collected. A review of system mass removal, hydraulic containment, and evaluation of treated groundwater quality and air emissions are included for the operational year.

3.1 Groundwater Collection System Performance

The following is a summary of the quantity and quality of groundwater collected and treated by the GCT system. This section includes annual totalized flow, groundwater quality, estimated VOC mass removal, and a discussion on hydraulic containment.

3.1.1 Quantity of Collected Groundwater

The quantity of collected groundwater is monitored by totaling flow meters located within the GCT system treatment building. Figure 2 shows the total gallons of groundwater that has been collected and treated during the operational year. Figure 3 presents the average monthly flow rate of groundwater collected and treated between each normal O&M event of the year. These figures demonstrate that the GCT system has been operating in a stable, consistent mode throughout the year.

Over the year, the GCT system collected and treated VOC impacted groundwater. The amount is consistent with historical annual groundwater quantities collected and treated as summarized below:

Table 3.1 Historical Summary – Amount of Groundwater Collected and Treated

Year	Amount of Groundwater Collected and Treated (million gallons)
1998	1.90
1999	1.60
2000	1.73
2001	1.71
2002	1.86
2003	1.78
2004	1.88
2005	1.98
2006	2.49
2007	1.63
2008	1.5
2009	1.7
2010	1.56
2011	2.37
2012	1.46
2013	1.91
2014	1.91
2015	1.22
2016	1.57

Year	Amount of Groundwater Collected and Treated (million gallons)
2017	2.03
2018	1.84
2019	2.14
2020	1.69
2021	1.74
2022	1.59
2023	1.70

The semi-annual flow rates are consistent with flow rates encountered during previous years of operation and are consistent with weather conditions during that portion of the year. The flow rates are summarized in the following table:

Table 3.2 Historical Summary – Average Groundwater Collection Rate

Year	January – June (gpm)	July – December (gpm)
1998	6.2	2.9
1999	6.3	1.4
2000	5.3	1.55
2001	4.55	2.11
2002	5.24	1.72
2003	4.77	2.11
2004	5.53	2.13
2005	5.31	2.11
2006	6.03	3.29
2007	5.84	1.2
2008	5.23	1.89
2009	4.55	2.06
2010	3.58	2.43
2011	6.71	2.16
2012	4.77	0.72
2013	4.65	2.7
2014	5.98	1.41
2015	2.46	2.09
2016	4.96	1.19
2017	5.52	2.09
2018	5.0	2.03
2019	5.43	2.89
2020	5.25	1.21
2021	3.25	3.26
2022	4.89	1.25
2023	4.83	1.70

3.1.2 Quality of Collected Groundwater

The quality of the collected groundwater is monitored by collecting influent samples prior to treatment within the GCT treatment building. During 2023, quarterly monitoring of VOC concentrations was conducted. Additionally, Lockheed Martin sampled for influent groundwater pH, and total dissolved solids (TDS) to evaluate the system. Appendix A provides a summary of influent groundwater quality data.

Appendix A summarizes the concentration of VOCs in the influent groundwater samples collected during the year. Additionally, the operational year data is consistent with historical data.

3.1.3 VOC Mass Removal Estimate

An estimate of VOC mass removal for individual compounds from the groundwater due to operation of the GCT system has been calculated using the following assumption:

- The influent VOC concentrations of individual compounds measured from a specific sampling event remain constant until the next sampling event.

Appendix B presents the calculated estimate of VOC mass removed. In summary, approximately 0.13 pounds of VOCs have been removed from the groundwater during the year. The total VOC mass removal is broken down by compound as follows:

- 0.04 pounds of 1,1-dichloroethane
- 0.074 pounds of 1,2-dichloroethene
- 0.000 pounds of chloroethane
- 0.020 pounds of vinyl chloride
- 0.001 pounds of trichloroethene

A summary of VOC mass removal for previous years based on treatment system flows is provided below:

Table 3.3 Historical Summary – Estimate of Total VOC Mass Removal

Year	Estimate of Total VOC Mass Removal (lbs)
1998	4.00
1999	3.20
2000	2.20
2001	1.72
2002	1.84
2003	1.52
2004	1.50
2005	2.29
2006	1.56
2007	1.76
2008	0.53
2009	0.69
2010	0.52
2011	0.95

Year	Estimate of Total VOC Mass Removal (lbs)
2012	0.35
2013	0.28
2014	0.46
2015	0.12
2016	0.25
2017	0.42 [1]
2018	0.22
2019	0.24
2020	0.19
2021	0.27
2022	0.25
2023	0.13
[1] Due to a laboratory error, the 4th quarter influent sample was not analyzed completely, and therefore, is not included in the total mass removed calculation for the 2017 year.	

In addition to the mass of VOCs removed from the groundwater through operation of the GCT system, additional VOC mass was reduced by natural degradation.

3.1.4 Hydraulic Containment

Groundwater elevations were measured from shallow monitoring wells, staff gauges and the collection trench clean-out risers. Groundwater elevation monitoring data was collected semi-annually (March and September) during 2023 from MW-1S, MW-2S, MW-3S, MW-4S, MW-6S, MW-7S, MW-8S, MW-9, MW-10, MW-11R, MW-12, MW-13, MW-15, MW-16AR, MW-17A, MW-18A, MW-19S, SG-1R, SG-2R, SG-3R, SG-5R, SG-7R, SG-8, SG-9, CO-N and CO-S. This data is summarized in Table 1.

The GCT system has consistently maintained lower heads along the collection trench relative to the surrounding groundwater regime, as evidenced by the lower elevations measured within the collection trench (*i.e.*, cleanouts CO-N and CO-S) compared to nearby monitoring wells, piezometers and staff gauges. The collection system has established hydraulic control of the VOC-impacted shallow groundwater, thereby preventing migration of the VOC-impacted shallow groundwater, located east of the collection trench, toward the South Branch of Ley Creek and Sanders Creek. Continued operation of the GCT system will prevent and control the migration of VOC-impacted shallow groundwater.

In addition to the semi-annual measurements, groundwater flow within the collection trench is confirmed by inspection of the collection system cleanouts (CO-N and CO-S) during the year. Each of the inspections indicated that water was freely draining from the collection trench toward the collection sump.

3.2 Groundwater Treatment System Performance

This section addresses the GCT system performance by examining both groundwater effluent discharges and air emissions. Both discharges are reviewed on a quarterly basis to confirm compliance with NYSDEC effluent limitations and are discussed in detail in the sections below.

3.2.1 Treated Groundwater Effluent Discharge Quality

The quality of treated groundwater effluent discharge is monitored by collecting effluent samples from GCT system piping located within the GCT system treatment building following treatment. During 2023, sample collection and analysis was performed in accordance with the Effluent Limitations and Monitoring Requirements established for the system by the NYSDEC. Quarterly monitoring of flow rate, VOC concentrations (1,1-dichloroethane, 1,2-dichloroethene, vinyl chloride, trichloroethene), pH, TDS, and zinc was conducted. In addition, at the request of the NYSDEC, 1,4-dioxane has been included in the quarterly events.

Appendix C presents a summary of effluent analytical data generated during operation of the GCT system during the year. As shown in Appendix C, no effluent limitations were exceeded during the year.

3.2.2 Air Emission Evaluation

The O&M Plan provided an evaluation method to confirm that the VOCs emitted from the air stripper do not create ambient air quality impacts above short-term guideline concentrations (SGCs) or annual guideline concentrations (AGCs) defined in the NYSDEC's Guidelines for the Control of Toxic Ambient Contaminants - Air Guide 1 (NYSDEC, Draft 1991). In the NYSDEC's response to the 2022 Annual O&M Report (comments letter dated March 23, 2023), the Department requested that Lockheed Martin update the air emissions evaluation consistent with DAR-1 requirements.

Based on the request, Lockheed Martin has updated the original air emissions evaluation for the Site by modeling mass emissions from the GCT system using the highest treatment flow rate (gpm) recorded in the past four quarters multiplied by the highest individual influent COC concentrations observed in the year and assumed that mass emission occurred every hour of the year. This modeling was performed using the AERSCREEN air dispersion model and included site-specific source information (including, but not limited to, stack height, stack diameter, building dimensions and other information). The results of the model, which are summarized in the Table 2, indicate that projected air quality impacts are well below current SGCs and AGCs. LMC will update these results on annual basis, as part of each Annual O&M Report.

4. STORM SEWER OUTFALL QUALITY

A storm sewer outfall sample was collected from outfall OF-02 on April 11, 2023 and analyzed for VOCs. Outfall OF-02 discharges to the South Branch of Ley Creek, as shown in Figure 1. The sample was collected during a “dry weather” period, meaning that surface water was not flowing into the catch basins at the time of sample collection. Lockheed Martin received laboratory analytical data for the annual dry weather storm sewer sampling performed at the outfall and notified the NYSDEC of the results. A summary of the storm sewer outfall sampling analytical results showing detected concentrations of VOCs using EPA Method 8260 is presented in Appendix D. The outfall analysis data from the event is consistent with historical data for the site.

During April 2024, Outfall OF-02 will be sampled during “dry weather” conditions as specified in the August 1997 Storm Sewer IRM Work Plan, and Lockheed Martin’s June 30, 1998 letter and NYSDEC’s August 28, 1998 letter regarding the Storm Sewer IRM.

5. GROUNDWATER QUALITY

In March 2023, groundwater samples were collected and analyzed from monitoring wells MW-1S, MW-2S, MW-8S, MW-10, MW-11R, MW-12, MW-16AR, MW-17A, MW-18A and MW-19S.

A summary of groundwater monitoring well analytical results showing detected concentrations of VOCs using EPA Method 8260 is presented in Appendix E. Monitoring well locations are shown on Figure 1. The groundwater analysis data from the event is consistent with historical data for the site.

During March 2024, groundwater samples will be collected from monitoring wells MW-1S, MW-2S, MW-8S, MW-10, MW-11R, MW-12, MW-16AR, MW-17A, MW-18A and MW-19S.

6. CONCLUSIONS

This section provides conclusions drawn based upon the operation of the GCT system during 2023 and remedial goals for the site as specified in the ROD.

6.1 GCT System Operational Performance

The GCT system collected approximately 1.70 million gallons of groundwater during 2023 and has treated this groundwater in compliance with NYSDEC requirements for air emissions and treated water discharges. The GCT system has operated consistently, experiencing minimal shut-down periods with no significant operational concerns.

The GCT system has consistently maintained lower heads along the collection trench relative to the surrounding shallow groundwater regime. Therefore, hydraulic control has been established, preventing migration of the VOC-impacted shallow groundwater, located east of the collection trench, toward the South Branch of Ley Creek and Sanders Creek.

6.2 Attainment of Remedial Goals

The remedial goals specified in the ROD for the site (NYSDEC, March 1999) are as follows:

- Prevent the migration of VOC impacted shallow groundwater to the South Branch of Ley Creek and to Sanders Creek, to the extent feasible considering site conditions.
- Reduce the level of residual VOCs in the shallow groundwater to attain NYSDEC groundwater standards (6 NYCRR Part 703), to the extent feasible considering site conditions, currently available technology, implementability, and cost-effectiveness.
- Reduce the level of residual VOCs in site soils to attain NYSDEC Soil Cleanup Objectives (NYSDEC Technical and Administrative Guidance Memorandum 4046), to the extent feasible considering site conditions, currently available technology, implementability, and cost-effectiveness.

The GCT system has been successful in establishing hydraulic control, preventing migration of the VOC-impacted shallow groundwater, located south and east of the collection trench, toward the South Branch of Ley Creek and Sanders Creek. Additional VOC-impacted groundwater is being collected and controlled from areas located north and west of the collection trench. The concentration of VOCs in the storm sewer outfall OF-02 (South Branch of Ley Creek) continue to be at trace levels, similar to past sample results.

The GCT system has removed 0.13 pounds of VOCs from groundwater during 2023 in pursuit of reducing the level of residual VOCs in the shallow groundwater. Additional VOC mass reduction has also been accomplished through natural degradation. As discussed in the Feasibility Study (EMCON, January 1999), it is anticipated that groundwater quality at portions of the site (*e.g.*, near former source areas) will not achieve groundwater standards, criteria, and guidelines (SCGs) (6 NYCRR Part 703) for a number of decades. It is also anticipated that shutdown of the GCT system may be appropriate prior to achieving groundwater quality SCGs across the site. In accordance with the FS and the ROD, O&M of the GCT system will continue until groundwater concentrations of site-related VOCs have leveled off at a relatively low concentration over the majority of the site, significant quantities of contaminants are no longer being removed, or it can

be demonstrated that the full-scale phytoremediation system and/or natural attenuation of VOCs will be protective of water quality in the South Branch of Ley Creek and Sanders Creek.

6.3 Plans for 2024

The following present Lockheed Martin's plans for the site in 2024 in addition to the operation of the GCT system and regular sampling activities:

- Continue to review and assess operational improvement options and alternate treatment options for their potential effectiveness for future use at the site.
- Continue implementation of the Phytoremediation Pilot Test Work Plan with tree stand inspections, tree pruning, tree replacement as necessary, watering trees, vegetation management and monthly influent/effluent monitoring and analysis.
- Complete the inspection report and perform next round of visual inspections on the building slab associated with vapor intrusion (VI). Results of the inspections will be summarized in a report to the NYSDEC.
- Based upon performance of the pilot test to date, Lockheed Martin is compiling data collected and comparing to the objectives of the approved Pilot Work Plan. Lockheed Martin will be preparing and submitting a separate letter petition to the NYSDEC documenting the request to reduce, or modify, operation of the treatment system to seasonal operation.

TABLES

TABLE 1
SEMI-ANNUAL GROUNDWATER ELEVATION DATA

Table 1
Semi-Annual Groundwater Elevation Data
2023 Annual Operations and Maintenance Report
Former GE Court Street Building 5 Site

Well	March 2, 2023 Groundwater Elevation (ft. MSL)	September 1, 2023 Groundwater Elevation (ft. MSL)
MW-1S	380.60	378.95
MW-2S	379.36	375.86
MW-3S	377.61	376.04
MW-4S	376.36	374.33
MW-6S	380.55	376.03
MW-7S	378.72	374.79
MW-8S	375.78	373.14
MW-9	377.22	374.08
MW-10	376.41	DRY
MW-11R	378.81	375.27
MW-12	376.86	375.30
MW-13	374.60	374.12
MW-15	377.65	373.01
MW-16AR	375.56	373.86
MW-17A	374.75	373.13
MW-18A	374.89	374.29
MW-19S	377.51	376.74
SG-1R	374.61	374.32
SG-2R	372.71	372.43
SG-3R	372.59	372.41
SG-5R	374.82	374.45
SG-7R	373.96	DRY
SG-8	372.51	372.36
SG-9	372.52	372.32
CO-N	372.76	372.62
CO-S	373.24	373.17

Notes:

1. Comparison of groundwater elevations recorded on both sides of the trench to elevations recorded in the collection trench (i.e., interpolation based on cleanouts) confirm an inward hydraulic gradient.

TABLE 2
TOXICS AERSCREEN MODELING RESULTS

Table 2
Toxics AERSCREEN Modeling Results
Lockheed Martin - Court St Site
Syracuse, New York

Pollutants	CAS Number	Water Treatment Flow Rate (max quarterly result) (gal/min)	Concentration in Water (max result) (µg/L)	Emission Rate[a] (lb/hr)	Normalized Short-Term Concentration[b] (µg/m³/lb/hr)	Normalized Annual Concentration[b] (µg/m³/lb/hr)	Short-Term Concentration[c] (µg/m³)	Annual Concentration[c] (µg/m³)	Short-Term Guideline Concentration (SGC)[d] (µg/m³)	Annual Guideline Concentration (AGC)[d] (µg/m³)	% SGC	% AGC	Emission Rate to Meet SGC[e] (lb/hr)	Concentration in Water to Meet SGC[f] (µg/L)	Emission Rate to Meet AGC[e] (lb/hr)	Concentration in Water to Meet AGC[f] (µg/L)	Maximum Allowable Concentration in Water (µg/L)
		5.22															
Vinyl Chloride	00075-01-4		4.1	1.07E-05	1,589	159	1.70E-02	1.70E-03	180,000	0.11	<1	2	113	43,343,737	6.92E-04	265	265
1, 1-Dichloroethane	00075-34-3		3.6	9.41E-06	1,589	159	1.50E-02	1.50E-03	---	0.63	---	<1	---	---	3.96E-03	1,517	1,517
1, 2-Dichloroethene	00156-59-2		5.4	1.41E-05	1,589	159	2.24E-02	2.24E-03	---	63	---	<1	---	---	0.396	151,703	151,703
Trichloroethylene	00079-01-6		1	2.61E-06	1,589	159	4.15E-03	4.15E-04	20	0.21	<1	<1	1.26E-02	4,816	1.32E-03	506	506
Chloroethane	00075-00-3		1	2.61E-06	1,589	159	4.15E-03	4.15E-04	---	10,000	---	<1	---	---	62.9	24,079,854	24,079,854
1,4-Dioxane	00123-91-1		N/A	N/A	1,589	159	N/A	N/A	3,000	0.20	---	---	1.89	722,396	1.26E-03	482	482

Notes:
(a) Emission Rate (lb/hr) = Water Treatment Flow Rate (gal/min) x 60 (min/hr) x Concentration in Water (µg/L) x 3.785 (L/gal) ÷ 1,000,000 (µg/g) ÷ 453.592 (g/lb)
(b) AERSCREEN modeling was performed on a normalized basis with an emission rate of 1 lb/hr.
(c) Short-Term/Annual Concentration (µg/m^3) = Emission Rate (lb/hr) x Normalized Short-Term/Annual Concentration (µg/m^3)
(d) AGCs and SGCs were obtained from the February 21, 2021 version of NYSDEC's DAR-1.
(e) Emission Rate to Meet SGC/AGC (lb/hr) = SGC/AGC (µg/m^3) ÷ Normalized Short-Term/Annual Concentration (µg/m^3/lb/hr)
(f) Concentration in Water to Meet SGC/AGC (µg/L) = Emission Rate to Meet SGC/AGC (lb/hr) x 453.592 (g/lb) x 1,000,000 (µg/g) ÷ 60 (min/hr) ÷ Water Treatment Flow Rate (gal/min) ÷ 3.785 (L/gal)

FIGURES

FIGURE 1
SITE PLAN

N

DEERE ROAD

298

FORMER SG-1

CREEK

SANDERS

BUILDING 5

BUILDING 5A

EXISTING STORM SEWER LINES AND EXISTING EFFLUENT LINE (COMBINED FROM CB-2)

COLLECTION SUMP

MW-19S

INFLUENT LINES

SG-2

MW-3S

CB-3

CB-2

MW-1S

CLEANOUT RISER (CR-SOUTH)

MW-12

OF-02

CREEK

(SOUTH BRANCH)

FORMER SG-5

MW-6S

MW-2S

TREATMENT BUILDING

CB-20

MW-4S

OF-01A

CB-4

MW-16A

MW-11R

MW-18A

MW-7S

SG-6

FLOW

LEY

MW-8S

MW-9

MW-10

ROUTE

SG-8

MW-13

FORMER SG-4

LOCATION OF GROUNDWATER COLLECTION SYSTEM TRENCH

SG-3

MW-17A

SG-9

FORMER EFFLUENT LINE

MW-15

CLEANOUT RISER (CR-NORTH)

SG-7

0 120 240

SCALE IN FEET

1" 1/2" 0" 1"

LEGEND:

- MONITORING WELL (ONLY THOSE WELLS INCLUDED IN PERIODIC HYDRAULIC OR GROUNDWATER MONITORING ARE SHOWN)
- STAFF GAUGE
- OUTFALL
- CATCH BASIN
- EXISTING STORM SEWER LINES
- YARD PIPING (APPROXIMATE LOCATIONS COLLECTION TRENCH AND INFLUENT LINE)
- FORMER EFFLUENT LINE
- EXISTING EFFLUENT LINE

NOTE: ORIGINAL BASED ON EMCON DRAWING DATED 2/1998

FIGURE 1

ANNUAL OPERATIONS AND MAINTENANCE REPORT
FORMER GE COURT STREET BUILDING 5

SITE PLAN

FIGURE 2
TOTAL GALLONS OF GROUNDWATER COLLECTED AND TREATED

Figure 2
Total Gallons of Groundwater Collected and Treated
2023 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

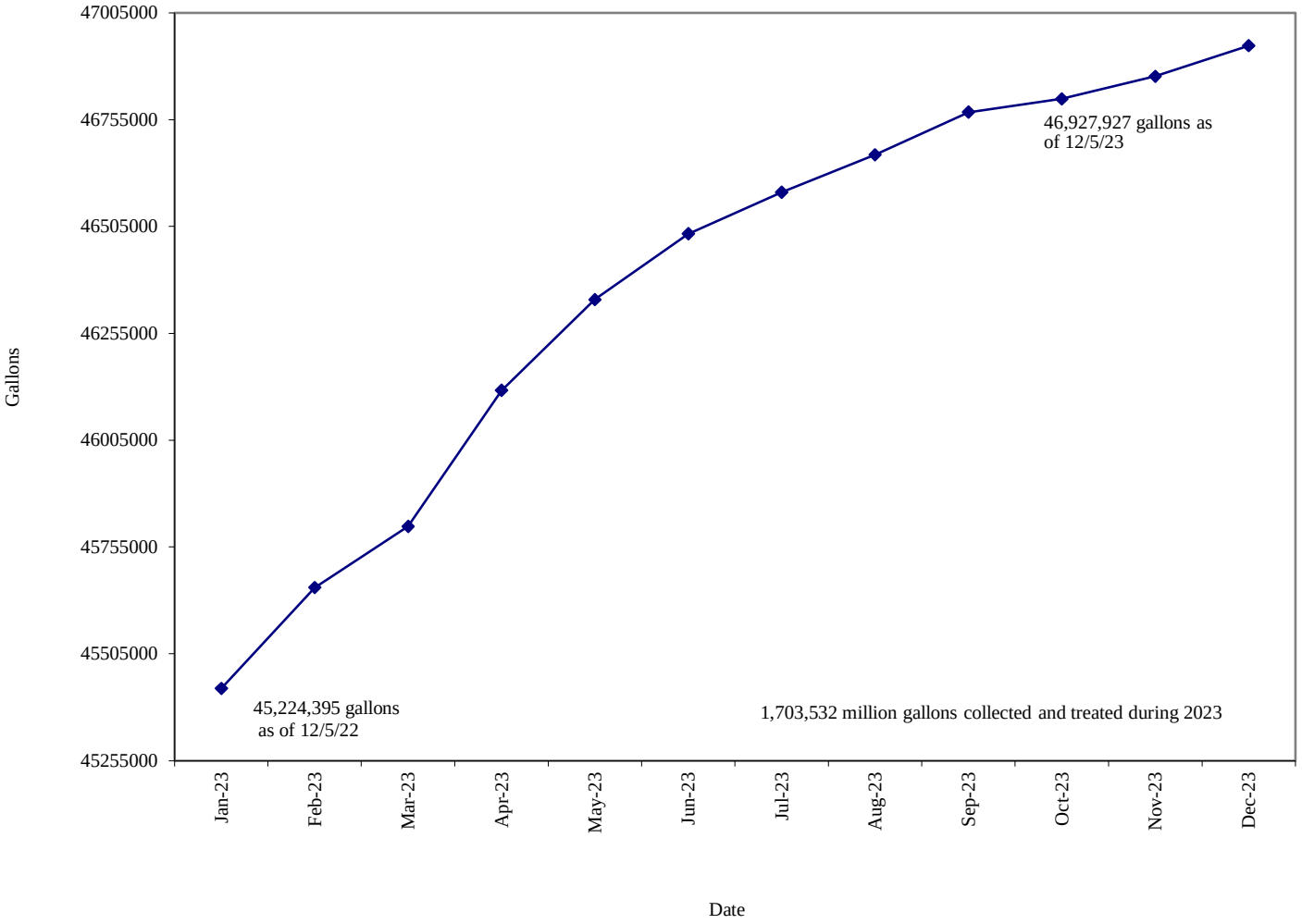
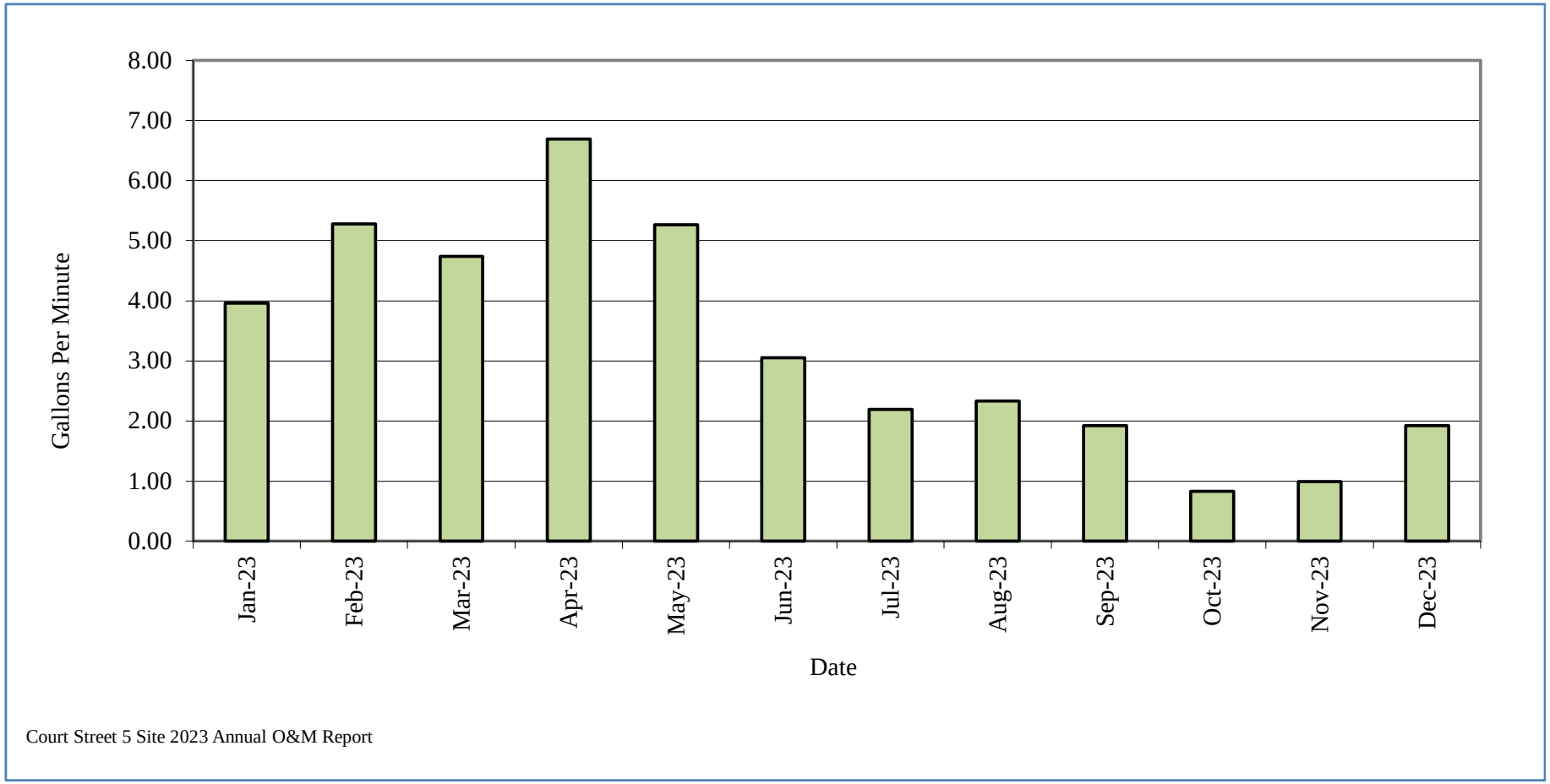


FIGURE 3
AVERAGE FLOW RATE OF GROUNDWATER COLLECTED AND TREATED

Figure 3
Average Monthly Flow Rate of Groundwater Collected and Treated
2023 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site



Court Street 5 Site 2023 Annual O&M Report

APPENDICES

APPENDIX A
INFLUENT GROUNDWATER QUALITY

Appendix A
Influent Groundwater Quality
2023 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

Event Identification	Date	Total Ground-water Treated (gallons)	Instant. Flow Rate (gpm)	pH (S.U.)	Total Dis. Solids (mg/l)	Vinyl Chloride (µg/L)	1,1-DCA (µg/L)	1,2-DCE (Total) (µg/L)	TCE (µg/L)	Chloroethane (µg/L)	1,4-Dioxane (µg/L)
Normal O&M Week #1310 Quarterly Sample, Influent	03/02/23	45,803,315	4.42	6.94	780	4.1	2.0	5.3	<1.0	<1.0	NA
Normal O&M Week #1324 Quarterly Sample, Influent	06/06/23	46,487,642	5.22	7.21	794	<1.0	2.5	5.3	<1.0	<1.0	NA
Normal O&M Week #1337 Quarterly Sample, Influent	09/07/23	46,772,369	2.17	6.89	683 B	<1.0	3.6	4.9	0.51 J	<1.0	NA
Normal O&M Week #1350 Quarterly Sample, Influent	12/05/23	46,927,927	1.19	6.95	659	<1.0	2.3	5.4	<1.0	<1.0	NA
				Minimum Value:	683 B	<1.0	2.0	4.9	0.51 J	<1.0	NA
				Maximum Value:	794	4.1	3.6	5.4	<1.0	<1.0	NA
				Number of Detections/Number of Analyses :	4/4	2/4	4/4	4/4	1/4	0/4	NA

Notes:
1. Influent pH, and TDS is not required for the site O&M monitoring; however, during certain O&M events LMC may sample these parameters for system evaluation.
2. Laboratory analysis performed by TestAmerica Laboratories, Inc.
3. Per the request of Mr. Joshua Cook, (NYSDEC), chloroethane and 1,4 dioxane results are for the efluent sample only.
4. cis-1,2-DCE reported as 1,2-DCE

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

APPENDIX B
ESTIMATE OF VOC MASS REMOVED

Appendix B
Estimate of VOC Mass Removed
2023 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

Quarter 2023	From Date	To Date	GW Treated during Period (gallons)	Vinyl Chloride (lb.)	1,1-DCA (lb.)	1,2-DCE (Total) (lb.)	TCE (lb.)	Chloroethane (lb.)
1st Quarter Jan - Mar.	12/05/22	03/02/23	578,920	0.020	0.010	0.026	0.000	0.000
2nd Quarter Mar. - June	03/02/23	06/06/23	684,327	0.000	0.014	0.030	0.000	0.000
3rd Quarter June - Sept.	06/06/23	09/07/23	284,727	0.000	0.009	0.012	0.001	0.000
4th Quarter Sept. - Dec.	09/07/23	12/05/23	155,558	0.000	0.003	0.007	0.000	0.000
Estimated Mass (lbs) of Individual VOCs Removed by the GCT System in 2023:				**0.020**	**0.04**	**0.074**	**0.001**	**0.000**

Estimated Mass (lbs) of Total VOCs Removed by the GCT System in 2023:	**0.13**

Sample Calculation:

Estimate of Mass of 1,1-DCA Removed Between December 5, 2022 and March 2, 2023.

$$C_1 \times \frac{1 \text{ pound}}{454 \times 10^6 \text{ ug}} \times (Q_2 - Q_1) \times \frac{3.785 \text{ liters}}{1 \text{ gallon}} = M$$

where:

M=Mass (pounds) of 1,1-DCA Removed during the period.

Q_1=Quantity (gallons) of groundwater treated as of December 5, 2022.

Q_2=Quantity (gallons) of groundwater treated as of March 2, 2023.

C_1=Concentration (ug/l) of 1,1-DCA in sample collected March 2, 2023.

Solution:

Q_1= 45,224,395 gallons

Q_2= 45,803,315 gallons

C_1= 2.0 ug/l

M= 0.010 pounds

APPENDIX C
TREATED GROUNDWATER EFFLUENT DISCHARGE QUALITY

Appendix C
Treated Groundwater Effluent Discharge Quality
2023 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

Event Identification	Date	Total Ground-water Treated (gallons)	Instant. Flow Rate (gpm)	pH (S.U.)	Total Dis. Solids (mg/L)	Zn Total (µg/L)	Vinyl Chloride (µg/L)	1,1-DCA (µg/L)	1,2-DCE (Total) (µg/L)	TCE (µg/L)	Chloroethane (µg/L)	1,4 Dioxane (µg/L)
Effluent Limitations :			**Monitor**	**6 - 9**	**Monitor**	**400**	**50**	**30**	**30**	**10**	**NA**	**NA**
Normal O&M Week #1310 Quarterly Sample, Effluent	03/02/23	45,803,315	4.42	8.16	782	3.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.9
Normal O&M Week #1324 Quarterly Sample, Effluent	06/06/23	46,487,642	5.22	8.15	772	4.3 JB	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.5 B
Normal O&M Week #1337 Quarterly Sample, Effluent	09/07/23	46,772,369	2.17	8.23	698 B	11	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.3
Normal O&M Week #1350 Quarterly Sample, Effluent	12/05/23	46,927,927	1.19	8.12	660	<10	< 1.0	< 1.0	<1.0	< 1.0	< 1.0	3.2
Minimum Value:		660	3.9	< 1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.2
Maximum Value:		782	11	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.5 B
Number of Samples :		4	4	4	4	4	4	4	4	4	4	4
Number of Detections/Number of Analyses:		4/4	3/4	0/4	0/4	0/4	0/4	0/4	0/4	0/4	0/4	4/4

Notes:
1. Laboratory analysis performed by TestAmerica Laboratories, Inc..
2. Per the request of Mr. Joshua Cook, (NYSDEC), chloroethane and 1,4 dioxane results are included in this summary table.

E = Estimate value - results exceeded calibration range

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

B = Compound was found in the blank and sample.

APPENDIX D
2023 SOUTH BRANCH OF LEY CREEK OUTFALL OF-02 SAMPLE

Appendix D
South Branch of Ley Creek Outfall OF-02 Sample
2023 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

PARAMETER	NYSDEC Effluent Discharge Limitation	OF-02 4/11/2023 Result
1,1-Dichloroethene	--	<1.0
1,1-Dichloroethane	30	10
1,2-Dichloroethane	--	<1.0
1,1,1-Trichloroethane	--	<1.0
Trichloroethene	10	<1.0
c-1,2-Dichloroethene	30	<1.0
Chloroform	--	<1.0
Bromodichloromethane	--	<1.0

Notes:
1. NYSDEC Effluent Discharge Limitation is provided for comparison.
2. All concentrations are presented in ug/l.
3. Sample analyzed by Method 8260.
4. Laboratory analysis provided by TestAmerica Laboratories, Inc.

APPENDIX E
GROUNDWATER MONITORING WELL DATA SUMMARY

Appendix E
Groundwater Monitoring Well Data Summary
2023 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

PARAMETER	NYSDEC Groundwater (GA) Standard (6 NYCRR 703)	MW-1S Sample Date 3/3/2023 Result	MW-2S Sample Date 3/3/2023 Result	MW-8S Sample Date 3/3/2023 Result	MW-10 Sample Date 3/3/2023 Result	MW-11R Sample Date 3/3/2023 Result	MW-12 Sample Date 3/3/2023 Result	MW-16AR Sample Date 3/3/2023 Result	MW-17A Sample Date 3/3/2023 Result	MW-18A Sample Date 3/3/2023 Result	MW-19S Sample Date 3/3/2023 Result
1,1,1-Trichloroethane	5	< 80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloro-1,2,2-trifluoroethane	5	< 80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	5	370	5.4	< 1	21	21	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	0.6	< 80	< 1	< 1	< 1	< 1	< 1	1.4	< 1	< 1	< 1
1,1-Dichloroethene	5	< 80	< 1	< 1	< 1	1.3	< 1	< 1	< 1	< 1	< 1
2-Butanone	None	<800	< 10	< 10	< 10 *+	< 10 *+	< 10 *+	< 10	< 10 *+	< 10 *+	< 10
Acetone	None	< 800	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chloroethane	5	4000	3.4	< 1	< 1	24	< 1	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	5	< 80	5.8	< 1	7.2	110	< 1	2.1	< 1	< 1	< 1
Ethylbenzene	5	< 80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene Chloride	5	< 80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	5	< 80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	5	< 80	< 1	< 1	< 1	1.3	< 1	< 1	< 1	< 1	< 1
Trichloroethene	5	< 80	< 1	< 1	0.96 J	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2	< 80	21	< 1	< 1	74	< 1	< 1	< 1	< 1	< 1
Xylenes (total)	5	< 160	< 2	< 2	<1	< 2	< 2	< 2	< 2	< 2	< 2

Notes:
1. Samples analyzed by EPA Method 8260.
2. Concentrations are presented in ug/l.
3. Laboratory analysis performed by Eurofins TestAmerica.
4. MW-16A replaced with MW-16AR on February 27, 2017.
5. Exceeds NYSDEC Class GA groundwater standards
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*+ - LCS and/or LCSD is outside acceptance limits, high biased.

APPENDIX F
COURT STREET BUILDING SLAB INSPECTION REPORT

MEMO

Project name	**2023 Annual Building Slab Inspection Summary – Former GE Court Street Building Site**
Project no.	**5851/1940101934**
Client	**Lockheed Martin Corporation**
Memo no.	**1**
Version	**1**
To	**Jill Fonte, Lockheed Martin**
From	**Scott Scheidelman**
Copy to	**Robert Tyson – BS&K** **R. Stan Phillips – Lockheed Martin** **Matthew Traister – Ramboll**
Prepared by	**Michael Mellen – Ramboll**
Checked by	**Matthew Traister – Ramboll**
Approved by	**Matthew Traister – Ramboll**

This Technical Memorandum (TM) presents a summary of the 2023 annual building slab inspection conducted at the former GE Court Street Building 5 Site (Site) on November 20, 2023. The purpose of the inspection was to identify slab breaches and building modifications in accordance with recommendations presented in the March 12, 2009 technical memorandum by O'Brien & Gere Engineers, Inc (OBG). Note that Ramboll Americas Engineering Solutions, Inc. (Ramboll) is formerly known as OBG, pre 2019). This TM is an update to the following:

Date/Description of Subslab Inspection	Date of Ramboll Technical Memorandum
November 2010 Baseline slab inspection	February 1, 2011
2011 slab inspection	December 8, 2011
2012 slab inspection	December 13, 2012
2013 slab inspection	December 19, 2013
2014 slab inspection	December 19, 2014
2015 slab inspection	January 8, 2016
2016 slab inspection	December 20, 2016
2017 slab inspection	December 11, 2017
2018 slab inspection	December 19, 2018
2019 slab inspection	December 3, 2019
2020 slab inspection	January 4, 2021
2021 slab inspection	January 3, 2022
2022 slab inspection	January 11, 2023

The 2023 inspection, documented by this TM, evaluated the potential slab breaches identified in previous inspections, and inspected the slab for potential new breaches that may have occurred since the last inspection. Potential slab breaches were evaluated with respect to their ability to facilitate the vapor intrusion (VI) pathway. This TM provides the details of the evaluations and provides recommendations for next steps.

1 Background

The Site consists of approximately 10 acres in an industrial zoned setting located in the Town of Dewitt at the intersection of Deere Road and Route 298. There is one on-Site building, Building 5, which is currently owned by B&B Family Limited Partnership. The primary occupant is Premier Hardwood Products (PHP). PHP's operations consist primarily of cutting, molding, and planing of lumber. An additional tenant, Specialty Products & Insulation Co. (SPI), is located in the northwest portion of the building. SPI is a distributor of HVAC system products such as metal ducting, piping, and insulation. SPI has constructed an enclosed office space located within the warehouse area of Building 5. The building layout is shown on **Figure 1**.

In response to a request by the New York State Department of Environmental Conservation (NYSDEC) in August 2006, Lockheed Martin Corporation (Lockheed Martin) conducted sampling at the Site to assess the potential for vapor intrusion. Lockheed Martin retained Ramboll to conduct the vapor intrusion sampling, which was performed in February 2007 for the 2006-2007 heating season. The results of the sampling were summarized in a TM in May 2007, in which further monitoring for trichloroethene (TCE), tetrachloroethene (PCE) and 1,1,1-trichloroethane (1,1,1-TCA) was recommended. Further monitoring was conducted in November 2007 for the 2007-2008 heating season, the results of which were reported by Ramboll in a TM in January 2008. Sub-slab vapor concentrations were found to be lower at one sample location and lower or the same (depending upon compound) at the other three sampling locations (comparison of November 2007 and February 2007 sample results). Therefore, additional sampling was recommended at the other three sampling locations.

Additional sampling was conducted in December 2008 for the 2008-2009 heating season and results were summarized in a TM in March 2009. Based on the sample results, and in conformance with the two New York State Department of Health (NYSDOH) soil vapor / indoor air matrices, no further action was necessary. However, Ramboll recommended that annual inspections be conducted to identify slab breaches and building modifications that could increase the potential for sub-slab vapors to intrude. NYSDEC approved the annual inspection approach in a December 9, 2009 letter from Javier Perez of NYSDEC to Myron Parkolap of Lockheed Martin. This TM presents the results of the thirteenth annual inspection.

2 Building Survey

Ramboll confirmed that the building survey information (e.g., building foundation, utilities, slab conditions and penetrations) collected during the previous annual inspection had not changed. The following information is provided as an overview.

Building 5's concrete floor (slab) is approximately 3 feet above grade. Except for some surficial cracks in the slab's surface, it is in excellent condition. Most of the building is a large open area without partitioning walls. There are three constructed office areas within the main building, and an additional office area that is an addition to the main building. The office spaces each contain their own natural gas-fired furnace and hot water tank. SPI operates loading docks and doors along the northwest end of the building for loading and unloading of product. **Figure 1** presents a floor plan.

The warehouse is heated by four natural gas-fired forced air units located within the indoor space. The warehouse is not air conditioned. A fire protection pump is located in the northeast corner of the building.

PHP operates a wood dust/chip collection system located along the north wall. The blower units take air from inside the building via hoods located over process equipment, route it through a filter/collection system, and return the air back inside the building. This system does not materially affect the building's indoor air pressure.

Along the south wall is a partition that separates an office area and compressor room from the rest of the warehouse area. The climate control for the compressor room is maintained by manual operation of ductwork dampeners that are adjusted seasonally. In the winter months, make-up air to the compressor is pulled from the building's interior and then discharged back inside the building; therefore, the indoor air pressure is unchanged. In the summer months, make-up air is drawn from inside the building and then exhausted outside; under these conditions, the indoor air pressure within the building becomes negative.

In 2011, PHP constructed an office/break room area, slightly west of the center of the building. The location of the office/break room is shown on **Figure 1**. Similar to the other office spaces, this office/break room area has its own HVAC system.

3 Slab Inspection

The 2023 slab inspection was conducted on November 20, 2023. Accessible areas of the building's slab were inspected for slab cracks, holes, and other potential breaches through the slab (herein referred to as slab areas). Locations and measurements of the identified slab areas were recorded on checklists and each slab area was catalogued with a corresponding letter; this information can be found in **Attachment 1**. Photographs of accessible slab areas are documented in **Attachment 2**. The location of each identified slab area is identified on a floor plan, **Figure 1**. The 2023 slab inspection used findings observed during the previous inspections to aid in identifying whether changes have occurred over the past year (*e.g.,* the 2022 slab inspection).

As reported in previous annual inspections, the slab remains in excellent condition, meaning that it provides a competent (sealed) cover over the sub-slab material (*e.g.,* gravel, soil) below. Narrow surface cracks exist throughout the slab; however, they do not appear to penetrate through the slab to the sub-slab material. Due to the quantity observed, these narrow surface cracks were not catalogued as part of this inspection. Wider and deeper cracks were catalogued so that their condition could be evaluated over time as potential pathways for vapor intrusion. Note that in 2012, Mr. Mike Tradeau of PHP indicated that PHP applied an epoxy sealant to help protect the slab in some higher truck traffic areas; some of these areas where the epoxy sealant was applied were observed during this inspection. As noted below, additional epoxy sealant was applied by PHP between the 2013 and 2014 inspections.

There were several areas where the slab could not be observed due to stored product and/or process equipment, as shown on **Figure 1**. The dimensions on the field forms for the inaccessible areas are those found in the latest inspection when the area was accessible. The depths of accessible slab areas were established by digging with a utensil into the area to work away loose concrete until refusal was

met. Therefore, the depths reported in the field forms are the maximum depth encountered and typically do not indicate the depth of the area on average or in appearance. These depths and technique will be used in future inspections to gauge the deterioration or stability of each slab area.

There is one identified slab area that is not necessarily a potential pathway to the sub-soil. Slab area D is a currently active floor drain connected to storm sewer lines. Although this identified area penetrates through the slab, it is not expected to provide a vapor pathway through the slab, so it is documented in this report for future reference only.

Slab areas L and M can no longer be accessed due to the permanent installation of process equipment (machinery) used to cut, mold, and/or plane lumber; therefore, slab areas L and M are no longer tracked. Slab area S (three 2-foot square holes saw-cut into the slab for the installation of footings for the new office/break room area) has been sealed by PHP (as a result of the completed construction) and has not been considered a slab area since late 2011. Greater access between slab areas V and K during the 2013 slab inspection concluded that the two slab areas are connected; therefore, slab area V is no longer tracked as a separate slab area, slab area V is considered part of slab area K.

PHP began installation of a new process line in the northeast portion of the building in September 2017. As part of this installation (to accommodate a conveyer belt system), approximately 60 feet of trenching was saw-cut into the concrete. After the concrete was removed, approximately two to four feet of soil was excavated. The trenches were back-filled with stone and were sealed with concrete. Process equipment was then installed at grade and the conveyers were installed in the sealed trenches below grade. On behalf of Lockheed Martin, Ramboll monitored for dust and volatile organic compounds while sub-slab soils were exposed and no exceedances were observed during construction. Given that the trenches are sealed with concrete, they are not expected to provide a vapor pathway through the slab. The trenches are documented in this report for future reference only.

4 Findings and Summary

There were no new slab areas identified during this inspection. There was one slab area (N) whose width had increased approximately ½" between the 2021 and 2022 inspections; however, the area does not appear to have increased in size during 2023 and does not penetrate through the slab. It is worth noting that PHP continues to address some of the wider areas and applies either epoxy or concrete, as needed. Due to process operating equipment and placement of pallets of lumber, slab areas D, G, L, M, P, T, U and Z were not accessible during this inspection.

There were no slab areas identified in which a penetration extended through the entire slab; thus, such penetrations do not represent a potential soil vapor pathway. Some of these slabs are up to 4 inches deep. The deeper slab areas, identified during this or previous inspections as slab areas J, K, N, P, Q, T and Z, should be observed carefully during subsequent inspections as their integrity may become compromised over time.

Some of the slab areas were catalogued during the initial inspection as concrete patches or surface deterioration adjacent to concrete patches. These include slab areas I (concrete patch of a hole), M (deterioration next to a concrete patch), N (edge of large square patch), O (deterioration around a hole patch), and P (concrete patch of a hole or a hole that was not drilled through the entire slab).

Two slab areas (W and Y) are located along the interface of the concrete slab and inlayed ceramic tile. The ceramic tile has been installed such that the tile is flush with the adjacent concrete slab and tiles along the edge of the inlay have become broken or are missing. In some cases, the voids left behind by broken or missing tiles were up to six inches wide and two inches deep. On their own accord, PHP applied an epoxy sealant to portions of these areas between the 2013 and 2014 slab inspections.

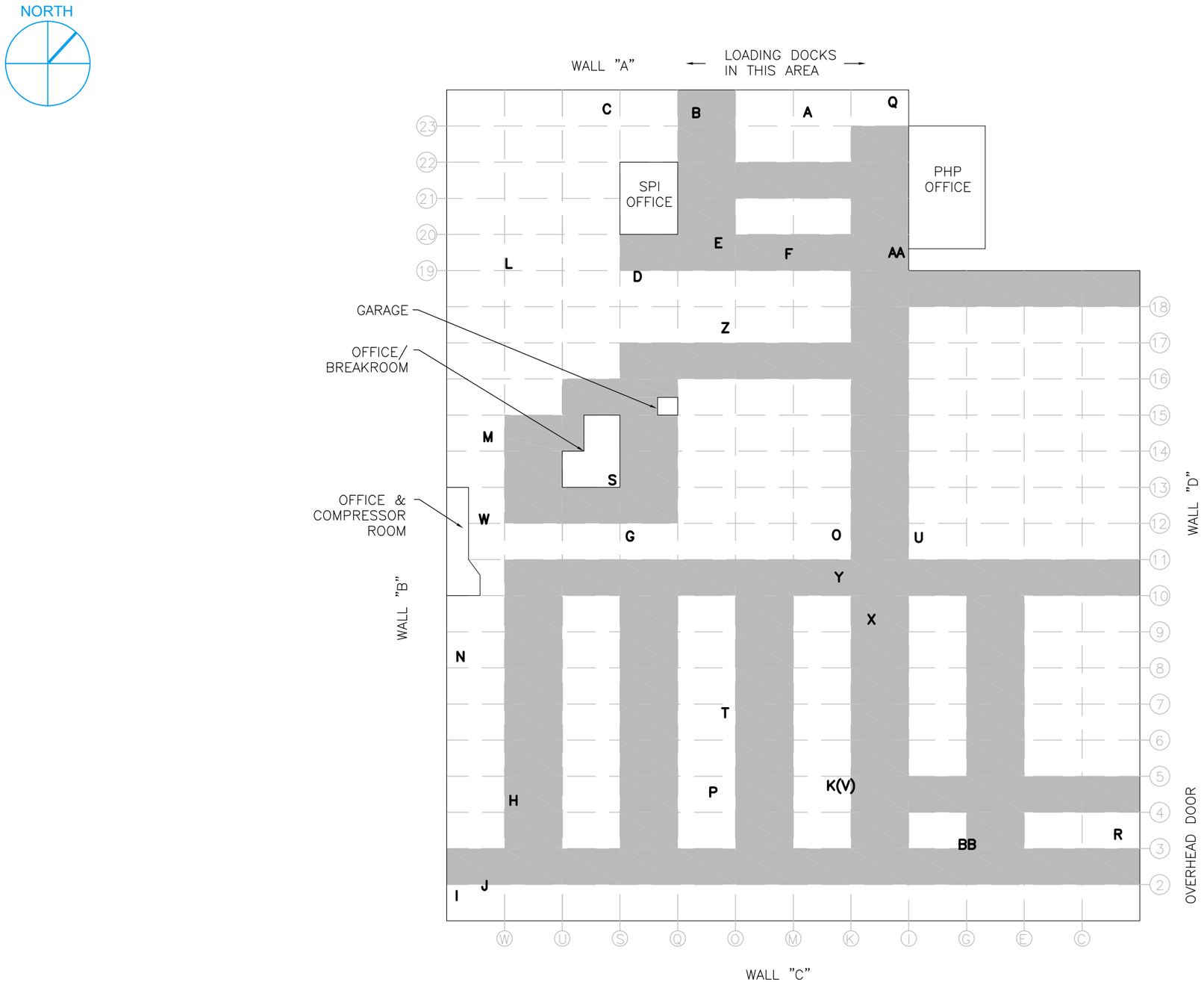
A single location, located within a high traffic aisle, immediately adjacent to slab area Z was identified as an area where the concrete has “depressed”. Due to the high traffic nature of this area, the damage has resulted in three approximately 8” x 18” depressions with a maximum observed depth of 1.5”. This depression did not appear to penetrate through the slab and was documented with a photograph. Following discussion with the property manager, to minimize potential for additional damage, this area is anticipated to be patched with either epoxy or concrete during 2024.

In summary, we did not find slab areas that penetrate the slab to the sub-surface below and do not believe that the potential for vapor intrusion has increased since the December 2008 sampling event. With the exception of the area identified above, we did not recommend to the building owner that additional sealing was necessary at this time. The next annual inspection is due in November 2024.

Attachments: Figure 1 – Building 5 Layout and Slab Area Identification
Attachment 1 – Field Data Forms
Attachment 2 – Photo Log

FIGURE 1
BUILDING 5 LAYOUT AND SLAB AREA IDENTIFICATION

PROJECT: XXXX.XXXXX DATED: 12/16/2021 8:24 AM DESIGNER: ERIC.ALONGI \\Server\services\Ambient Monitoring\Projects\Ramboll\Vapor Intrusion\Lockheed Martin\Court Street\Court St_slab inspection-2022.dwg



NOT TO SCALE

BUILDING 5 LAYOUT AND SLAB AREA IDENTIFICATION

FIGURE 01

Site #7-34-070

Former GE Court Street 5 Site
6439 Deere Road
Dewitt, New York

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

ATTACHMENT 1
FIELD DATA FORMS

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/20/23

Structure ID #: #7-34-070 **Team:** MDM

Slab Area+ ID: A

Length: Varying - large spider cracks **Width:** up to 2-in **Depth:** up to 1-in

Distance from D *** wall in feet:** ~100'

Distance from A *** wall in feet:** ~20'

- Area partially covered w/ equipment
- Larger cracks filled w/ epoxy.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: B

Length: Varying - large Spider Cracks **Width:** up to 3-in **Depth:** up to 1-in

Distance from D *** wall in feet:** ~140'

Distance from A *** wall in feet:** ~20'

- Larger cracks sealed w/ epoxy

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: C

Length: ~90' **Width:** up to 1 1/2" **Depth:** up to 1"

Distance from D *** wall in feet:** ~160'

Distance from A *** wall in feet:** ~20'

- No apparent changes in crack size

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/20/23

Structure ID #: #7-34-070 **Team:** MDM

Slab Area+ ID: D

Length: ~8" ø hole **Width:** – **Depth:** unknown

Distance from toward office wall to wall A *** wall in feet:** ~27'

Distance from D *** wall in feet:** ~185' – Not accessible due to storage of hardwood flooring

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA unknown

Should it be sealed? ☐ Yes ☐ No unknown Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: E

Length: ~33' x 12' concrete patch **Width:** up to 3/4" around patch **Depth:** up to 1"

Distance from A *** wall in feet:** ~102'

Distance from D *** wall in feet:** ~44' - No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: F

Length: ~40' **Width:** up to 2 1/2" **Depth:** up to 3/4"

Distance from A *** wall in feet:** ~17'

Distance from D *** wall in feet:** ~50' - Partially covered with storage of hardwood flooring.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA - No apparent change since last visit.

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/20/23

Structure ID #: #7-34-070 **Team:** MDM

Slab Area+ ID: G

Length: ~40' **Width:** up to 1/4" **Depth:** up to 1"

Distance from C *** wall in feet:** ~200'

Distance from B *** wall in feet:** ~200' unknown

- Not accessible due to stored equipment

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: H

Length: ~2' Sq. Patch **Width:** up to 1/2" **Depth:** up to 1/2"

Distance from C *** wall in feet:** ~78'

Distance from B *** wall in feet:** ~50'

- No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

- Area has been sealed w/ concrete

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: I

Length: ~4" Ø circle **Width:** - **Depth:** up to 1/2" Deep

Distance from C *** wall in feet:** ~40'

Distance from B *** wall in feet:** ~30'

- This area has been sealed w/ concrete

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

- No apparent changes since last visit

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd **Date of Visit:** 11/20/23

Structure ID #: # 7-34-070 **Team:** MDM

Slab Area+ ID: J

Length: Length of building **Width:** up to 1 1/2" **Depth:** up to 2"

Distance from C *** wall in feet:** ~33'

Distance from NA *** wall in feet:** Length of building

- Epoxy has been added to portions of the area

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

- No apparent change since last visit.

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: K(V)

Length: ~50'x 25' "T" Shaped Patch **Width:** up to 2 1/4" **Depth:** up to 2"

Distance from D *** wall in feet:** ~200'

Distance from C *** wall in feet:** ~100'

- Portions of area have been sealed w/ concrete

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

- Portion of area inaccessible due to stored lumber

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

- No apparent changes since last visit

Slab Area+ ID: L

Length: ~48' **Width:** up to 3/4" **Depth:** up to 1"

Distance from A *** wall in feet:** ~125'

Distance from B *** wall in feet:** ~4'

- Area no longer accessible due to stored equipment

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? unknown ☐ Yes ☐ No ☐ NA

Should it be sealed? unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deer Rd **Date of Visit:** 11/20/23

Structure ID #: #7-34-070 **Team:** MDM

Slab Area+ ID: M

Length: ~4" ϕhole **Width:** – **Depth:** up to 2"

Distance from A *** wall in feet:** ~250'

Distance from B *** wall in feet:** ~28

- No longer accessible due to process equipment.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA (unknown)

Should it be sealed? ☐ Yes ☐ No (unknown) Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: N

Length: ~8' **Width:** up to 1'1/2" **Depth:** up to 4'1/2"

Distance from C *** wall in feet:** ~156'

Distance from B *** wall in feet:** ~8'

- 1/2" bigger than 2021 inspection
- No apparent change since last inspection

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: O

Length: 7- 6" holes **Width:** – **Depth:** ~1"

Distance from B *** wall in feet:** ~280

Distance from C *** wall in feet:** ~250

- Some holes caused by equipment
- Sealed w/concrete

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Dunc Rd **Date of Visit:** 11/20/23

Structure ID #: # 7-34-070 **Team:** MDM

Slab Area+ ID: P

Length: ~6" ϕ hole **Width:** — **Depth:** ~2"

Distance from C *** wall in feet:** ~94' - Former Sub-slab utility penetration

Distance from B *** wall in feet:** ~72' - Not accessible due to Stored lumber Pallets.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA unknown

Should it be sealed? ☐ Yes ☐ No unknown Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: Q

Length: ~9' **Width:** **Depth:** up to 3'1/4"

Distance from A *** wall in feet:** 0

Distance from D *** wall in feet:** ~3' No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: R

Length: ~20' **Width:** up to 2" **Depth:** up to 2"

Distance from D *** wall in feet:** ~24'

Distance from C *** wall in feet:** ~65' NO apparent change since last visit.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deer Rd **Date of Visit:** 11/20/23

Structure ID #: #7-34-070 **Team:** MDM

Slab Area+ ID: S

Length: _____ **Width:** _____ **Depth:** _____

Distance from B ***wall in feet:** ~100' - Area has been sealed now that construction is complete

Distance from A ***wall in feet:** ~150'

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA - Area no longer Accessible.

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

Slab Area+ ID: T

Length: ~6" ϕ hole **Width:** — **Depth:** ~4"

Distance from B ***wall in feet:** ~104 - Former equipment mounts

Distance from A ***wall in feet:** ~84

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? unknown ☐ Yes ☐ No ☐ NA - Not accessible due to Stored lumber pallets

Should it be sealed? unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: U

Length: ~20'x14' concrete patch **Width:** up to 3" **Depth:** up to 1"

Distance from B ***wall in feet:** ~79'

Distance from C ***wall in feet:** ~130' Not accessible due to Stored lumber and equipment.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? unknown ☐ Yes ☐ No ☐ NA

Should it be sealed? unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deer Rd **Date of Visit:** 11/20/23

Structure ID #: # 7-34-070 **Team:** MDM

Slab Area+ ID: V

Length: _____ **Width:** _____ **Depth:** _____

Distance from _____ *** wall in feet:** _____ See Slab area K

Distance from _____ *** wall in feet:** _____ —

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

Slab Area+ ID: W

Length: ~4' **Width:** ~4 1/2" **Depth:** ~1 1/2"

Distance from office wall toward B *** wall in feet:** ~17' - No apparent changes since last visit

Distance from C *** wall in feet:** ~225'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA — Epoxy in good condition

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: X

Length: ~2' Square **Width:** up to 1 1/4" **Depth:** up to 1/2"

Distance from D *** wall in feet:** ~220' - Part of this area previously sealed w/ epoxy/concrete

Distance from C *** wall in feet:** ~175'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA — NO apparent change since last visit

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deer Rd **Date of Visit:** 11/20/23

Structure ID #: #7-34-070 **Team:** MDM

Slab Area+ ID: Y

Length: ~30' **Width:** up to 3" **Depth:** up to 1 1/2"

Distance from C *** wall in feet:** ~230' - Portions have been sealed with concrete

Distance from D *** wall in feet:** ~230'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA - No apparent change since last visit.

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: Z

Length: ~3' Square **Width:** up to 2 1/2" **Depth:** up to 3"

Distance from A *** wall in feet:** ~200' Not accessible due to stored lumber pallets

Distance from D *** wall in feet:** ~240'

Is the slab area new? ☐ Yes ☒ No (unknown) If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA (unknown)

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: AA

Length: ~30' **Width:** up to 1 1/2" **Depth:** up to 1 1/4"

Distance from Near overhead door next to PHP office *** wall in feet:**

Distance from *** wall in feet:**

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deer Rd **Date of Visit:** 11/20/23

Structure ID #: # 7-34-070 **Team:** MDM

Slab Area[+] ID: BB

Length: 30" Sq. Sump pit **Width:** ~1/8" around edge **Depth:** ~3/4"

Distance from D *** wall in feet:** ~120'

Distance from C *** wall in feet:** ~50'

- Sump is sealed on sides & bottom

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

- Small amount of standing water observed.

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: _____

Length: _____ **Width:** _____ **Depth:** _____

Distance from _____ *** wall in feet:** _____

Distance from _____ *** wall in feet:** _____

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

Slab Area[+] ID: _____

Length: _____ **Width:** _____ **Depth:** _____

Distance from _____ *** wall in feet:** _____

Distance from _____ *** wall in feet:** _____

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

ATTACHMENT 2
PHOTO LOG

SLAB INSPECTION – PHOTOLOG

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 1	**DATE:** 11/20/2023		
DESCRIPTION Slab Area A			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 2	**DATE:** 11/20/2023		
DESCRIPTION Slab Area B			

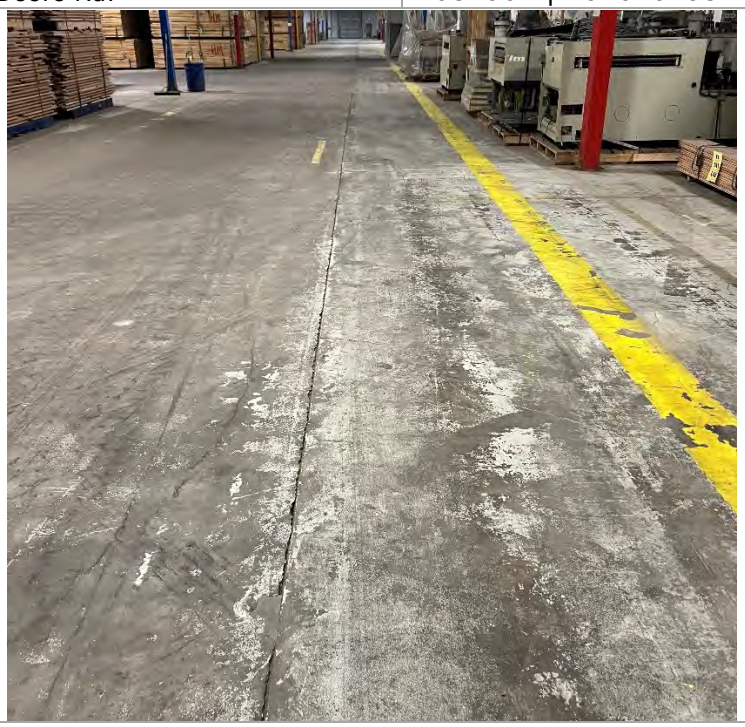
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 3	**DATE:** 11/20/2023		
DESCRIPTION Slab Area C			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 4	**DATE:** 11/20/2023		
DESCRIPTION Slab Area E			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 5	**DATE:** 11/20/2023		
DESCRIPTION Slab Area F			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 6	**DATE:** 11/20/2023		
DESCRIPTION Slab Area H			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 7	**DATE:** 11/20/2023		
DESCRIPTION Slab Area I			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 8	**DATE:** 11/20/2023		
DESCRIPTION Slab Area J			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 9	**DATE:** 11/20/2023		
DESCRIPTION Slab Area K(V)			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 10	**DATE:** 11/20/2023		
DESCRIPTION Slab Area N			

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
Lockheed Martin	6439 Deere Rd.	1087962 | 1940101934

PHOTO NO.	DATE:
11	11/20/2023

DESCRIPTION
Slab Area O



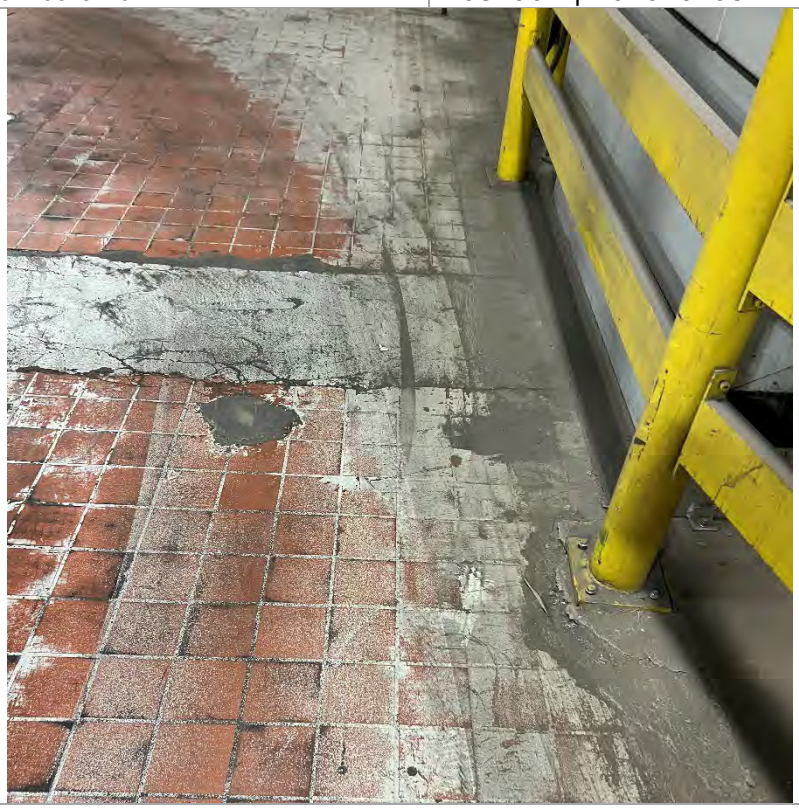
CLIENT NAME:	SITE LOCATION:	PROJECT NO.
Lockheed Martin	6439 Deere Rd.	1087962 | 1940101934

PHOTO NO.	DATE:
12	11/20/2023

DESCRIPTION
Slab Area Q



CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 13	**DATE:** 11/20/2023		
DESCRIPTION Slab Area R			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 14	**DATE:** 11/20/2023		
DESCRIPTION Slab Area W			

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
Lockheed Martin	6439 Deere Rd.	1087962 | 1940101934

PHOTO NO.	DATE:
15	11/20/2023

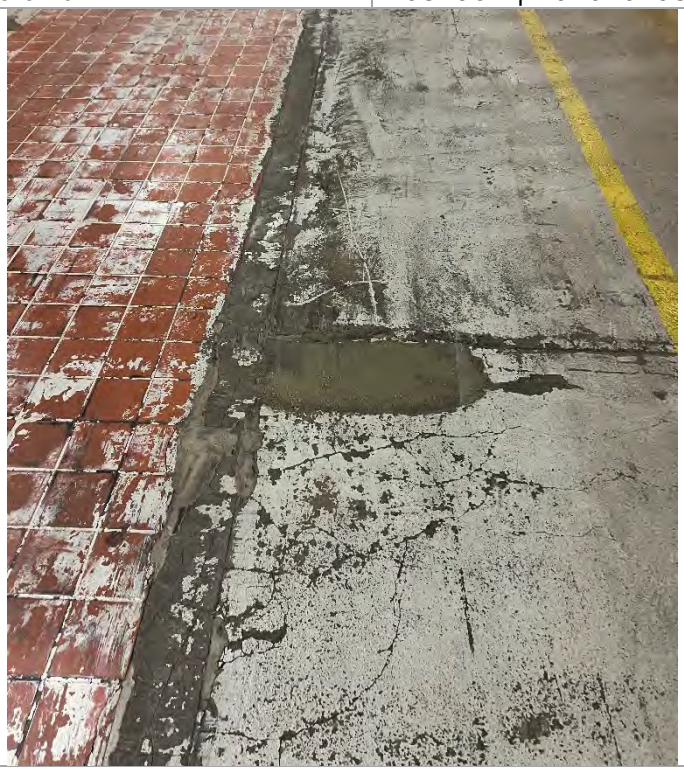
DESCRIPTION
Slab Area X

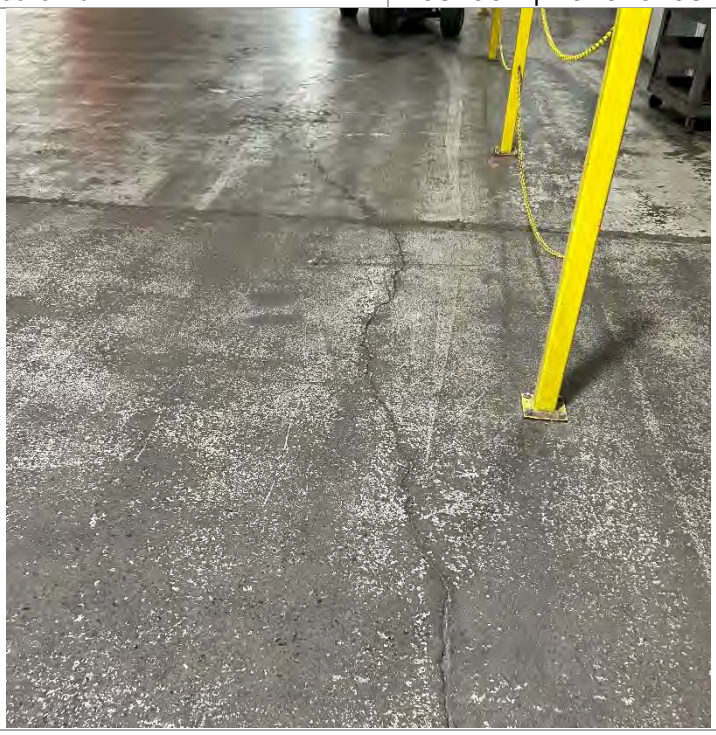


CLIENT NAME:	SITE LOCATION:	PROJECT NO.
Lockheed Martin	6439 Deere Rd.	1087962 | 1940101934

PHOTO NO.	DATE:
16	11/20/2023

DESCRIPTION
Slab Area Y



CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 17	**DATE:** 11/20/2023		
DESCRIPTION Slab Area AA			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 18	**DATE:** 11/20/2023		
DESCRIPTION Slab Area BB			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940101934
PHOTO NO. 19	**DATE:** 11/20/2023		
DESCRIPTION High traffic aisle adjacent to slab area Z			

APPENDIX G
O&M INSPECTION FORMS

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site: Martin Koenwecke	Date: 1-9-23	Time: 10:15 AM

Weather Data

Temp. (F): 31° Relative Humidity (%) 68% Barometric Pressure (in Hg) 30.01"

Cleanout Risers

0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

0.25 Feet of Water (CO-S) DTW CO-N 10.10 DTW CO-S 10.30

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper ~~Tank & Diffusers~~

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank

NA Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

96958 @ 10:15 Hrs.

Phone Line Function (Y or N)

Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

____ Clear of debris Y Good Condition ____ Corrected During Visit

Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

1-9-23

System Pressure

Location	Pressure (psi)
High Flow Influent	5.8
Low Flow Influent	5.6
Blower Discharge	2.1
Blower Discharge Differential	0.3
Air Stripper Tank	0.2 / 20"WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	65°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.80
Low Flow Influent	5.52
Location	**Flow (cfm)**
Blower (PLC)	126
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29369449
Low Flow Influent	16054702

Influent Sample Collected (Y or N)	N	pH (S.U.)	Temp.	Time (hrs.)
Effluent Sample Collected (Y or N)	N	pH (S.U.)	Temp.	Time (hrs.)
Bag Filters Changed (Y or N)	NA			
Air Stripper Cleaned (Y or N)	N			

Comments/Other Work Performed

24.25" ReDuX

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 52A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site: MARTIN KOEHNECKE | Date: 2-9-23 | Time: 9:00 AM

Weather Data
Temp. (F): 35° | Relative Humidity (%): 84% | Barometric Pressure (in Hg): 30.15

Cleanout Risers: 0.26 Feet of Water (CO-N) | X Good Condition | Corrected During Visit
0.25 Feet of Water (CO-S)
DTW CO-N: 10.10 | DTW CO-S: 10.30
CO-N TOC Elevation: 10.30
CO-S TOC Elevation: 10.55

Collection Sump: _____ Inches of Sediment | X Good Condition | _____ Corrected During Visit
Work Performed or Needed: _____

Catch Basin CB-2I
_____ clear of debris & silt | X Good Condition | _____ Corrected During Visit
Work Performed or Needed: _____

Outfall OF-01A _____ clear of debris & silt | X Good Condition | _____ Corrected During Visit
Work Performed or Needed: _____

Air Stripper Tank & ~~Collection~~
_____ Inches of Sediment | X Good Condition | _____ Corrected During Visit
Work Performed or Needed: _____

Transfer Tank: N/A Inches of Sediment | _____ Good Condition | _____ Corrected During Visit
Work Performed or Needed: _____

Electric Meter Reading
02238 @ 9:00 Hrs

Phone Line Function (Y or N)
Y Autodialer | _____ Modem | Y Voice

Floor Sump: (Y or N)
Floor Sump | Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet _____ Clear of debris | Y Good Condition | _____ Corrected During Visit
Work Performed or Needed: _____

FORMER 62 COURT STREET BUILDING 8RA
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

2-9-23

Analyzer Readings

Location	(Insert Unit)
High Flow Influent	6.1
Low Flow Influent	5.6
Blower Discharge	3.0
Blower Discharge (Effluent)	0.3
Air Stripper Tank	0.2 / 18" wc
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	70

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.51
Low Flow Influent	5.88
Location	Flow (cfm)
Blower (VLC)	103

System Totalized Flows — Blower (Calculated)

Location	Flow (gallons)
High Flow Influent	29425603
Low Flow Influent	16234358

Influent Sample Collected (Y or N): N — pH (S.U.): — Temp. — Time (hrs.):
Effluent Sample Collected (Y or N): N — pH (S.U.): — Temp. — Time (hrs.):
Filter Filters Changed (Y or N): N/A
Air Stripper Cleaned (Y or N): N

Comments/Other Work Performed

18" ReDox Left on site, Tested Flock Sump Alarm - for, Sall out, DID Sall out, CHANGED out Light Bulb on control Panel

Personnel Signature: Mark Hanke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site: MARTin Koennecke | Date: 3-2-23 | Time: 10:00 AM

Weather Data
Temp. (F): 36° Relative Humidity (%): 85% Barometric Pressure (in Hg): 29.74

Cleanout Risers
0.47 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit
0.39 Feet of Water (CO-S)
DTW CO-N 9.83 DTW CO-S 10.16
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump
____ Inches of Sediment ✓ Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Catch Basin CB-20
____ clear of debris & sed. ✓ Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Outfall OF-01A
____ clear of debris & sed. ✓ Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Air Stripper Tank ~~& Diffusers~~
____ Inches of Sediment ✓ Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Transfer Tank
NA Inches of Sediment ____ Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Electric Meter Reading
05828 @ 10:45 Hrs.

Phone Line Function (Y or N)
Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet
____ Clear of debris Y Good Condition ____ Corrected During Visit
Work Performed or Needed:

3-2-23

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

System Pressure

Location	Pressure (psi)
High Flow Influent	5.8
Low Flow Influent	5.4
Blower Discharge	3.0
Blower Discharge Differential	0.2
Air Stripper Tank	0.3
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	71°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.06
Low Flow Influent	4.88
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29443052
Low Flow Influent	16360263

Influent Sample Collected (Y or N)	Y	pH (S.U.)	Temp.	Time (hrs.)	10:25
Effluent Sample Collected (Y or N)	Y	pH (S.U.)	Temp.	Time (hrs.)	10:15
Bag Filters Changed (Y or N)	NA				
Air Stripper Cleaned (Y or N)	N				

Comments/Other Work Performed

QUARTERLY Inf/Eff. SAMPLES TAKEN.
REDOX - 13" IN DRUM

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site: MARTin Koenecke | Date: 4-4-23 | Time: 9:15 AM

Weather Data

Temp. (F): 46° Relative Humidity (%): 87% Barometric Pressure (in Hg): 30.04"

Cleanout Risers

0.35 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

0.33 Feet of Water (CO-S)

DTW CO-N 9.95 DTW CO-S 10.22

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper ~~Tank & Diffusers~~

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank

NA Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

11616 @ 9:25 Hrs.

Phone Line Function (Y orN)

Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

____ Clear of debris Y Good Condition ____ Corrected During Visit

Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

4-4-23

System Pressure

Location	Pressure (psi)
High Flow Influent	6.2
Low Flow Influent	5.8
Blower Discharge	1.8
Blower Discharge Differential	0.2
Air Stripper Tank	0.2 / 18" wc
Filter Differential	N/A

System Temperatures

Location	Temperature (F)
Blower Discharge	81°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.7
Low Flow Influent	5.14
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29599306
Low Flow Influent	16522057

Influent Sample Collected (Y or N)	N	pH (S.U.)	Temp.	Time (hrs.)
Effluent Sample Collected (Y or N)	N	pH (S.U.)	Temp.	Time (hrs.)
Bag Filters Changed (Y or N)	N/A			
Air Stripper Cleaned (Y or N)	N			

Comments/Other Work Performed

6" REDUX LEFT. (WILL NEED TO ORDER MORE)

Personal Signature Keith Kemble

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke	**Date** 5-2-23	**Time** 11:00 AM

Weather Data
Temp. (F): 48° Relative Humidity (%) 62% Barometric Pressure (in Hg) 29.34"

Cleanout Risers
0.54 Feet of Water (CO-N) X Good Condition _____ Corrected During Visit
0.80 Feet of Water (CO-S) DTW CO-N 9.76 DTW CO-S 9.75
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump _____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Catch Basin CB-20
_____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Outfall OF-01A _____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Air Stripper ~~Tank & Diffusers~~
_____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Transfer Tank NA Inches of Sediment _____ Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Electric Meter Reading
16387 @ 11:00 Hrs.

Phone Line Function (Y or N)
Y Autodialer _____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet _____ Clear of debris X Good Condition _____ Corrected During Visit
Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

5-2-23

System Pressure

Location	Pressure (psi)
High Flow Influent	6.2
Low Flow Influent	5.4
Blower Discharge	1.9
Blower Discharge Differential	0.2
Air Stripper Tank	0.2 / 18"WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	84°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.28
Low Flow Influent	4.82
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29675761
Low Flow Influent	16657990

Influent Sample Collected (Y or N)	N	pH (S.U.)	Temp.	Time (hrs.)
Effluent Sample Collected (Y or N)	N	pH (S.U.)	Temp.	Time (hrs.)
Bag Filters Changed (Y or N)	NA			
Air Stripper Cleaned (Y or N)	Inspected			

Comments/Other Work Performed

OUT of ReDUXy NEED To ORDER

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN KOERNER KE	**Date** 6-6-23	**Time** 930 AM

Weather Data
Temp. (F): 64° Relative Humidity (%) 65% Barometric Pressure (in Hg) 29.77

Cleanout Risers
0.33 Feet of Water (CO-N) V Good Condition ____ Corrected During Visit
0.33 Feet of Water (CO-S)
DTW CO-N 9.97 DTW CO-S 10.22
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump ____ Inches of Sediment X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Catch Basin CB-20
____ clear of debris & sed. X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Outfall OF-01A ____ clear of debris & sed. X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Air Stripper Tank & Diffusers
____ Inches of Sediment X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Transfer Tank NA Inches of Sediment ____ Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Electric Meter Reading 17673 @ 12:15 Hrs.

Phone Line Function (Y or N)
Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet ____ Clear of debris Y Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

6-6-23

System Pressure

Location	Pressure (psi)
High Flow Influent	6.2
Low Flow Influent	5.2
Blower Discharge	2.3
Blower Discharge Differential	0.2
Air Stripper Tank	0.2 / 18 "WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	87°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.08
Low Flow Influent	4.74
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29720026
Low Flow Influent	16767616

Influent Sample Collected (Y or N)	Y	pH (S.U.)	Temp.	Time (hrs.)	10:30
Effluent Sample Collected (Y or N)	Y	pH (S.U.)	Temp.	Time (hrs.)	10:40
Bag Filters Changed (Y or N)	NA				
Air Stripper Cleaned (Y or N)	N				

Comments/Other Work Performed

QUARTERLY INF/EFF SAMPLES

REXDUX - ONE NEW DRUM AND 29.75" IN DRUM IN USE

Personal Signature Mark Fowle

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke	**Date** 7-7-23	**Time** 9:00 AM

Weather Data
Temp. (F): 76° Relative Humidity (%) 78% Barometric Pressure (in Hg) 29.88

Cleanout Risers 0.20 Feet of Water (CO-N) X Good Condition _____ Corrected During Visit
0.25 Feet of Water (CO-S) DTW CO-N 10.10 DTW CO-S 10.30
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump _____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Catch Basin CB-20
_____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Outfall OF-01A _____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Air Stripper Tank ~~& Diffusers~~
_____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Transfer Tank _____ Inches of Sediment _____ Good Condition _____ Corrected During Visit
Work Performed or Needed: NA.

Electric Meter Reading
18519 @ 9:00 Hrs.

Phone Line Function (Y or N)
Y Autodialer _____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet _____ Clear of debris X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

7-7-23

System Pressure

Location	Pressure (psi)
High Flow Influent	6.0
Low Flow Influent	5.4
Blower Discharge	2.0
Blower Discharge Differential	0.2
Air Stripper Tank	0.2 / 20"WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	97°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.02
Low Flow Influent	5.56
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29738948
Low Flow Influent	16846473

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) Inspected

Comments/Other Work Performed

STARTED MOWING WELL AND TREE AREA 7-6-23

ONE NEW DRUM AND 29" IN DRUM IN USE

Personal Signature Mike Kemble

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION AND TREATMENT SYSTEM
SUPPLEMENTAL O&M EVENT FORM

INSPECTOR: MARTIN KOERNICKE

DATE: 7-2-23

ACTIVITY:

X	RESPONSE TO SYSTEM SHUTDOWN
	STRIPPER CLEANING
	OTHER

PROVIDE A DESCRIPTION OF THE CAUSE OF THE SHUTDOWN, CORRECTIVE ACTIONS TAKEN, AND/OR OTHER INFORMATION NECESSARY TO UNDERSTAND THE PURPOSE OF THE VISIT.

High Building Sump ALARM SHUT DOWN SYSTEM
PUMPED SUMP THROUGH ~~BB~~ STRIPPER THEN
RESTARTED SYSTEM IN HAND TILL WET WELL CAUGHT
UP TO LEVELS IT COULD RUN IN AUTO.

HEAVY RAIN FROM WEEK BEFORE CAME IN THROUGH
OVER HEAD DOOR JUST ENOUGH TO TRIP SUMP ALARM.

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN KOENNECKE | **Date** 8-2-23 | **Time** 9:30 AM

Weather Data

Temp. (F): 70° Relative Humidity (%) 53% Barometric Pressure (in Hg) 30.22

Cleanout Risers 0.20 Feet of Water (CO-N) X Good Condition _____ Corrected During Visit

0.25 Feet of Water (CO-S) DTW CO-N 10.10 DTW CO-S 10.30

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump _____ Inches of Sediment X Good Condition _____ Corrected During Visit

Work Performed or Needed: _____

Catch Basin CB-20

_____ clear of debris & sed. X Good Condition _____ Corrected During Visit

Work Performed or Needed: _____

Outfall OF-01A _____ clear of debris & sed. X Good Condition _____ Corrected During Visit

Work Performed or Needed: _____

Air Stripper Tank & ~~Diffusers~~

_____ Inches of Sediment X Good Condition _____ Corrected During Visit

Work Performed or Needed: _____

Transfer Tank NA Inches of Sediment _____ Good Condition _____ Corrected During Visit

Work Performed or Needed: _____

Electric Meter Reading

19327 @ 11:40 Hrs.

Phone Line Function (Y or N)

Y Autodialer _____ Modem Y Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet _____ Clear of debris X Good Condition _____ Corrected During Visit

Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

8-2-23

System Pressure

Location	Pressure (psi)
High Flow Influent	6.6
Low Flow Influent	5.8
Blower Discharge	2.0
Blower Discharge Differential	0.2
Air Stripper Tank	0.2 / 17"wc
Filter Differential	N/A

System Temperatures

Location	Temperature (F)
Blower Discharge	94°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	16.30
Low Flow Influent	4.92
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29745196
Low Flow Influent	16927595

Influent Sample Collected (Y or N)	N	pH (S.U.)	Temp.	Time (hrs.)
Effluent Sample Collected (Y or N)	N	pH (S.U.)	Temp.	Time (hrs.)
Bag Filters Changed (Y or N)	N/A			
Air Stripper Cleaned (Y or N)	N			

Comments/Other Work Performed

Redux - 25.5". Plus one new DRUM

Personal Signature Keith Kemble

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke	**Date** 9-7-23	**Time** 8:45 AM

Weather Data
Temp. (F): 79° Relative Humidity (%) 74% Barometric Pressure (in Hg) 29.79

Cleanout Risers
0.20 Feet of Water (CO-N) X Good Condition _____ Corrected During Visit
0.25 Feet of Water (CO-S) DTW CO-N 10.10 DTW CO-S 10.30
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump _____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Catch Basin CB-20
_____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Outfall OF-01A _____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Air Stripper ~~Tank & Diffusers~~
_____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Transfer Tank NA Inches of Sediment _____ Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Electric Meter Reading
20315 @ 8:45 Hrs.

Phone Line Function (Y or N)
Y Autodialer _____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet _____ Clear of debris Y Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

9-7-23

System Pressure

Location	Pressure (psi)
High Flow Influent	6.4
Low Flow Influent	5.6
Blower Discharge	2.0
Blower Discharge Differential	0.2
Air Stripper Tank	0.2 / 16" WC
Filter Differential	N/A

System Temperatures

Location	Temperature (F)
Blower Discharge	97°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	16.05
Low Flow Influent	4.62
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29753041
Low Flow Influent	17019328

Influent Sample Collected (Y or N)	Y	pH (S.U.)	Temp.	Time (hrs.)	9:50
Effluent Sample Collected (Y or N)	Y	pH (S.U.)	Temp.	Time (hrs.)	10:00
Bag Filters Changed (Y or N)	N/A				
Air Stripper Cleaned (Y or N)	N				

Comments/Other Work Performed

QUARTERLY. SAMPLES COLLECTED

REDUX - 1 NEW DRUM AND 21.5" IN DRUM IN USE

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN KOENNECKE	**Date** 10-3-23	**Time** 10:15 AM

Weather Data
Temp. (F): 71° Relative Humidity (%) 72% Barometric Pressure (in Hg) 30.19

Cleanout Risers
0.20 Feet of Water (CO-N) X Good Condition _____ Corrected During Visit
0.25 Feet of Water (CO-S) DTW CO-N 10.10 DTW CO-S 10.30
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump _____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Catch Basin CB-20
_____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Outfall OF-01A _____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Air Stripper Tank & Diffusers
_____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Transfer Tank N.A. Inches of Sediment _____ Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Electric Meter Reading
20681 @ 10:15 Hrs.

Phone Line Function (Y or N)
Y Autodialer _____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet _____ Clear of debris Y Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

10-3-23

System Pressure

Location	Pressure (psi)
High Flow Influent	6.2
Low Flow Influent	5.8
Blower Discharge	1.7
Blower Discharge Differential	0.2
Air Stripper Tank	0.2 / 18" WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	86°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	16.10
Low Flow Influent	4.60
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29753064
Low Flow Influent	17050305

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

19.75" REDOX. PLUS ONE NEW DRUM ON SITE

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN KOENNEKE | **Date** 11-9-23 | **Time** 11:15 AM

Weather Data
Temp. (F): 51° Relative Humidity (%) 93% Barometric Pressure (in Hg) 29.77

Cleanout Risers
0.22 Feet of Water (CO-N) X Good Condition _____ Corrected During Visit
0.25 Feet of Water (CO-S) DTW CO-N 10.08 DTW CO-S 10.30
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump _____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Catch Basin CB-20
_____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Outfall OF-01A _____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Air Stripper Tank & Strippers
_____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Transfer Tank NA Inches of Sediment _____ Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Electric Meter Reading
21510 @ 11:25 Hrs.

Phone Line Function (Y or N)
Y Autodialer _____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet _____ Clear of debris X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

11-9-23

System Pressure

Location	Pressure (psi)
High Flow Influent	6.3
Low Flow Influent	5.6
Blower Discharge	1.6
Blower Discharge Differential	0.2
Air Stripper Tank	0.2 / 18"wc
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	78°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.58
Low Flow Influent	4.57
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29753064
Low Flow Influent	17102997

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

17.5" Redux Plus one new DRUM. on SITE

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTin Koenwecke | **Date** 12-5-23 | **Time** 11:15 AM

Weather Data
Temp. (F): 34° Relative Humidity (%) 80% Barometric Pressure (in Hg) 30.06"

Cleanout Risers 0.20 Feet of Water (CO-N) X Good Condition _____ Corrected During Visit
0.25 Feet of Water (CO-S) DTW CO-N 10.10 DTW CO-S 10.30
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump _____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Catch Basin CB-20
_____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Outfall OF-01A _____ clear of debris & sed. X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Air Stripper Tank & ~~Diffusers~~
_____ Inches of Sediment X Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Transfer Tank NA Inches of Sediment _____ Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

Electric Meter Reading
25271 @ 11:30 Hrs.

Phone Line Function (Y or N)
Y Autodialer _____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet _____ Clear of debris Y Good Condition _____ Corrected During Visit
Work Performed or Needed: _____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

12-5-23

System Pressure

Location	Pressure (psi)
High Flow Influent	5.8
Low Flow Influent	5.6
Blower Discharge	1.7
Blower Discharge Differential	0.2
Air Stripper Tank	0.2 / 20" wc
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	73°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.12
Low Flow Influent	4.33
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29753092
Low Flow Influent	17174835

Influent Sample Collected (Y or N) Y pH (S.U.) Temp. 11:55 Time (hrs.)

Effluent Sample Collected (Y or N) Y pH (S.U.) Temp. 11:45 Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

Quarterly Samples Taken, Redux - One new DRUM Plus 14.75"

Personal Signature Mark Komke

APPENDIX H
YEAR 4 PHYTOREMEDIATION PILOT TEST REPORT

Intended for
Lockheed Martin Corporation

Document type
Phytoremediation Report

Date
January 2024

YEAR 4 PHYTOREMEDIATION PILOT TEST REPORT

FORMER GE COURT STREET BUILDING 5 SITE

RAMBOLL Bright ideas. Sustainable change.

Confidential

YEAR 4 PHYTOREMEDIATION PILOT TEST REPORT
FORMER GE COURT STREET BUILDING 5 SITE

Project name	**Former GE Court Street Building 5 Site**
Project no.	**5851/74232**
Recipient	**Lockheed Martin Corporation**
Document type	**Report**
Date	**January 10, 2024**

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1. INTRODUCTION

1.1 General

Ramboll Americas Engineering Solutions, Inc. (Ramboll, previously O'Brien & Gere Engineers, Inc.) prepared this *Year 4 Phytoremediation Pilot Test Repor*t (PTR) on behalf of Lockheed Martin Corporation (Lockheed Martin) to summarize the operation, maintenance and monitoring (OM&M) activities performed in 2023 for the phytoremediation system installed at the Former GE Court Street Building 5 Site (Site) (Site No.734070) located at 6439 Deere Road in the Town of Dewitt, Onondaga County, New York (**Figure 1**). Construction of the phytoremediation system was completed in March and May 2020 and is summarized in the *Phytoremediation Pilot Test Construction Completion Report* (CCR) (Ramboll, 2021a), and the as-built system is shown in **Figure 2**. The phytoremediation pilot test system is being implemented in accordance with the *Phytoremediation System Pilot Test Work Plan* (PTWP) (Ramboll, 2020) that was approved by the New York State Department of Environmental Conservation (NYSDEC) on April 1, 2020.

As presented in the PTWP, the overall goal of the phytoremediation pilot test is to identify whether phytoremediation can be used to enhance the existing remedy and therefore reduce the timeframe over which the groundwater collection trench needs to be operated. As described in the PTWP, there are several specific objectives related to this goal, as follows:

- Assess the ability of phytoremediation to reduce the concentrations of chlorinated volatile organic compounds (CVOCs) and 1,4-dioxane in the influent to the treatment system
- Assess the ability of phytoremediation to reduce the flow of groundwater in the collection trench
- Assess the ability of phytoremediation to accelerate the mitigation of CVOC and 1,4-dioxane impacted groundwater between the access road on the back/west side of the building and the collection trench
- Evaluate if phytoremediation can be used to improve the environmental sustainability of the remedy

To achieve the overall goal and specific objectives, a full-scale pilot test was proposed in the PTWP to augment the existing remedy by planting a stand of hybrid poplars (retaining some of the existing large trees) that, when mature, would have the ability to "consume" water during the growing season. The PTWP also included continued monitoring of monthly trench flows, supplemental monitoring of treatment system influent concentrations, an expanded annual groundwater monitoring event, and supplemental water-level measurements in select monitoring wells. In accordance with the approved PTWP, the performance of the phytoremediation pilot test is being reported on an annual basis; this document represents the fourth report and covers the period from January 2023 through December 2023.

1.2 Site History

The Site is located at 6439 Deere Road in the Town of Dewitt, New York, as shown on **Figure 1**. The Site is currently owned by the B&B Family Limited Partnership, which manufactures hardwood flooring (including cutting, molding, and planing lumber). The Site is on NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites and is designated as a Class 4 site. This designation is used for sites that have implemented the selected remedy but still require long-term OM&M.

Based on review of available historical documents, prior activities at the Site involved former operation of nine 250-gallon solvent underground storage tanks (USTs) in the 1950s. These tanks were reportedly located on the west side of Building 5 (approximate location presented on **Figure 2**). The USTs were reportedly taken out of service in 1960 and removed from the ground in 1986 (Wehran-New York Inc. [Wehran], 1992). Historical activities also involved dispensing paint solvents from 55-gallon drums on an outdoor concrete pad (Wehran, 1992), which was located on the west side of the building (approximate location presented on **Figure 2**).

In April and May 1992, an interim subsurface investigation (Wehran, 1992) and interim remedial measure (IRM) was implemented by Wehran that included removal of soil impacted by CVOCs from the UST and solvent drum dispensing pad areas (Wehran, 1993). In 1992, 1993 and 1997, an interim remedial measure (IRM) was completed for storm sewer rehabilitation, including replacing/relocating catch basins, repairing select clay tile piping and removal of select clay tile piping (NYSDEC, 1999). In January 1998, another IRM was implemented that involved the installation of a groundwater collection and treatment system (GCTS) (Ramboll, 2021a). The groundwater is collected using an 830-feet-long trench and is treated using air stripping before discharged to the on-site storm sewer. Operation of the GCTS began in February 1998 and has continued to the present (Ramboll, 2021a) (**Figure 2**).

1.3 Groundwater Remedy

NYSDEC issued a Record of Decision (ROD) for the Site in March 1999. The selected remedy included continued OM&M of the GCTS and groundwater monitoring. The monitoring component includes the sampling and analysis of groundwater from designated monitoring wells and storm water outfalls and the quarterly sampling and analysis of treatment system influent and effluent samples.

The groundwater collection trench is approximately 830 feet long, with a collection sump at the northwest end. Based on variations in the ground surface elevation, the depth of the collection trench ranges from 8 to 14 feet below grade. Pumps are located within the collection sump to transfer groundwater to the treatment building. The groundwater is discharged into a low-profile air stripper designed to remove CVOCs. The treated water flows by gravity from the air stripper to a catch basin (CB-2) and ultimately through storm sewer piping to Sanders Creek (outfall OF-01A) in accordance with the substantive requirements (i.e., effluent limitations and monitoring requirements) established by NYSDEC. Features of the groundwater remedy are presented in **Figure 2**.

The average monthly flow rate of the GCTS from January 2014 to April 2020 (before installation of the phytoremediation system) varied from 2.9 to 5.4 gallons per minute (gpm), with an average annual flow rate of 3.4 gpm. **Figure 3** shows the average monthly flow rate over the annual 12-month cycle based on data from January 2014 to April 2020 (before installation of the phytoremediation system) and also the monthly flow rates for 2020, 2021, 2022 and 2023. The monthly post-planting flow rates varied from 0.62 gpm in September 2020 to 7.58 gpm in February 2022. It is expected that the phytoremediation system will impact the average annual and average monthly GCTS flow rates as the hybrid poplars become established.

As discussed in the PTWP, the estimated annual mass of CVOCs removed by the GCTS decreased an order of magnitude over the two decades prior to implementation of the phytoremediation pilot test. For example, the estimated mass removed was approximately 4.0 pounds in 1998 but was only 0.24 pounds in 2019 (the year before installation of the phytoremediation system), a reduction of approximately 94%. By decreasing the flow of impacted groundwater into the collection trench, the phytoremediation system is expected to also cause a reduction in the estimated annual mass of CVOCs removed by the GCTS.

2. PHYTOREMEDIATION SYSTEM CONSTRUCTION

Construction of the phytoremediation system began during the week of March 9, 2020, with marking the existing trees that were to be retained.[1] The brush and other trees were then cleared and mulched on-site, leaving 19 existing trees (one willow, nine cottonwoods, seven boxelders and two quacking aspen). Two hundred boreholes were advanced on an approximate 12-foot spacing to 3.5 feet below grade in preparation for planting 6-foot-long hybrid poplar poles (OP-367). The poles were inoculated overnight with endophytic bacteria culture strains PDN3 (*Enterobacter sp.*), PD1 (*P. putida*) and hormone rooting powder. The poles were then planted and boreholes backfilled with a MYKO Start® 60 fertilizer pack followed by a 50:50 mix of Sunshine Mix #4 and native soil. The remaining inoculant was utilized to inoculate the exposed roots of the 19 retained trees. Construction of the phytoremediation system was completed on May 13, 2020. Further details are included in the CCR (Ramboll, 2021a), which is Appendix I of the *2020 Annual Operations and Maintenance Report* [Ramboll, 2021b]).

[1] The design of the phytoremediation system included retaining ten large phreatophytes (one willow and nine cottonwoods). NYSDEC requested that some additional large trees be retained during its review and approval of the PTWP.

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3. STAND INSPECTIONS AND ASSOCIATED ACTIONS

Inspections of the hybrid poplar stand were completed every two months during the growing season as outlined in Section 4.4.1 in the PTWP. During Year 4, the stand inspections were completed on May 10, July 12 and September 12, 2023, and are documented in the Inspection Reports that are provided in **Appendix A**. The inspection reports include observations, tree measurements and photographs documenting the tree stand development.

3.1 Tree Growth and Survival Rate

Growth of the hybrid poplars was noted during each of the three inspections. Survival was 91.5% during the final Year 1 inspection (November 9, 2020), decreased to 70% during the final Year 2 inspection (November 9, 2021), decreased to 61% during the final Year 3 inspection (September 14, 2022), and decreased to 58% by the last Year 4 inspection (September 12, 2023) with the loss of six additional trees in Year 4. **Figure 4** shows the status of the phytoremediation system during the final Year 4 inspection, with 116 surviving poplars (104 healthy and 12 stressed). The canopy of the larger retained trees is also shown on **Figure 4**, and most of the poplars that have died are below the canopy. The majority of the dead trees (85%, or 71 of the 84 dead trees) are located under the canopy of the large retained trees; thus, the stress and die-off is largely believed to be due to water competition and shading from the retained trees. The weather conditions in Year 1 (elevated spring heat, shortly after planting) and the tree guards (which protected the trees from deer damage, but restricted air movement and increased humidity) also contributed to some tree stress and death.

3.2 Tree Watering

In general, the 2023 growing season can be characterized as being similar to average temperatures but with wetter than normal conditions (i.e., the 30-year average) during the summer (**Figure 5**). Nevertheless, manual watering was performed on one occasion (May 18, 2023) during a dryer period to help the planted poplars from becoming stressed.

The manual watering was performed by hose using water stored in a 500-gallon water tank. The water sat for at least 24 hours in order for residual chlorine (from the public water supply) to dissipate. The water was then distributed to the hybrid poplars.

3.3 Biological Stresses

Two general biological stresses were observed in 2023. There were minor observations of *Marssonina* leaf spot (a common foliage disease of cottonwoods caused from a fungus) during the 2023 inspections. In addition, aggressive growth of native vine (e.g., virginia creeper, wild grape, poison ivy) and common reed was noted. Similar to previous years, vines were observed growing up trees and threatened to overtake some of the hybrid poplars. Common reed growth was also present along the eastern planting area and threatened to overtake some of the trees (see Section 4.1 below for routine vegetation management).

3.4 Tree Guard Replacement

During the final Year 2 inspection (September 21, 2021) and year-end pruning, the tree guards were removed, and the trees were wrapped to protect the trees from deer rubbing. Damaged tree wraps were replaced in Year 4 to continue to protect the smaller trees. Tree wraps were removed from the larger trees, where wraps were deteriorating.

4. ROUTINE OPERATION AND MAINTENANCE ACTIVITIES

4.1 Management of Undesirable Vegetative Growth

As a result of the vine and common reed growth observed during the first Year 1 inspection, and in accordance with the approved PTWP, Ramboll requested approval from NYSDEC to apply herbicides. Approval was granted during a July 26, 2020 telephone call to apply herbicides in compliance with regulations and any necessary permit requirements. No permits were required and Ramboll selected a licensed pesticide applicator for the effort.

RoundUP® was applied by Brightview Landscapes LLC (Brightview) of Jamesville, New York (Bureau of Pesticides Management Registration #17582) twice during Year 1 (August 11 and 12, 2020 and September 18, 2020) and once during Year 2 (August 3, 2021) to control vines and common reed growth within the poplar stand. No pesticide application was performed during Year 3.

Similar to Year 3, no pesticide application was performed in Year 4. The growth of vines and common reeds were successfully managed by mowing, which was performed in September 2023.

4.2 Year 4 Pruning

Consistent with the PTWP, the hybrid poplars were pruned at the end of Year 1 and Year 2 (following leaf fall). This pruning was performed by Ramboll and completed consistent with the *Poplar and Willow Tree Care Guide* (Intrinsyx, 2020). Consistent with the PTWP, pruning was not conducted at the end of Year 3 or Year 4.

4.3 Fertilization

Consistent with the PTWP, the timing of any additional fertilization will be established based on the findings of the routine inspections and leaf nutrient analyses. In accordance with the PTWP, if additional fertilization is warranted, it will be performed in accordance with the manufacturer's recommendations and using methods provided to NYSDEC in advance. Based on the results of the leaf nutrient analyses performed in Year 2, and the observations during the Year 4 inspections, no fertilization of the hybrid poplar stand occurred in 2023.

4.4 Contingent Tree Replacement

The PTWP includes a contingency for tree replacement. Since the majority of the dead trees are located under the canopy of large retained trees (one willow, nine cottonwoods, seven boxelders and two quacking aspen), replacement of dead hybrid poplars was not performed in Year 4.

5. COLLECTION TRENCH AND GROUNDWATER MONITORING

Routine monitoring activities at the Site include (a) monthly flow totalizer readings (from which volumes and rates can be calculated), (b) quarterly sampling of the treatment system influent and effluent for laboratory analyses, (c) annual water level measurements and (d) annual groundwater sampling for laboratory analyses. The PTWP includes supplemental monitoring that would be performed to augment the routine monitoring and facilitate evaluation of the phytoremediation pilot test.

5.1 Volume Rate of Groundwater Flow in the Collection Trench

Monthly flow totalizer readings are collected as part of the routine OM&M activities. **Table 1** presents the gallons of groundwater pumped and the resulting average flow rates between the monthly measurement events from January 2023 through December 2023. **Figure 3** presents the average monthly flow rate of the GCTS over the 12-month cycle based on the data for 2014 through 2019 in comparison to the data for 2020, 2021, 2022 and 2023.

As shown in **Figure 3**, the average monthly flow rate in the GCTS was less than the monthly means from 2014 through 2019 (before planting the phytoremediation system in May 2020) during the growing season (April through September) and months immediately after, except for July and August. Specifically, the average monthly flow rate was significantly less during May, June, September, and October. Precipitation in July and August was significantly greater than normal and likely resulted in increased flow rates in the GCTS.

5.2 Treatment System Influent and Effluent Data

The routine OM&M of the GCTS includes quarterly sampling of the treatment system influent and effluent in March, June, September and December. The influent and effluent are analyzed for volatile organic compounds (VOCs), total dissolved solids (TDS), pH, and zinc and the results are presented in the *2023 Annual Operations and Maintenance Report* (Ramboll, 2024). At the request of NYSDEC, the effluent is also analyzed for 1,4-dioxane on a quarterly basis. As outlined in the PTWP, additional influent samples are being collected during the other eight months and analyzed for VOCs and 1,4-dioxane. In anticipation of the phytoremediation pilot test, this supplemental influent sampling began in October 2019 (the hybrid poplar stand was planted in May 2020) to collect additional baseline information.

Table 2 presents the monthly influent concentrations for select CVOCs,[2] the monthly influent 1,4-dioxane concentrations (for eight months) and quarterly effluent 1,4-dioxane concentrations (for four months) from January through December 2023. The substantive requirements for the discharge from the treatment system to the storm sewer are also shown on **Table 2**. None of the CVOC concentrations in the treatment system influent (collection trench effluent) exceeded their associated discharge limits.

5.3 Groundwater Monitoring

The routine OM&M activities at the Site include the annual sampling of 10 monitoring wells (MW-1S, MW-2S, MW-8S, MW-10, MW-11R, MW-12, MW-16AR, MW-17A, MW-18A and MW-19S) for

[2] The CVOCs shown on **Table 2** were the only VOCs detected in the influent samples collected during 2023.

laboratory analysis of VOCs. These analytical results are presented in the *2023 Annual Operations and Maintenance Report* (Ramboll, 2024).

In accordance with the PTWP, the annual groundwater monitoring events have been expanded during the phytoremediation pilot test to include nine additional monitoring wells for VOC analysis (MW-06S, MW-07S, MW-21, MW-22, MW-23, MW-24, PTMW-01, TMW-02, and TMW-20). In addition, seven monitoring wells (MW-06S, MW-07S, MW-09, MW-10, MW-11R, MW-22, and MW-23) are being sampled annually for 1,4-dioxane analysis. For completeness, the analytical results for the expanded groundwater monitoring performed in 2023 are presented in **Appendix B** and summarized in **Table 4**, which includes the data from 2023. Analytical results from the ten monitoring wells that are routinely sampled are presented in the *2023 Annual Operations and Maintenance Report* (Ramboll, 2024).

Water level measurements are also collected annually as part of the routine OM&M activities. At the request of NYSDEC, monthly water levels are being measured during the phytoremediation pilot test in 17 monitoring wells and two clean-outs along the collection trench. The monthly water level measurements from January to December 2023 are presented in **Table 3**. Although not required by the PTWP, water level measurements are occasionally also collected from the three surface water staff gages (SG-3R, SG-5R and SG-7R) located along Saunders Creek; these data are also presented in **Table 3**.

6. PLANNED YEAR 5 PHYTOREMEDIATION PILOT TEST ACTIVITIES

Routine OM&M activities for the phytoremediation pilot test will continue in 2024. These activities will include bimonthly tree stand inspections during the growing season, augmented influent sampling and laboratory analysis, monthly water level measurements in select monitoring wells, and augmented groundwater sampling and laboratory analysis. A mowing event is also likely to be performed. Contingent activities may include tree pruning, pesticide application, manual watering, fertilization, and leaf analyses.

The data collected to date demonstrate that the concentrations of CVOCs in the treatment system influent (collection trench effluent) are reliably below the substantive requirements established by NYSDEC for discharge to the storm sewer. The hybrid poplar stand continues to mature (the maximum diameter and height of the hybrid poplars are now 8.0 inches and 32 feet, respectively). Although 84 of the 200 planted trees have died, most of the die-off occurred under the canopy of the large retained trees due to competition for water and sun. The 19 retained trees (including 10 phreatophytes, one willow and nine cottonwoods) are serving the same purpose as the hybrid poplars in these portions of the pilot test area. As discussed in Section 5.1 and shown on **Figure 3**, the average monthly flow rates from the collection trench in 2023 was less than the monthly means from 2014 through 2019 (before planting the phytoremediation system) in six of the eight months during and immediately after the growing season (May through December 2023 excluding July and August 2023). Based on review of the data collected thus far during the phytoremediation pilot test, Ramboll has performed a detailed evaluation and is preparing a request that will be submitted to NYSDEC for approval to modify the PTWP to include seasonal operation of the GCTS (i.e., from January through June) during the next two years.

REFERENCES

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Wehran-New York Inc., 1992. *Interim Subsurface Investigation Report*, Court Street – Building 5 and 5A, Inactive Solvent Dispensing Area. May 1992.

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TABLES

Table 1

Yea 4 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

Groundwater Collection and Treatment System Flow Rates

Totalizer Reading (gallons)	Total Pumped (gallons)	Date Recorded	Number of Days	Average Monthly Flow Rate (gpm)	Monthly Rainfall/Snowfall (inches)[1]	Representative Month
45,400,531	176,136	1/6/2023	32	3.8	3.25/16.4	December 2022
45,670,101	269,570	2/10/2023	35	5.3	4.07/10.2	January 2023
45,803,315	133,214	3/2/2023	20	4.6	2.58/21.6	February 2023
46,160,142	356,827	4/7/2023	36	6.9	3.31/13.7	March 2023
46,359,604	199,462	5/4/2023	27	5.1	4.68/--	April 2023
46,487,582	127,978	6/6/2023	33	2.7	1.28/--	May 2023
46,597,109	109,527	7/11/2023	35	2.2	2.88/--	June 2023
46,716,196	119,087	8/11/2023	31	2.7	6.85/--	July 2023
46,765,168	48,972	9/1/2023	21	1.6	5.12/--	August 2023
46,805,552	40,384	10/6/2023	35	0.8	1.99/--	September 2023
46,850,708	45,156	11/6/2023	31	1.0	2.47/--	October 2023
46,927,478	76,770	12/5/2023	29	1.8	2.75/5.5	November 2023
47,086,738	159,260	1/2/2024	29	3.8	5.14/4.8	December 2023

Notes:

1 - Data source: NOAA National Weather Service, Syracuse Hancock International Airport (KSYR)

-- = No precipitation in this form

gpm = gallons per minute

Table 2

Year 4 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

CVOC and 1,4-Dioxane Data for Collection Trench

	CVOC Data for Influent						1,4-Dioxane	
Sample Date	Total CVOCs	Trichloroethene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Vinyl Chloride	Chloroethane	Concentration	Sampling Location
01/06/23	13.8	<1	2.6	7.8	3.4	<1	3.1	influent
02/10/23	12.3	<1	2.3	6.4	3.6	<1	3.8	influent
03/02/23	11.4	<1	2	5.3	4.1	<1	3.9	effluent
04/07/23	13.6	<1	2.5	6.0	5.1	<1	3.2	influent
05/04/23	13.5	<1	2.4	6.4	4.7	<1	4.0	influent
06/06/23	7.8	<1	2.5	5.3	<1	<1	6.5 B	effluent
07/11/23	12.7	<1	2.6	5.7	4.4	<1	5.0	influent
08/11/23	9.76	0.46 J	2.6	4.6	2.1	<1	3.6	influent
09/07/23	9.01	0.51 J	3.6	4.9	<1	<1	4.3	effluent
10/06/23	6.2	<1	2.9	3.3	<1	<1	3.2	influent
11/08/23	8.6	<1	2.8	5.8	<1	<1	4.1	influent
12/05/23	7.7	<1	2.3	5.4	<1	<1	3.2	effluent
Effluent Limitations:	NA	10	30	30	50	NA	NA	

Notes:

Concentrations in micrograms per liter (µg/L)

NA - not applicable

J - Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

B - Compound was found in the blank and sample.

Table 3

Year 4 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

Monthly Groundwater Level Data

Well ID	Measuring Point Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation
		1/6/2023		2/10/2023		3/2/2023		4/7/2023		5/4/2023		6/6/2023		7/11/2023		8/11/2023		9/1/2023		10/6/2023		11/6/2023		12/5/2023	
MW-01S	381.20	0.38	380.82	0.18	381.02	0.60	380.60	0.29	380.91	0.33	380.87	2.82	378.38	1.17	380.03	0.70	380.50	2.25	378.95	3.15	378.05	1.75	379.45	0.81	380.39
MW-02S	381.83	1.60	380.23	1.59	380.24	2.47	379.36	1.33	380.50	1.42	380.41	6.08	375.75	3.65	378.18	2.60	379.23	5.97	375.86	6.99	374.84	5.75	376.08	3.61	378.22
MW-06S	385.81	3.48	382.33	3.24	382.57	5.26	380.55	3.33	382.48	3.44	382.37	9.53	376.28	8.29	377.52	7.42	378.39	9.78	376.03	11.23	374.58	9.49	376.32	8.04	377.77
MW-07S	384.45	4.15	380.30	3.98	380.47	5.73	378.72	3.56	380.89	3.89	380.56	9.51	374.94	7.58	376.87	6.63	377.82	9.66	374.79	10.65	373.80	9.22	375.23	7.15	377.30
MW-09	385.11	6.29	378.82	5.62	379.49	7.89	377.22	5.39	379.72	5.88	379.23	10.82	374.29	9.46	375.65	8.78	376.33	11.03	374.08	11.98	373.13	10.79	374.32	8.99	376.12
MW-10	386.11	11.04	375.07	7.34	378.77	9.70	376.41	6.23	379.88	6.85	379.26	13.13	372.98	12.75	373.36	13.03	373.08	DRY	DRY	DRY	DRY	DRY	DRY	12.75	373.36
MW-11R	385.71	4.89	380.82	4.78	380.93	6.90	378.81	4.93	380.78	5.10	380.61	10.19	375.52	9.47	376.24	8.69	377.02	10.44	375.27	11.48	374.23	10.44	375.27	9.15	376.56
MW-12	384.99	7.35	377.64	6.85	378.14	8.13	376.86	6.56	378.43	6.89	378.10	9.58	375.41	9.41	375.58	9.01	375.98	9.69	375.30	10.98	374.01	9.44	375.55	9.00	375.99
MW-17A	384.11	8.66	375.45	7.78	376.33	9.36	374.75	6.85	377.26	7.48	376.63	10.86	373.25	10.38	373.73	9.86	374.25	10.98	373.13	11.80	372.31	10.96	373.15	10.61	373.50
MW-17B	383.41	6.93	376.48	6.66	376.75	7.25	376.16	5.49	377.92	5.75	377.66	9.12	374.29	8.84	374.57	8.40	375.01	9.74	373.67	10.50	372.91	9.70	373.71	9.17	374.24
MW-18A	385.18	7.68	377.50	7.05	378.13	10.29	374.89	8.01	377.17	8.34	376.84	10.97	374.21	10.61	374.57	9.73	375.45	10.89	374.29	11.22	373.96	10.90	374.28	8.39	376.79
MW-18B	384.04	6.90	377.14	6.82	377.22	8.68	375.36	7.35	376.69	7.61	376.43	9.97	374.07	9.49	374.55	8.65	375.39	9.58	374.46	10.04	374.00	9.49	374.55	7.74	376.30
MW-21	383.55	2.44	381.11	2.38	381.17	3.40	380.15	2.36	381.19	2.48	381.07	7.08	376.47	4.77	378.78	3.76	379.79	6.95	376.60	8.22	375.33	6.90	376.65	4.65	378.90
MW-22	381.15	0.24	380.91	0.14	381.01	0.56	380.59	0.13	381.02	0.21	380.94	2.97	378.18	0.98	380.17	0.47	380.68	2.49	378.66	3.38	377.77	1.92	379.23	0.72	380.43
MW-23	384.83	3.35	381.48	3.31	381.52	4.99	379.84	2.23	382.60	3.27	381.56	9.14	375.69	7.31	377.52	5.98	378.85	9.17	375.66	10.35	374.48	9.02	375.81	6.86	377.97
MW-24	385.05	4.34	380.71	2.76	382.29	5.10	379.95	2.75	382.30	3.18	381.87	9.42	375.63	8.84	376.21	7.59	377.46	9.77	375.28	11.30	373.75	9.34	375.71	7.83	377.22
MW-20	380.82	0.10	380.72	0.08	380.74	0.36	380.46	0.00	380.82	0.17	380.65	2.57	378.25	0.59	380.23	0.34	380.48	1.94	378.88	3.16	377.66	1.27	379.55	0.48	380.34
CO-N	382.59	9.80	372.79	9.86	372.73	9.83	372.76	9.98	372.61	9.89	372.70	9.97	372.62	9.95	372.64	9.95	372.64	9.97	372.62	10.00	372.59	9.94	372.65	9.96	372.63
CO-S	383.40	10.12	373.28	10.18	373.22	10.16	373.24	10.14	373.26	10.15	373.25	10.22	373.18	10.20	373.20	10.22	373.18	10.23	373.17	10.50	372.90	10.21	373.19	10.19	373.21
SG-3R	377.04	NC	NC	NC	NC	4.45	372.59	NC	NC	NC	NC	4.73	372.31	NC	NC	NC	NC	4.63	372.41	4.68	372.36	4.65	372.39	4.32	372.72
SG-5R	383.96	NC	NC	NC	NC	9.14	374.82	NC	NC	NC	NC	9.45	374.51	NC	NC	NC	NC	9.51	374.45	9.54	374.42	9.35	374.61	9.05	374.91
SG-7R	379.81	NC	NC	NC	NC	5.85	373.96	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	DRY	DRY	DRY	DRY	DRY	DRY	5.80	374.01

Notes:

ft bmp = feet below measuring point

DTW = depth to water

NC = not collected

NA = not applicable

Table 4

Year 4 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

2023 Expanded Groundwater Sampling Results

Location ID:		MW-06S	MW-07S	MW-9	MW-10	MW-11R	MW-21	MW-22	MW-23	MW-24	PTMW-01	TMW-02	TMW-20
Sample Date:		3/2/2023	3/2/2023	3/2/2023	3/2/2023	3/2/2023	3/2/2023	3/2/2023	3/2/2023	3/2/2023	3/2/2023	3/2/2023	3/2/2023
ANALYTE	TOGS[1]												
1,4-Dioxane by USEPA Method 8270D SIM													
1,4 Dioxane	0.35	9.3	29 E	6.7	18	4.8	NA	1,500	21 E	NA	NA	NA	NA
VOCs by USEPA Method 8260C													
1,1,1-Trichloroethane	5	ND	ND	NA	NA	NA	**190**	ND	ND	ND	ND	**75**	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	**34**	**16**	NA	NA	NA	**7,600**	**13,000**	3.3	3.2	**5,900**	**580**	**39,000**
1,1-Dichloroethene	5	1.8 J	ND	NA	NA	NA	52 J	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.0006	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	ND	NA	NA	NA	**130**	**300 J**	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	NA	NA	NA	ND	ND	ND	3.4 J	ND	ND	ND
Benzene	1	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	**130**	ND	NA	NA	NA	**600**	**7,900**	1.7	3.0	**7,900**	**84**	**11,000**
Chloroform	7	ND	ND	NA	NA	NA	**27 J**	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	**21**	**150**	NA	NA	NA	**11,000**	ND	**65**	ND	ND	**360**	ND
cis-1,3-Dichloropropene	0.4	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	NA	NA	NA	**270**	ND	ND	ND	ND	**29**	ND
Isopropylbenzene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	NA	NA	NA	**560**	ND	ND	ND	ND	**62**	ND
trans-1,2-Dichloroethene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	**25**	**300**	NA	NA	NA	**3,700**	ND	**13**	ND	ND	**350**	ND
Xylenes, Total	5	ND	ND	NA	NA	NA	**550**	ND	ND	ND	ND	**62**	ND

Notes:

All units in micrograms per liter (µg/L)

[1] New York State Department of Environmental Conservation, Technical and Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998

Bold - Indicates result exceeds criteria

E - Result exceeded calibration range

J - Estimated value above the laboratory's detection limit but below the laboratory's reporting limit

ND - Not detected above the laboratory's detection limit

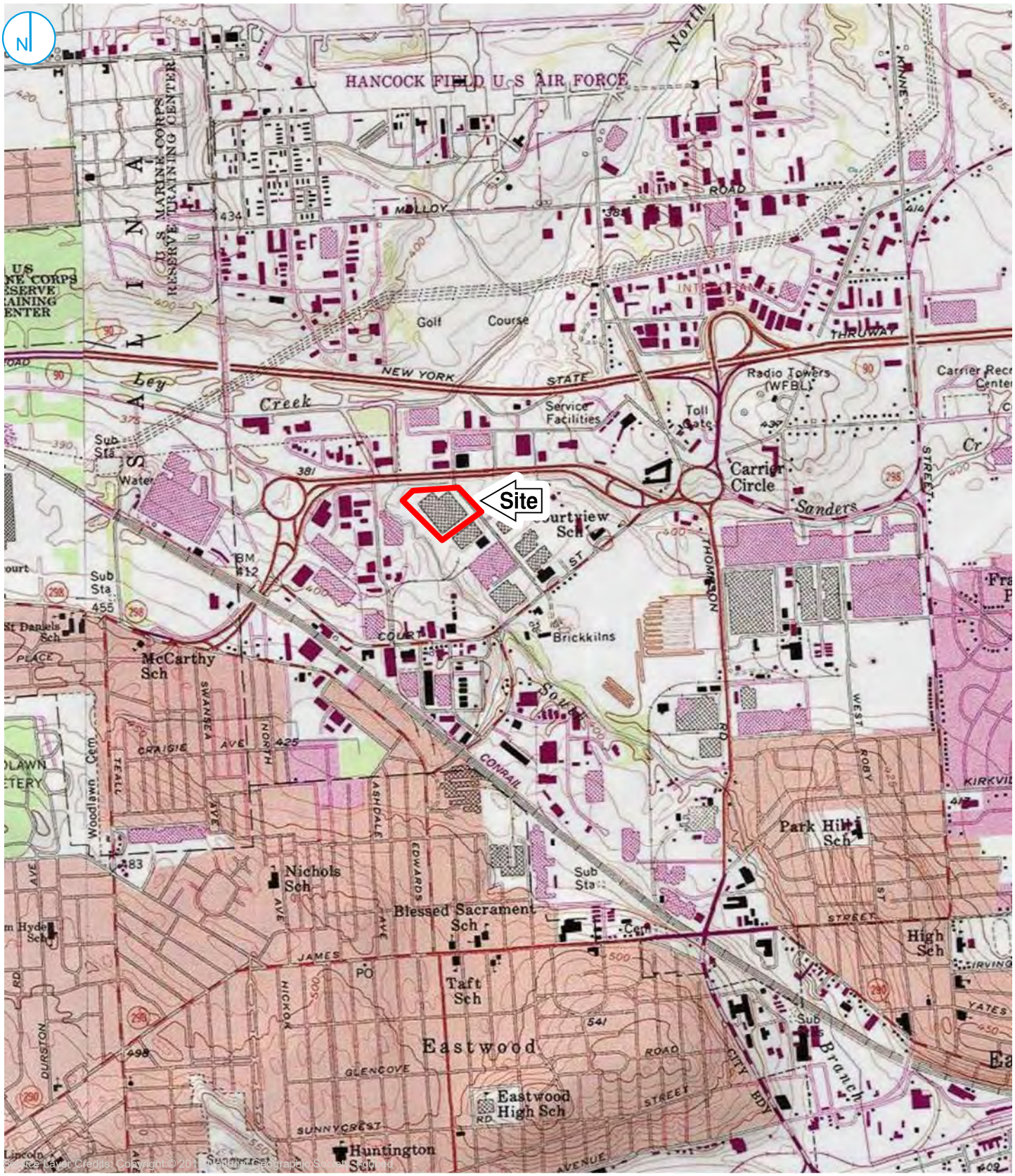
NC- No criteria

NA - Not analyzed

FIGURES

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PROJECT: 5851.74232 | DATED: 2/7/2020 | DESIGNER: NEWTONJM



Service Layer Credits: Copyright © 2013 National Geographic Society, i-cubed



KEY MAP

Map Scale: 1:1:24,000;
Map Center: 76°6'4"W 43°5'1"N

0 1,000 2,000 Feet

SITE LOCATION

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

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PROJECT: 585.174292 | DATED: 1/12/2021 | DESIGNER: MONETANT



- NEW POPLAR
- REMOVED TREE LOCATIONS
- REMAINING TREE LOCATIONS
- MONITORING WELL
- GROUNDWATER COLLECTION TRENCH

HISTORICAL CHEMICAL STORAGE LOCATIONS

- FORMER UST LOCATION
- FORMER SOLVENT PAD

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES AS-BUILT 5/13/2020

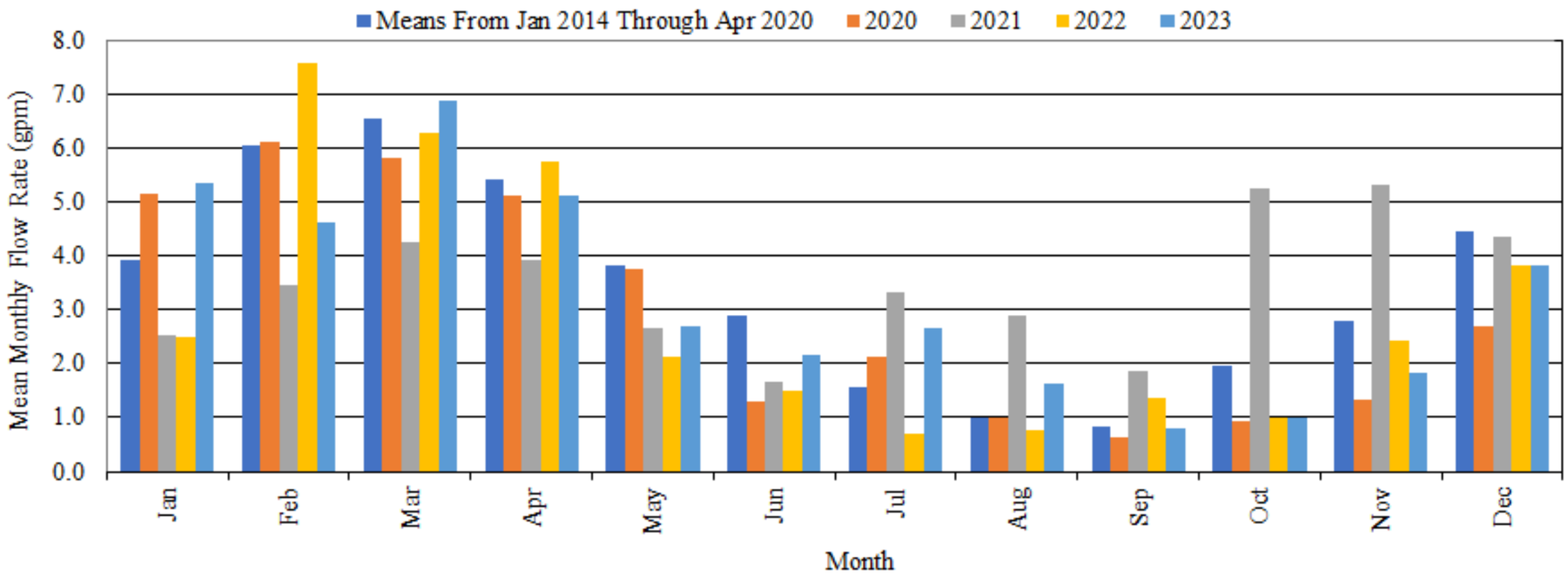
LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 02

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

A RAMBOLL COMPANY

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MEAN MONTHLY FLOW RATES IN GROUNDWATER COLLECTION TRENCH

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5
TOWN OF DEWIT, NEW YORK

FIGURE 3

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

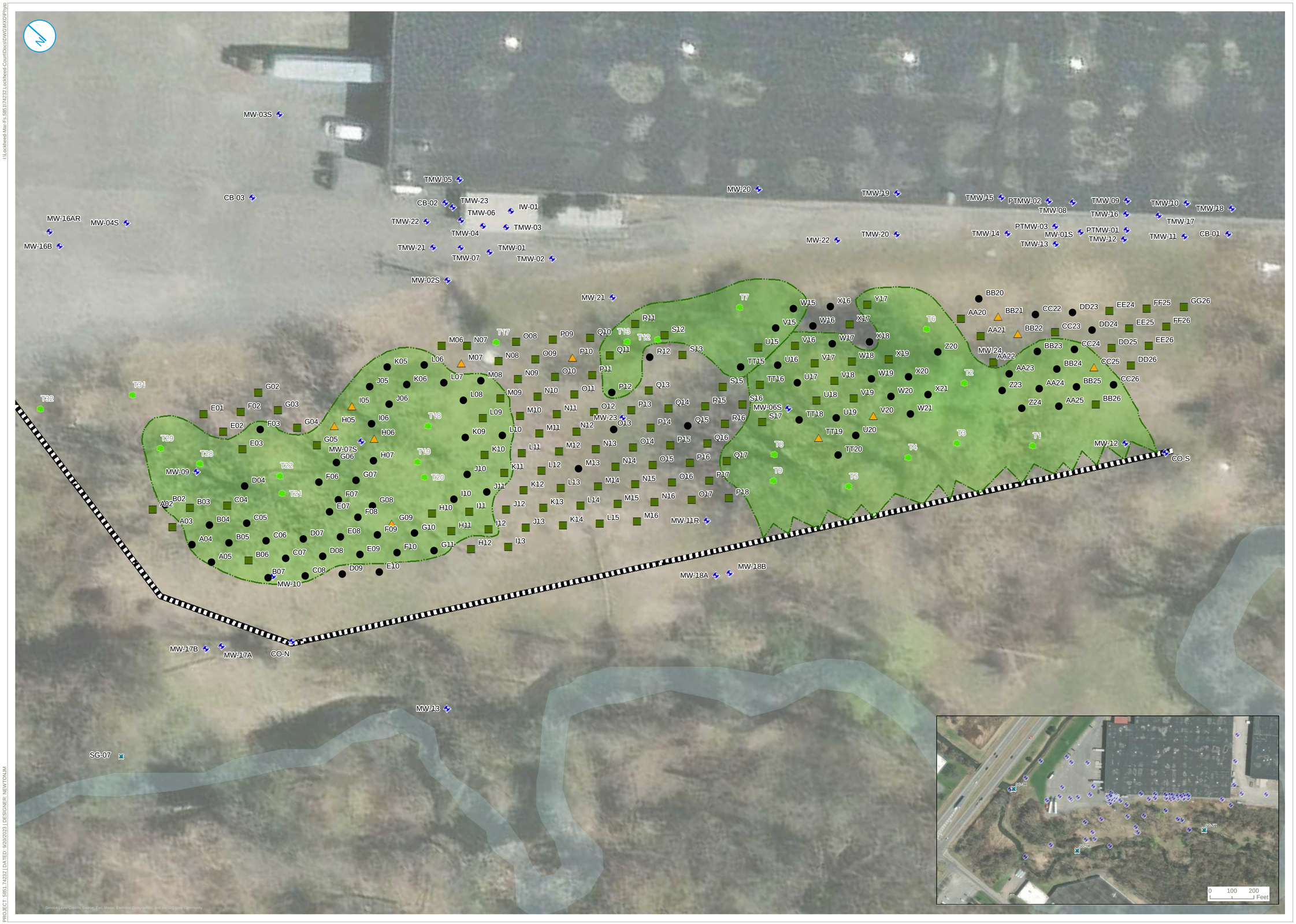
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 5851.74232 | DATED: 1/12/2022 | DESIGNER: NEWTONJM

Service Layer Credits:

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- STRESSED TREE
- HEALTHY NEW POPLAR
- DEAD NEW POPLARS
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
9/12/2023

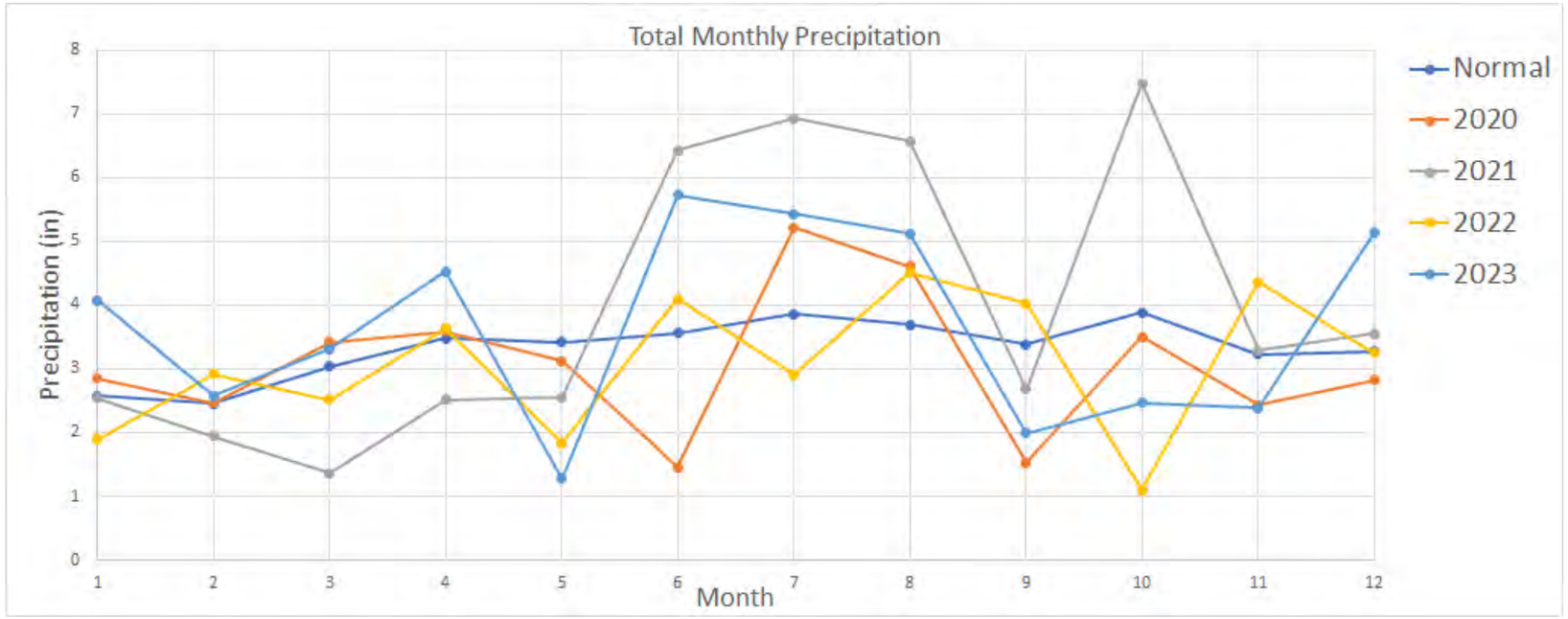
LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

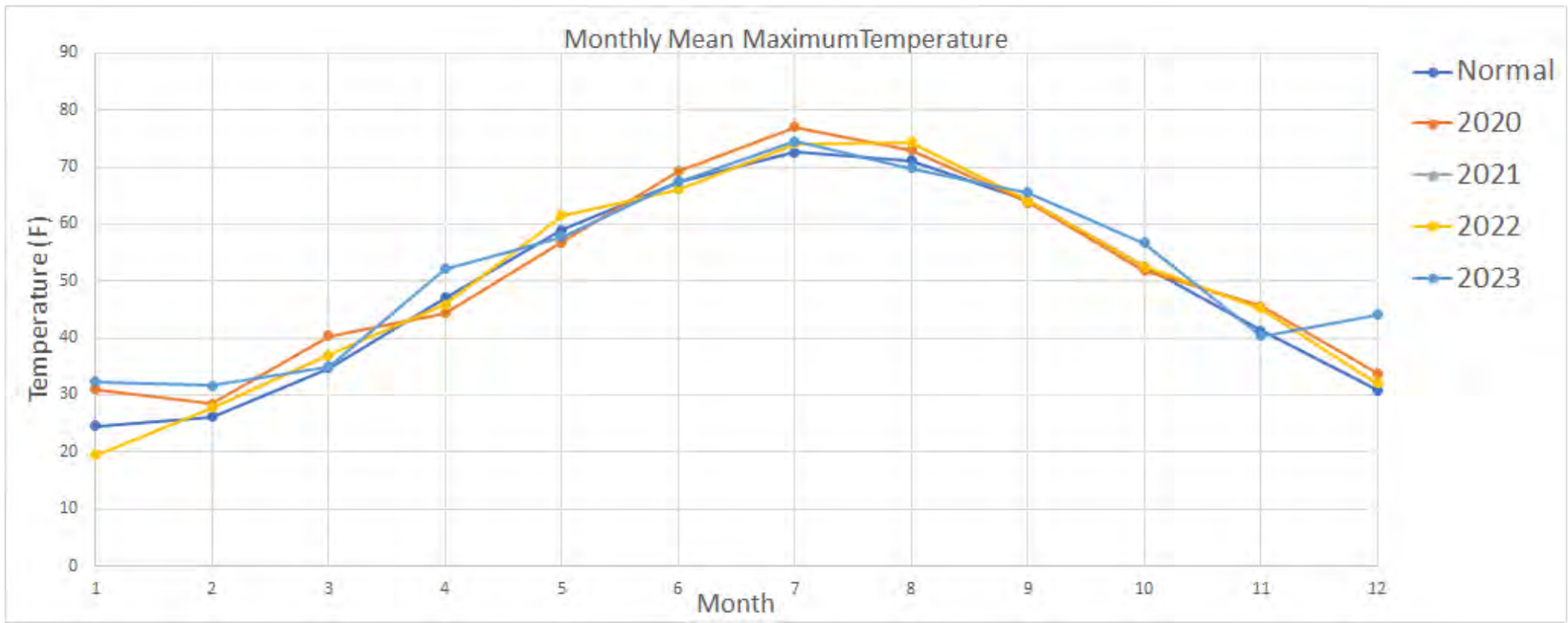
FIGURE 4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 5951.74232 | DATED: 9/20/2023 | DESIGNER: NEWTONJM





Data Source: https://www.weather.gov/wrh/climate?wfo=bgm

MEAN MONTHLY MAXIMUM TEMPURATURE AND MONTHLY TOTAL PRECIPITATION

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5
TOWN OF DEWIT, NEW YORK

FIGURE 5

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

A RAMBOLL COMPANY

RAMBOLL

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PROJECT: 5851.74232 | DATED: 1/12/2022 | DESIGNER: NEWTONJM

APPENDICES

APPENDIX A
YEAR 4 INSPECTION REPORTS

RAMBOLL

ENVIRONMENT
& HEALTH

PHYTOREMEDIATION PILOT TEST
YEAR 4 INSPECTION REPORT 1

Project name	**FORMER GE COURT STREET BUILDING 5 PHYTOREMEDIATION PILOT TEST**
Project no.	**5851/74232**
Recipient	**Jill Fonte, Lockheed Martin Corporation**
Date	**May 23, 2023**
Prepared by	**Christopher C. Nack**
CC:	**Scott Scheidelman** **Anthony Eallonardo** **Paul Hare** **Scott Tucker**

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1. Introduction **2**

2. Weather and Site Watering **2**

3. Inspection Summary **2**

Tables

Table 1 – Weather and Site Watering Data (embedded in text)
Table 2 – Tree Data (embedded in text)
Table 3 – Phytoremediation Pilot Test Year 4 Inspection 1

Attachments

Attachment 1 – Site Plan
Attachment 2 – Photo Log

1. Introduction

This report presents the summary of activities and results related to the first Year 4 inspection conducted on May 10, 2023 at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, New York. A total of 200 hybrid poplars were planted at the site between May 11 and 13, 2020 as part of the Phytoremediation Pilot Test approved by the New York State Department of Environmental Conservation (NYSDEC). To evaluate the health of the trees and guide maintenance activities, an inspection is performed on a bimonthly basis during the growing season and includes the evaluation of 20 randomly selected trees; trees that were previously identified as dead were not included in the evaluation. In addition to tree height and diameter at breast height (DBH), the trees are inspected for the following:

- Wilting leaves
- Yellowing leaves (chlorosis)
- Blackened leaves (necrosis)
- Leaf defoliation
- Leaf loss
- Trunk damage
- Branch damage
- Bore holes
- Pathogens

These conditions are associated with common stresses (e.g., excessive heat and diseases) and are used to indicate overall tree health.

Each tree in the stand was assigned a grid number which is provided in **Figure 1** included in **Attachment 1**. These grid numbers were used to randomly select trees for the first Year 4 inspection from the list of living trees during the final Year 3 inspection. Photos are provided in **Attachment 2** for the 20 trees that were randomly selected for this inspection.

2. Weather and Site Watering

Early spring 2023 can be generally characterized as being warmer and wetter in terms of temperature and precipitation (see **Table 1** below) prior to the inspection on May 10, 2023. The second half of May 2023 (after the first Year 4 inspection) was generally dryer and warmer than typical. Due to the dry weather, watering was conducted on May 31, 2023.

Table 1. Average monthly mean high temperatures (°F) and total monthly precipitation (inches) for the 2023 growing season and the approximate additional watering (inches) that was performed. Historical data is provided for comparison.

Month	Mean High Temp. (°F)		Precipitation (Inches)		Watering (Inches)	Total Water (inches)
	Historic	2023	Historic	2023		
March	42.4	42.7	3.04	3.31	0	**3.31**
April	56.4	66.7	3.48	4.68	0	**4.68**
May	69.2	70.5	3.42	1.28	0.8	**2.08**
July	--	--	--	--	--	--
August	--	--	--	--	--	--
September	--	--	--	--	--	--

Historic data source: https://www.weather.gov/wrh/climate?wfo=bgm

3. Inspection Summary

Inspection of the trees on May 10, 2023 identified a total of 80[1] trees dead (40%) and eight (4%) trees in poor condition, as shown in **Attachment 1**. This represents an additional two dead trees when compared to the final Year 3 inspection on September 14, 2022. The two additional dead trees were all under the canopy of the large Black Willow and Cottonwoods that were retained.

During the May 10, 2023 inspection there was no evidence of bore holes. Minor *Marssonina* leaf spot, a common foliage disease of Cottonwoods caused from a fungus was not present at the time of the inspection. Some minor trunk damage was also observed, which was associated with rubbing on the tree guards, previous deer damage over the 2021 and 2022 winter, or where branches have broken off.

Similar to prior inspections, with a lack of signs of observed major disease or pest damage, it is believed that the additional tree die-off and stress is related to the competition with the large retained trees (including water competition and shading due to proximity to large retained phreatophytic trees [one Black Willow and nine Cottonwoods]). **Figure 1** in **Attachment 1** shows the extent of the canopy from the retained trees based on observations made on August 9, 2021. This figure shows that 70 of the 80 dead trees (87.5%), including the additional two dead trees (G10 and BB25) since the final Year 3 inspection, are under the canopy of the retained trees.

Mean tree height during the first Year 4 inspection was approximately 18.0 feet (219 inches), ranging from 12 to 28 feet (146 to 336 inches) and mean DBH was 3.0 inches (ranging from 1.25 to 5.5 inches), as shown in **Table 2** below. These statistics are based on measurements for the 20 trees selected randomly for the first Year 4 inspection (see **Table 3**).

Table 2. Tree height and DBH summary for the final Year 1 inspection, final Year 2 inspection, final Year 3 inspection and first Year 4 inspection. These statistics are based on measurements for the 20 trees that were randomly selected during each inspection. Therefore, the same trees were not likely measured during each event.

	Planted Stake	Year 1 Final		Year 2 Final		Year 3 Final		Year 4 Inspection 1	
	Height (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)
Mean	41.1	109.1	0.5	203	1.4	208	1.7	219	3.0
Max	47	169	1.3	292	2.8	361	3.75	336	5.5
Min	35.5	76	0.3	92	0.4	112	0.75	146	1.25

At the time of the first Year 4 inspection, vines were not a major concern at the site. Although Wild Grape, Virginia Creeper, and Poison Ivy were observed, no vines were observed on the planted trees during this inspection. In addition to these three vines, Common Reed and Mugwort have been identified as species of concern during one or more prior inspections.

[1] The number of dead trees excludes two dead trees that were replanted in 2020 with tree cuttings and are currently healthy (B06 and O13).

Table 3

Lockheed Martin Corporation
Former GE Court St.
Town of Dewitt, NY

Phytoremediaion Pilot Test
Year 4, Inspection 1
Inspection Date: May 10, 2023

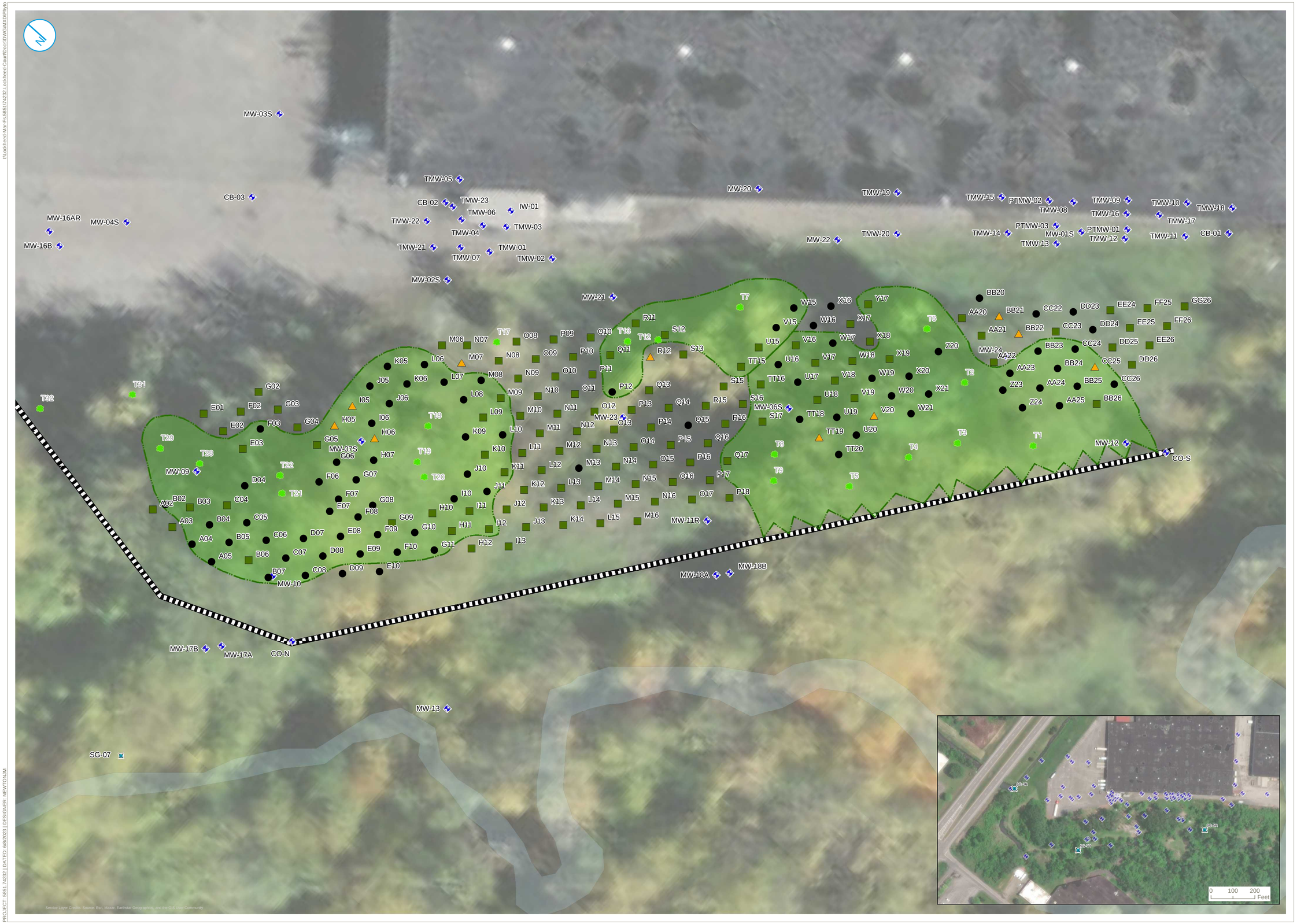
Tree ID:	B3	G4	I11	DD25	EE26	K11	L12	L9	M16	N12	N16	N7	N8	O16	O17	P9	Q11	S15	X17	X18
Wilting Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Yellowing Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Blackening Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Defoliation:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Loss:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Trunk Damage:	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N
Branch Damage:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bore Holes:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Pathogen:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Photograph:	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached
Diameter Breast Height (inches):	1.75	1.5	1.75	1.25	3.75	2	3.75	2.25	5.5	5.25	4.25	3.75	4.25	4.25	2.25	4.5	3.75	2	1.5	1.5
Height (inches):	170	151	172	159	228	166	276	167	336	252	324	216	264	300	204	300	204	191	146	148
Height (feet):	14.2	12.6	14.3	13.3	19.0	13.8	23.0	13.9	28.0	21.0	27.0	18.0	22.0	25.0	17.0	25.0	17.0	15.9	12.2	12.3

Notes:
- See attached photographic log for pictures of trees.

ATTACHMENT 1
SITE PLAN

I:\Lockheed-Mar-Fs.5951\74232.Lockheed-Court\Docs\DWG\MXD\Phyto

PROJECT: 5951.74232 | DATED: 6/8/2023 | DESIGNER: NEWTONJM



- STRESSED TREE
- HEALTHY NEW POPLAR
- DEAD NEW POPLARS
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

NEW AND RETAINED TREES
5/10/2023

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

ATTACHMENT 2
PHOTO LOG

The following photos document the hybrid poplar stand at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, NY during the inspection on 05/10/2023 (Year 4, Inspection 1). The photos shown were selected to be representative of the conditions observed during the inspection.



Description: 05/10/2023 - Tree stand facing Northwest.



Description: 05/10/2023 - General view of the site from the South side looking North.



Description: 05/10/2023 - General view of the site from the East side looking West.



Description: 05/10/2023 - General view of the site from the East side looking West under the canopy of a group of large retained Ce~~o~~ttonwood trees.



Description: 05/10/2023 – Tree B03.



Description: 05/10/2023 – Tree DD25.



Description: 05/10/2023 –Tree EE26.



Description: 05/10/2023 – Tree G4.



Description: 05/10/2023 – Tree I11.



Description: 05/10/2023 – Tree K11.



Description: 05/10/2023 – Tree L9.



Description: 05/10/2023 – Tree L12.



Description: 05/10/2023 – Tree M16.



Description: 05/10/2023 – Tree N7.



Description: 05/10/2023 – Tree N8.



Description: 05/10/2023 – Tree N12.



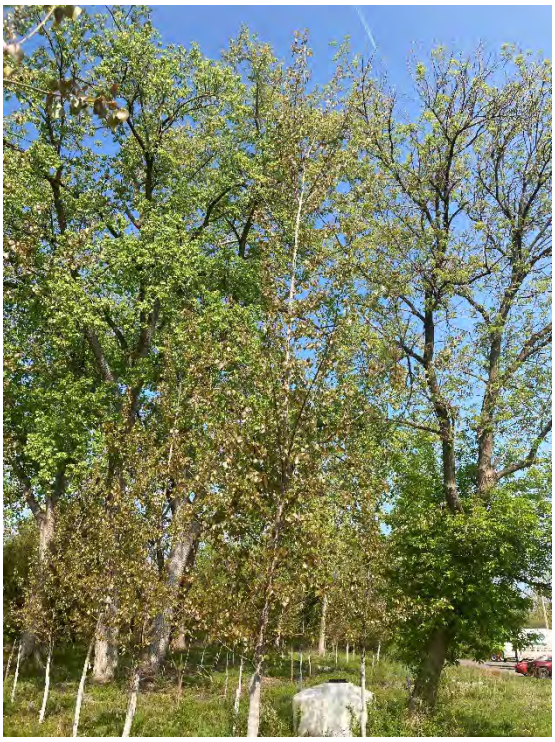
Description: 05/10/2023 – Tree N16.



Description: 05/10/2023 – Tree O16.



Description: 05/10/2023 – Tree O17.



Description: 05/10/2023 – Tree P9.



Description: 05/10/2023 – Tree Q11.



Description: 05/10/2023 – Tree S15.



Description: 05/10/2023 – Tree X17.



Description: 05/10/2023 – Tree X18.

RAMBOLL

ENVIRONMENT
& HEALTH

PHYTOREMEDIATION PILOT TEST
YEAR 4 INSPECTION REPORT 2

Project name	**FORMER GE COURT STREET BUILDING 5 PHYTOREMEDIATION PILOT TEST**
Project no.	**5851/74232**
Recipient	**Jill Fonte, Lockheed Martin Corporation**
Date	**August 9, 2023**
Prepared by	**Christopher C. Nack**
CC:	**Anthony Eallonardo**
	Paul Hare
	Scott Scheidelman
	Scott Tucker

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2. Weather and Site Watering **3**

3. Inspection Summary **4**

Tables

Table 1 – Weather and Site Watering Data (embedded in text)
Table 2 – Tree Data (embedded in text)
Table 3 – Phytoremediation Pilot Test Year 4 Inspection 2

Attachments

Attachment 1 – Site Plan
Attachment 2 – Photo Log

Confidential

1. Introduction

This report presents the summary of activities and results related to the second Year 4 inspection conducted on July 12, 2023 at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, New York. A total of 200 hybrid poplars were planted at the site between May 11 and 13, 2020 as part of the Phytoremediation Pilot Test approved by the New York State Department of Environmental Conservation (NYSDEC). To evaluate the health of the trees and guide maintenance activities, an inspection is performed on a bimonthly basis during the growing season and includes the evaluation of 20 randomly selected trees; trees that were previously identified as dead were not included in the evaluation. In addition to tree height and diameter at breast height (DBH), the trees are inspected for the following:

- Wilting leaves
- Yellowing leaves (chlorosis)
- Blackened leaves (necrosis)
- Leaf defoliation
- Leaf loss
- Trunk damage
- Branch damage
- Bore holes
- Pathogens

These conditions are associated with common stresses (e.g., excessive heat and diseases) and are used to indicate overall tree health.

Each tree in the stand was assigned a grid number which is provided in **Figure 1** included in **Attachment 1**. These grid numbers were used to randomly select trees for the second Year 4 inspection from the list of living trees during the first Year 4 inspection. Photos are provided in **Attachment 2** for the 20 trees that were randomly selected for this inspection.

Confidential

2. Weather and Site Watering

Early spring 2023 can be generally characterized as being warmer and wetter in terms of temperature and precipitation (see **Table 1** below) prior to the first Year 4 inspection on May 10, 2023. A late season heavy frost occurred on May 18, 2023, which caused die off of leaves of trees that had late leaf out. The second half of May 2023 was generally dryer and warmer than typical. Due to the dry weather, watering was conducted on May 31, 2023. June 2023 was significantly wetter than normal, especially in the second half of the month.

Table 1. Average monthly mean high temperatures (°F) and total monthly precipitation (inches) for the 2023 growing season and the approximate additional watering (inches) that was performed. Historical data is provided for comparison.

Month	Mean High Temp. (°F)		Precipitation (Inches)		Watering (Inches)	Total Water (inches)
	Historic	2023	Historic	2023		
March	42.4	42.7	3.04	3.31	0	**3.31**
April	56.4	66.7	3.48	4.68	0	**4.68**
May	69.2	70.5	3.42	1.28	0.8	**2.08**
June	77.3	77.6	3.56	5.73	0	**5.73**
July	81.7	84.2	3.86	5.43	0	**5.43**
August	--	--	--	--	--	--
September	--	--	--	--	--	--

Historic data source: https://www.weather.gov/wrh/climate?wfo=bgm

Confidential

3. Inspection Summary

Inspection of the trees on July 12, 2023 identified a total of 84[1] trees dead (42%) and seven (3.5%) trees in poor condition, as shown in **Attachment 1**. This represents an additional four dead trees when compared to the first Year 4 inspection on May 10, 2023. The four additional dead trees were identified during the May 31, 2023 watering event as being impacted by the late season frost on May 18, 2023. The four trees had smaller leaves than other trees in the stand, suggesting later leaf out. Late leaf out of trees is often suggestive of stress.

During the July 12, 2023 inspection there was no evidence of bore holes. Minor *Marssonina* leaf spot, a common foliage disease of Cottonwoods caused from a fungus, was not present at the time of the inspection. Some minor trunk damage was also observed, which was associated with rubbing on the tree guards, previous deer damage over the 2021 and 2022 winters, or where branches have broken off.

Similar to prior inspections, with a lack of signs of observed major disease or pest damage, it is believed that the additional tree die-off and stress is related to the competition with the large retained trees (including water competition and shading due to proximity to large retained phreatophytic trees [one Black Willow and nine Cottonwoods]). **Figure 1** in **Attachment 1** shows the extent of the canopy from the retained trees based on observations made on August 9, 2021. This figure shows that 71 of the 84 dead trees (85%), including 3 of the 4 additional dead trees (G10, BB25 and TT15) since the first Year 4 inspection, are under the canopy of the retained trees.

Mean tree height during the second Year 4 inspection was approximately 20.0 feet (240 inches), ranging from 8 to 26 feet (96 to 312 inches) and mean DBH was 3.31 inches (ranging from 0.75 to 5.0 inches), as shown in **Table 2** below. These statistics are based on measurements for the 20 trees selected randomly for the second Year 4 inspection (see **Table 3**).

Table 2. Tree height and DBH summary for the final Year 1 inspection, final Year 2 inspection, final Year 3 inspection and second Year 4 inspection. These statistics are based on measurements for the 20 trees that were randomly selected during each inspection. Therefore, the same trees were not likely measured during each event.

	Planted Stake	Year 1 Final		Year 2 Final		Year 3 Final		Year 4 Inspection 1		Year 4 Inspection 2	
	Height (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)
Mean	41.1	109.1	0.5	203	1.4	208	1.7	219	3.0	240.0	3.31
Max	47	169	1.3	292	2.8	361	3.75	336	5.5	312.0	5.0
Min	35.5	76	0.3	92	0.4	112	0.75	146	1.25	96.0	0.75

At the time of the second Year 4 inspection, vines were not a major concern at the site. Although Wild Grape, Virginia Creeper, and Poison Ivy were observed, no vines were observed on the planted trees during this inspection. In addition to these three vines, Common Reed and Mugwort have been identified as species of concern during one or more prior inspections. During the time of the inspection, mowing was being conducted to reduce vine and shrub growth at the site.

[1] The number of dead trees excludes two dead trees that were replanted in 2020 with tree cuttings and are currently healthy (B06 and O13).

Table 3

Lockheed Martin Corporation
Former GE Court Street
Town of Dewitt, NY

Phytoremediaion Pilot Test
Year 4, Inspection 2
Inspection Date: July 12, 2023

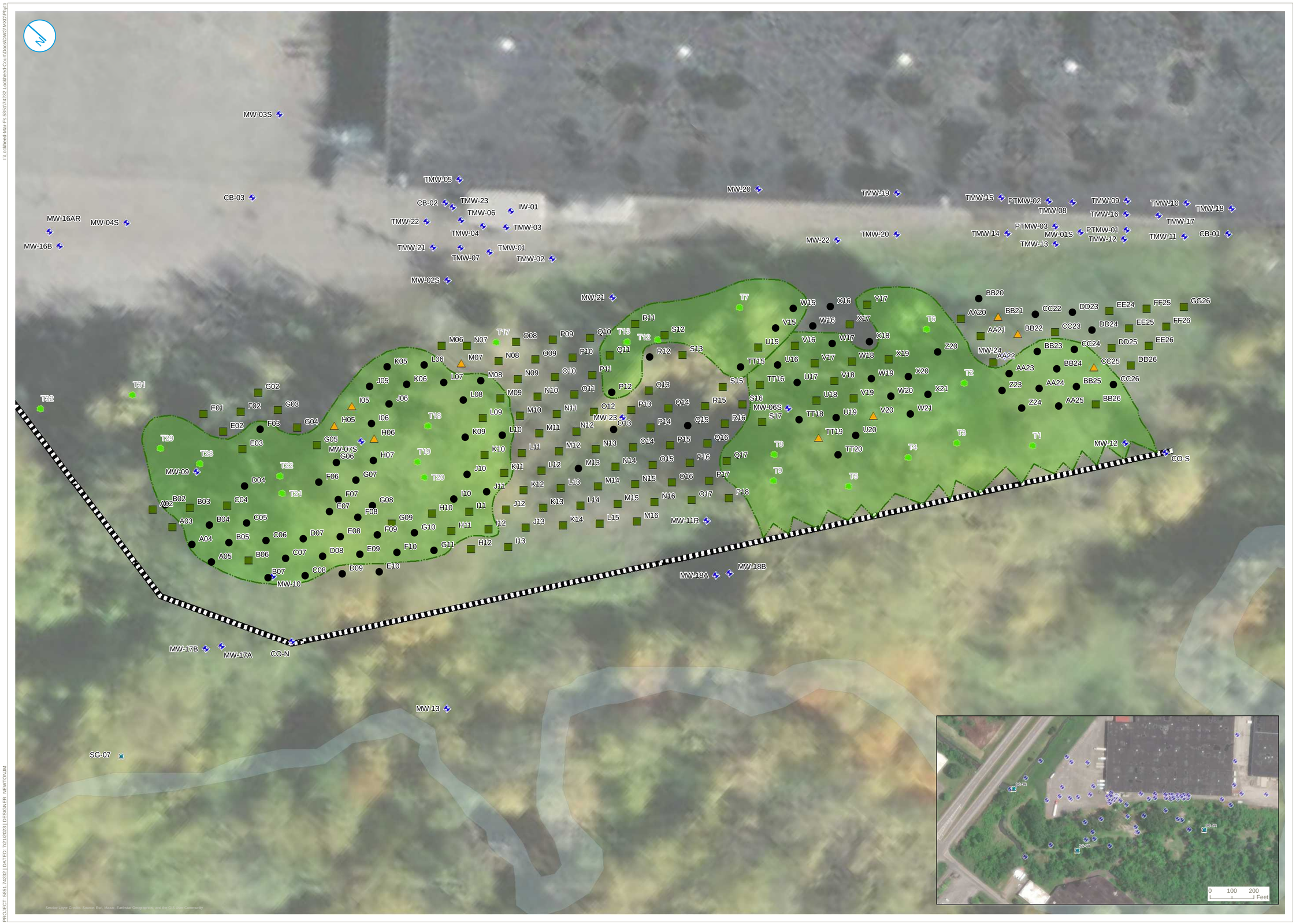
Tree ID:	A02	E02	F02	G02	G09	H10	K12	K14	L15	N07	N14	N16	O10	O12	Q11	R15	V19	EE24	FF25	FF26
Wilting Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Yellowing Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Blackening Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Defoliation:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Loss:	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Trunk Damage:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Branch Damage:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bore Holes:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Pathogen:	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	N	N	N
Photograph:	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached
Diameter Breast Height (inches):	1.75	3.5	4.5	5.0	0.8	2.5	4.5	4.5	4.0	2.0	3.5	4.0	3.0	2.0	2.5	2.5	2.0	3.25	2.75	4.0
Height (inches):	185	286	264	300	96	240	300	312	312	144	276	288	264	144	252	216	192	168	264	300
Height (feet):	15.0	24.0	22.0	25.0	8.0	20.0	25.0	26.0	26.0	12.0	23.0	24.0	22.0	12.0	21.0	18.0	16.0	14.0	22.0	25.0

Notes:
- See attached photographic log for pictures of trees.

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ATTACHMENT 1
SITE PLAN

I:\Lockheed-Mar-Fs.5951\74232.Lockheed-Court\Docs\DWG\MXD\Phyto



Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- STRESSED TREE
- HEALTHY NEW POPLAR
- DEAD NEW POPLAR
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
7/12/2023

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 5951.74232 | DATED: 7/21/2023 | DESIGNER: NEWTONJM

ATTACHMENT 2
PHOTO LOG

The following photos document the hybrid poplar stand at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, NY during the inspection on 07/12/2023 (Year 4, Inspection 2). The photos shown were selected to be representative of the conditions observed during the inspection.



Description: 07/12/2023 - Tree stand facing Northwest.



Description: 07/12/2023 - General view of the site from the South side looking North.



Description: 07/12/2023 - General view of the site from the East side looking West.



Description: 07/12/2023 – Tree A02.



Description: 07/12/2023 – Tree E02.

Confidential



Description: 07/12/2023 –Tree F02.



Description: 07/12/2023 – Tree G02.



Description: 07/12/2023 – Tree G09.



Description: 07/12/2023 – Tree H10.

Confidential



Description: 07/12/2023 – Tree K12.



Description: 07/12/2023 – Tree K14.



Description: 07/12/2023 – Tree L15.



Description: 07/12/2023 – Tree N07.

Confidential



Description: 07/12/2023 – Tree N14.



Description: 07/12/2023 – Tree N116.



Description: 07/12/2023 – Tree O10.



Description: 07/12/2023 – Tree O12.

Confidential



Description: 07/12/2023 – Tree Q11.



Description: 07/12/2023 – Tree R15.



Description: 07/12/2023 – Tree V19.



Description: 07/12/2023 – Tree EE24.

Confidential



Description: 07/12/2023 – Tree FF25.



Description: 07/12/2023 – Tree FF26.

Confidential

RAMBOLL

ENVIRONMENT
& HEALTH

PHYTOREMEDIATION PILOT TEST
YEAR 4 INSPECTION REPORT 3

Project name	**FORMER GE COURT STREET BUILDING 5 PHYTOREMEDIATION PILOT TEST**
Project no.	**5851/74232**
Recipient	**Jill Fonte, Lockheed Martin Corporation**
Date	**November 2, 2023**
Prepared by	**Christopher C. Nack**
CC:	**Anthony Eallonardo**
	Paul Hare
	Scott Scheidelman
	Scott Tucker

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2. Weather and Site Watering **3**

3. Inspection Summary **3**

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Table 1 – Weather and Site Watering Data (embedded in text)
Table 2 – Tree Data (embedded in text)
Table 3 – Phytoremediation Pilot Test Year 4 Inspection 3

Attachments

Attachment 1 – Site Plan
Attachment 2 – Photo Log

1. Introduction

This report presents the summary of activities and results related to the third Year 4 inspection conducted on September 12, 2023 at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, New York. A total of 200 hybrid poplars were planted at the site between May 11 and 13, 2020 as part of the Phytoremediation Pilot Test approved by the New York State Department of Environmental Conservation (NYSDEC). To evaluate the health of the trees and guide maintenance activities, an inspection is performed on a bimonthly basis during the growing season and includes the evaluation of 20 randomly selected trees; trees that were previously identified as dead were not included in the evaluation. In addition to tree height and diameter at breast height (DBH), the trees are inspected for the following:

- Wilting leaves
- Yellowing leaves (chlorosis)
- Blackened leaves (necrosis)
- Leaf defoliation
- Leaf loss
- Trunk damage
- Branch damage
- Bore holes
- Pathogens

These conditions are associated with common stresses (e.g., excessive heat and diseases) and are used to indicate overall tree health.

Each tree in the stand was assigned a grid number which is provided in **Figure 1** included in **Attachment 1**. These grid numbers were used to randomly select trees for the third Year 4 inspection from the list of living trees during the second Year 4 inspection. Photos are provided in **Attachment 2** for the 20 trees that were randomly selected for this inspection.

2. Weather and Site Watering

Early spring 2023 can be generally characterized as being warmer and wetter in terms of temperature and precipitation (see **Table 1** below) prior to the first Year 4 inspection on May 10, 2023. A late season heavy frost occurred on May 18, 2023, which caused die-off of leaves of trees that had late leaf out. The second half of May 2023 was generally dryer and warmer than typical. Due to the dry weather, watering was conducted on May 31, 2023. June 2023 was significantly wetter than normal, especially in the second half of the month. Similarly, August and the first half of September was significantly wetter than normal. The second half of September (after the completion of the third inspection) was dryer than normal.

Table 1. Average monthly mean high temperatures (°F) and total monthly precipitation (inches) for the 2023 growing season and the approximate additional watering (inches) that was performed. Historic data is provided for comparison.

Month	Mean High Temp. (°F)		Precipitation (Inches)		Watering (Inches)	Total Water (inches)
	Historic	2023	Historic	2023		
March	42.4	42.7	3.04	3.31	0	**3.31**
April	56.4	66.7	3.48	4.68	0	**4.68**
May	69.2	70.5	3.42	1.28	0.8	**2.08**
June	77.3	77.6	3.56	5.73	0	**5.73**
July	81.7	84.2	3.86	5.43	0	**5.43**
August	80.3	78.7	3.70	5.12	0	**5.12**
September	73.1	75.6	3.38	1.99	0	**1.99**

Historic data source: https://www.weather.gov/wrh/climate?wfo=bgm

3. Inspection Summary

Inspection of the trees on September 12, 2023 identified a total of 84[1] trees (42%) dead and twelve trees (6.0%) in poor condition, as shown in **Attachment 1**. No additional trees died when compared to the second Year 4 inspection on July 12, 2023.

During the September 12, 2023 inspection there was no evidence of bore holes. Minor *Marssonina* leaf spot, a common foliage disease of Cottonwoods caused from a fungus, was not present at the time of the inspection. Some minor trunk damage was also observed, which was associated with previous rubbing on the tree guards, previous deer damage over the 2021 and 2022 winters, or where branches have broken off. One tree, P10, took significant storm damage causing the tree to break halfway up the trunk; the top of the tree was fully removed and the remainder of the tree is in good condition.

Similar to prior inspections, with a lack of signs of observed major disease or pest damage, it is believed that previous tree die-off and stress is related to the competition with the large retained trees (including water competition and shading due to proximity to large retained phreatophytic trees [one Black Willow and nine Cottonwoods]). **Figure 1** in **Attachment 1** shows the extent of the canopy from the retained

[1] The number of dead trees excludes two dead trees (B06 and O13) that were replanted in 2020 with tree cuttings and are currently healthy.

trees based on observations made on August 9, 2021. This figure shows that 71 of the 84 dead trees (85%) are under the canopy of the retained trees.

Mean tree height during the third Year 4 inspection (the final inspection) was approximately 23.0 feet (280 inches), ranging from 11 to 32 feet (96 to 312 inches), and mean DBH was 4.0 inches (ranging from 2.0 to 8.0 inches), as shown in **Table 2** below. These statistics are based on measurements for the 20 trees selected randomly for the third Year 4 inspection (see **Table 3**).

Table 2. Tree height and DBH summary for the final Year 1 inspection, final Year 2 inspection, final Year 3 inspection and second Year 4 inspection. These statistics are based on measurements for the 20 trees that were randomly selected during each inspection. Therefore, the same trees were not likely measured during each event.

	Planted Stake	Year 1 Final		Year 2 Final		Year 3 Final		Year 4 Final	
	Height (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)
Mean	41.1	109.1	0.5	203	1.4	208	1.7	280	4.0
Max	47	169	1.3	292	2.8	361	3.75	396	8.0
Min	35.5	76	0.3	92	0.4	112	0.75	132	2.0

At the time of the third Year 4 inspection, vines were not a major concern at the site. Although Wild Grape, Virginia Creeper, and Poison Ivy were observed, no vines were observed on the planted trees during this inspection. In addition to these three vines, Common Reed and Mugwort have been identified as species of concern during one or more prior inspections. Mowing was conducted between September 11 and 14, 2023 to reduce vine and shrub growth at the site.

Table 3

Lockheed Martin Corporation
Former GE Court Street
Town of Dewitt, NY

Phytoremediaion Pilot Test
Year 4, Inspection 3
Inspection Date: September 12, 2023

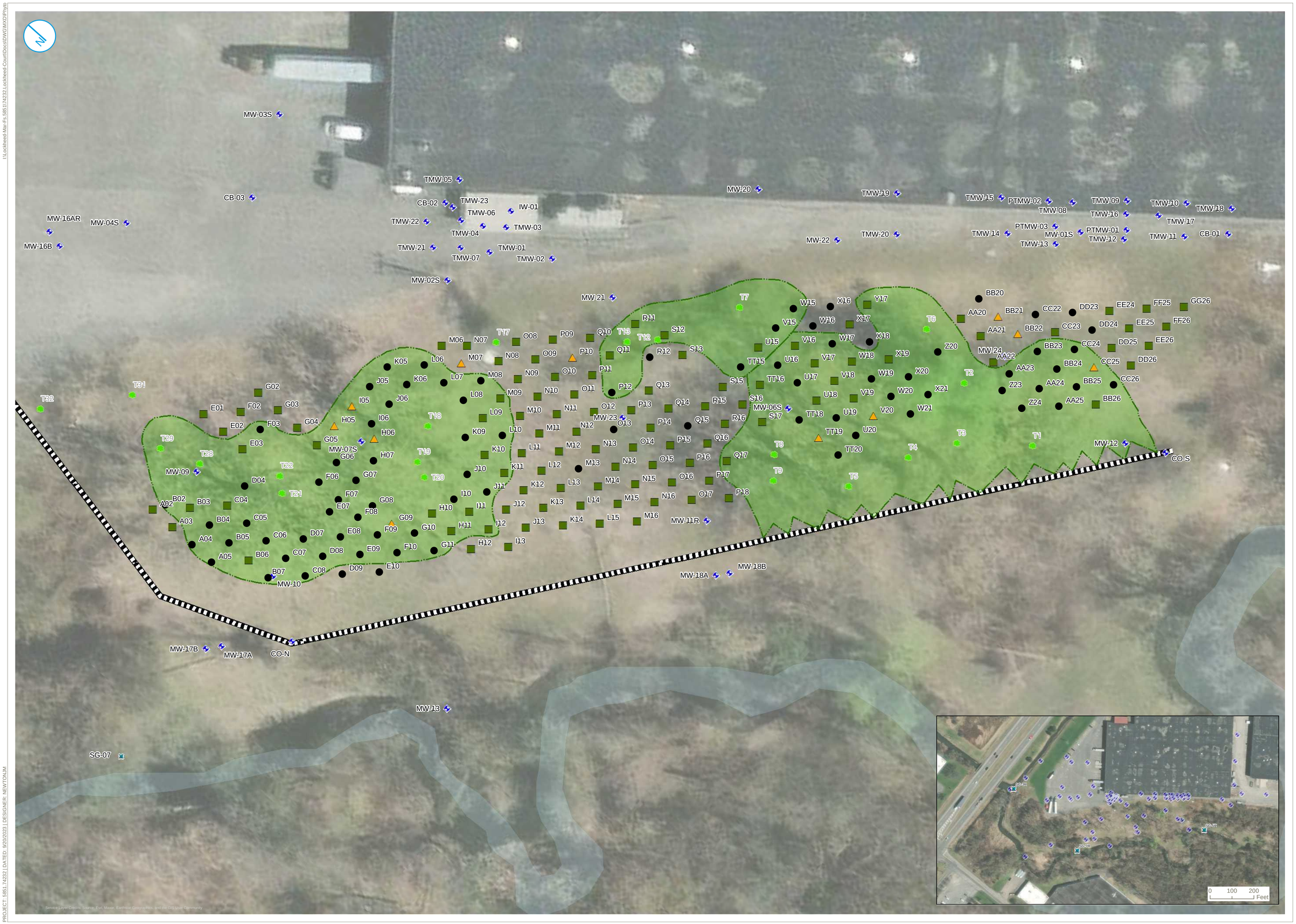
Tree ID:	A02	E03	F02	G02	H11	I11	J12	K14	L15	M10	M6	N16	O14	Q11	Q13	Q17	V19	CC25	DD26	EE26
Wilting Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Yellowing Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Blackening Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Defoliation:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Loss:	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Trunk Damage:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Branch Damage:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bore Holes:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Pathogen:	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	N	N	N
Photograph:	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached
Diameter Breast Height (inches):	2.25	4.5	6.0	7.5	4.0	3.0	5.0	6.0	7.0	3.5	2.5	6.0	5.0	4.5	6.0	4.0	2.0	2.50	2.50	5.0
Height (inches):	192	264	372	384	288	168	336	360	396	264	132	360	348	300	324	312	144	168	180	300
Height (feet):	16.0	22.0	31.0	32.0	24.0	14.0	28.0	30.0	33.0	22.0	11.0	30.0	29.0	25.0	27.0	26.0	12.0	14.0	15.0	25.0

Notes:
- See attached photographic log for pictures of trees.

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ATTACHMENT 1
SITE PLAN

I:\Lockheed-Mar-Fs_5951\174232\Lockheed_CourtDocs\DWG\MXD\P[typ



- STRESSED TREE
- HEALTHY NEW POPLAR
- DEAD NEW POPLARS
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
9/12/2023

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 5951.74232 | DATED: 9/20/2023 | DESIGNER: NEWTONJM

ATTACHMENT 2
PHOTO LOG

The following photos document the hybrid poplar stand at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, NY during the inspection on 09/12/2023 (Year 4, Inspection 3). The photos shown were selected to be representative of the conditions observed during the inspection.



Description: 09/12/2023 - Tree stand facing Northwest.



Description: 09/12/2023 - General view of the site from the South side looking North.



Description: 09/12/2023 - General view of the site from the East side looking West.



Description: 09/12/2023 - Tree A02.



Description: 07/12/2023 - Tree DD25.

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Description: 09/12/2023 - Tree DD26.



Description: 09/12/2023 - Tree E03.



Description: 09/12/2023 - Tree EE26.



Description: 09/12/2023 - Tree F02.

Confidential



Description: 09/12/2023 - Tree G02.



Description: 09/12/2023 - Tree H11.



Description: 09/12/2023 - Tree I11.



Description: 09/12/2023 - Tree J12.

Confidential



Description: 09/12/2023 - Tree K14.



Description: 09/12/2023 - Tree L15.



Description: 09/12/2023 - Tree M06.



Description: 09/12/2023 - Tree M10.

Confidential



Description: 09/12/2023 - Tree N16.



Description: 09/12/2023 - Tree O14.



Description: 09/12/2023 - Tree Q11.



Description: 09/12/2023 - Tree Q13.

Confidential



Description: 09/12/2023 - Tree Q17.



Description: 09/12/2023 - Tree V19.

Confidential

APPENDIX B
LABORATORY ANALYTICAL REPORTS

EXPANDED GROUNDWATER SAMPLING

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll US Corporation
333 West Washington Street
Syracuse, New York 13202

Generated 3/14/2023 11:00:31 AM

JOB DESCRIPTION

Phytoremediation GW Analysis Form LM Court Bldg #5

JOB NUMBER

480-206656-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

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Authorization



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(716)504-9838

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Definitions/Glossary

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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

Job ID: 480-206656-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-206656-1

Comments
No additional comments.

Receipt
The samples were received on 3/4/2023 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2º C.

GC/MS VOA
Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-21-030223 (480-206656-2), MW-22-030223 (480-206656-3), TMW-20-030323 (480-206656-4) and PTMW-01-030323 (480-206656-5). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-660650 recovered above the upper control limit for 2-Butanone (MEK) and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-07S-030323 (480-206656-12) and TB-01-030323 (480-206656-13).

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 480-660650 recovered outside control limits for the following analytes: Bromomethane. The associated samples are impacted::MW-07S-030323 (480-206656-12) and TB-01-030323 (480-206656-13).

Method 8260C: 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: TMW-20-030323 (480-206656-4).

Method 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone (MEK) in the full spike solution, 2-Butanone (MEK) exceeded control limits in the laboratory control sample (LCS) associated with analytical batch 480-660650 . The following samples were affected : MW-07S-030323 (480-206656-12) and TB-01-030323 (480-206656-13).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-660650 recovered outside control limits for the following analytes: Dichlorodifluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: MW-07S-030323 (480-206656-12) and TB-01-030323 (480-206656-13).

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-07S-030323 (480-206656-12). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: TMW-02-030223 (480-206656-1), MW-21-030223 (480-206656-2) and MW-06S-030323 (480-206656-7). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270D SIM ID: The 1,4-Dioxane result reported for samples MW-23-030323 (480-206656-8) and MW-07S-030323 (480-206656-12) have an E flag qualifier indicating the results are over the calibration range on the raw data. The actual amounts are within the calibration range; however, the E flag is generated based upon the bias corrected concentration. The LIMS system calculates a bias correction based on the recovery of the 1,4-Dioxane-d8 isotope.

Method 8270D SIM ID: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-22-030223 (480-206656-3). Elevated reporting limits (RLs) are provided.

Job ID: 480-206656-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

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

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

Detection Summary

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: TMW-02-030223 — Lab Sample ID: 480-206656-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	75		20	16	ug/L	20		8260C	Total/NA
1,1-Dichloroethane	580		20	7.6	ug/L	20		8260C	Total/NA
Chloroethane	84		20	6.4	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	360		20	16	ug/L	20		8260C	Total/NA
Ethylbenzene	29		20	15	ug/L	20		8260C	Total/NA
Toluene	62		20	10	ug/L	20		8260C	Total/NA
Vinyl chloride	350		20	18	ug/L	20		8260C	Total/NA
Xylenes, Total	62		40	13	ug/L	20		8260C	Total/NA

Client Sample ID: MW-21-030223 — Lab Sample ID: 480-206656-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	190		80	66	ug/L	80		8260C	Total/NA
1,1-Dichloroethane	7600		80	30	ug/L	80		8260C	Total/NA
1,1-Dichloroethene	52	J	80	23	ug/L	80		8260C	Total/NA
1,2-Dichloroethane	130		80	17	ug/L	80		8260C	Total/NA
Chloroethane	600		80	26	ug/L	80		8260C	Total/NA
Chloroform	27	J	80	27	ug/L	80		8260C	Total/NA
cis-1,2-Dichloroethene	12000	E	80	65	ug/L	80		8260C	Total/NA
Ethylbenzene	270		80	59	ug/L	80		8260C	Total/NA
Toluene	560		80	41	ug/L	80		8260C	Total/NA
Vinyl chloride	3700		80	72	ug/L	80		8260C	Total/NA
Xylenes, Total	550		160	53	ug/L	80		8260C	Total/NA
1,1-Dichloroethane - DL	7500		400	150	ug/L	400		8260C	Total/NA
1,2-Dichloroethane - DL	140	J	400	84	ug/L	400		8260C	Total/NA
Chloroethane - DL	630		400	130	ug/L	400		8260C	Total/NA
cis-1,2-Dichloroethene - DL	11000		400	320	ug/L	400		8260C	Total/NA
Toluene - DL	560		400	200	ug/L	400		8260C	Total/NA
Vinyl chloride - DL	3700		400	360	ug/L	400		8260C	Total/NA
Xylenes, Total - DL	420	J	800	260	ug/L	400		8260C	Total/NA

Client Sample ID: MW-22-030223 — Lab Sample ID: 480-206656-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	13000		500	190	ug/L	500		8260C	Total/NA
1,2-Dichloroethane	300	J	500	110	ug/L	500		8260C	Total/NA
Chloroethane	7900		500	160	ug/L	500		8260C	Total/NA
1,4-Dioxane	1500		20	10	ug/L	100		8270D SIM ID	Total/NA

Client Sample ID: TMW-20-030323 — Lab Sample ID: 480-206656-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	39000		400	150	ug/L	400		8260C	Total/NA
Chloroethane	11000		400	130	ug/L	400		8260C	Total/NA

Client Sample ID: PTMW-01-030323 — Lab Sample ID: 480-206656-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5900		130	48	ug/L	125		8260C	Total/NA
Chloroethane	7900		130	40	ug/L	125		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: MW-24-030323 — Lab Sample ID: 480-206656-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.2		1.0	0.38	ug/L	1		8260C	Total/NA
Acetone	3.4	J	10	3.0	ug/L	1		8260C	Total/NA
Chloroethane	3.0		1.0	0.32	ug/L	1		8260C	Total/NA

Client Sample ID: MW-06S-030323 — Lab Sample ID: 480-206656-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	34		4.0	1.5	ug/L	4		8260C	Total/NA
1,1-Dichloroethene	1.8	J	4.0	1.2	ug/L	4		8260C	Total/NA
Chloroethane	130		4.0	1.3	ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene	21		4.0	3.2	ug/L	4		8260C	Total/NA
Vinyl chloride	25		4.0	3.6	ug/L	4		8260C	Total/NA
1,4-Dioxane	9.3		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-23-030323 — Lab Sample ID: 480-206656-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.3		1.0	0.38	ug/L	1		8260C	Total/NA
Chloroethane	1.7		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	65		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	13		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	21	E	0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-11R-030323 — Lab Sample ID: 480-206656-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.8		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-10-030323 — Lab Sample ID: 480-206656-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	18		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-09-030323 — Lab Sample ID: 480-206656-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.7		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-07S-030323 — Lab Sample ID: 480-206656-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	16		5.0	1.9	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene	150		5.0	4.1	ug/L	5		8260C	Total/NA
Vinyl chloride	300		5.0	4.5	ug/L	5		8260C	Total/NA
1,4-Dioxane	29	E	0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: TB-01-030323 — Lab Sample ID: 480-206656-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: TMW-02-030223
Lab Sample ID: 480-206656-1
Date Collected: 03/02/23 13:56
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**75**		20	16	ug/L			03/08/23 12:27	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			03/08/23 12:27	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			03/08/23 12:27	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			03/08/23 12:27	20
1,1-Dichloroethane	**580**		20	7.6	ug/L			03/08/23 12:27	20
1,1-Dichloroethene	ND		20	5.8	ug/L			03/08/23 12:27	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			03/08/23 12:27	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			03/08/23 12:27	20
1,2-Dichlorobenzene	ND		20	16	ug/L			03/08/23 12:27	20
1,2-Dichloroethane	ND		20	4.2	ug/L			03/08/23 12:27	20
1,2-Dichloropropane	ND		20	14	ug/L			03/08/23 12:27	20
1,3-Dichlorobenzene	ND		20	16	ug/L			03/08/23 12:27	20
1,4-Dichlorobenzene	ND		20	17	ug/L			03/08/23 12:27	20
2-Butanone (MEK)	ND		200	26	ug/L			03/08/23 12:27	20
2-Hexanone	ND		100	25	ug/L			03/08/23 12:27	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			03/08/23 12:27	20
Acetone	ND		200	60	ug/L			03/08/23 12:27	20
Benzene	ND		20	8.2	ug/L			03/08/23 12:27	20
Bromodichloromethane	ND		20	7.8	ug/L			03/08/23 12:27	20
Bromoform	ND		20	5.2	ug/L			03/08/23 12:27	20
Bromomethane	ND		20	14	ug/L			03/08/23 12:27	20
Carbon disulfide	ND		20	3.8	ug/L			03/08/23 12:27	20
Carbon tetrachloride	ND		20	5.4	ug/L			03/08/23 12:27	20
Chlorobenzene	ND		20	15	ug/L			03/08/23 12:27	20
Dibromochloromethane	ND		20	6.4	ug/L			03/08/23 12:27	20
Chloroethane	**84**		20	6.4	ug/L			03/08/23 12:27	20
Chloroform	ND		20	6.8	ug/L			03/08/23 12:27	20
Chloromethane	ND		20	7.0	ug/L			03/08/23 12:27	20
cis-1,2-Dichloroethene	**360**		20	16	ug/L			03/08/23 12:27	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			03/08/23 12:27	20
Cyclohexane	ND		20	3.6	ug/L			03/08/23 12:27	20
Dichlorodifluoromethane	ND		20	14	ug/L			03/08/23 12:27	20
Ethylbenzene	**29**		20	15	ug/L			03/08/23 12:27	20
1,2-Dibromoethane	ND		20	15	ug/L			03/08/23 12:27	20
Isopropylbenzene	ND		20	16	ug/L			03/08/23 12:27	20
Methyl acetate	ND		50	26	ug/L			03/08/23 12:27	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			03/08/23 12:27	20
Methylcyclohexane	ND		20	3.2	ug/L			03/08/23 12:27	20
Methylene Chloride	ND		20	8.8	ug/L			03/08/23 12:27	20
Styrene	ND		20	15	ug/L			03/08/23 12:27	20
Tetrachloroethene	ND		20	7.2	ug/L			03/08/23 12:27	20
Toluene	**62**		20	10	ug/L			03/08/23 12:27	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			03/08/23 12:27	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			03/08/23 12:27	20
Trichloroethene	ND		20	9.2	ug/L			03/08/23 12:27	20
Trichlorofluoromethane	ND		20	18	ug/L			03/08/23 12:27	20
Vinyl chloride	**350**		20	18	ug/L			03/08/23 12:27	20
Xylenes, Total	**62**		40	13	ug/L			03/08/23 12:27	20

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: TMW-02-030223
Lab Sample ID: 480-206656-1
Date Collected: 03/02/23 13:56
Matrix: Water
Date Received: 03/04/23 11:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/08/23 12:27*	*20*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*03/08/23 12:27*	*20*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*03/08/23 12:27*	*20*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*03/08/23 12:27*	*20*

Client Sample ID: MW-21-030223
Lab Sample ID: 480-206656-2
Date Collected: 03/02/23 14:30
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**190**		80	66	ug/L			03/07/23 14:21	80
1,1,2,2-Tetrachloroethane	ND		80	17	ug/L			03/07/23 14:21	80
1,1,2-Trichloroethane	ND		80	18	ug/L			03/07/23 14:21	80
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		80	25	ug/L			03/07/23 14:21	80
1,1-Dichloroethane	**7600**		80	30	ug/L			03/07/23 14:21	80
1,1-Dichloroethene	**52**	**J**	80	23	ug/L			03/07/23 14:21	80
1,2,4-Trichlorobenzene	ND		80	33	ug/L			03/07/23 14:21	80
1,2-Dibromo-3-Chloropropane	ND		80	31	ug/L			03/07/23 14:21	80
1,2-Dichlorobenzene	ND		80	63	ug/L			03/07/23 14:21	80
1,2-Dichloroethane	**130**		80	17	ug/L			03/07/23 14:21	80
1,2-Dichloropropane	ND		80	58	ug/L			03/07/23 14:21	80
1,3-Dichlorobenzene	ND		80	62	ug/L			03/07/23 14:21	80
1,4-Dichlorobenzene	ND		80	67	ug/L			03/07/23 14:21	80
2-Butanone (MEK)	ND		800	110	ug/L			03/07/23 14:21	80
2-Hexanone	ND		400	99	ug/L			03/07/23 14:21	80
4-Methyl-2-pentanone (MIBK)	ND		400	170	ug/L			03/07/23 14:21	80
Acetone	ND		800	240	ug/L			03/07/23 14:21	80
Benzene	ND		80	33	ug/L			03/07/23 14:21	80
Bromodichloromethane	ND		80	31	ug/L			03/07/23 14:21	80
Bromoform	ND		80	21	ug/L			03/07/23 14:21	80
Bromomethane	ND		80	55	ug/L			03/07/23 14:21	80
Carbon disulfide	ND		80	15	ug/L			03/07/23 14:21	80
Carbon tetrachloride	ND		80	22	ug/L			03/07/23 14:21	80
Chlorobenzene	ND		80	60	ug/L			03/07/23 14:21	80
Dibromochloromethane	ND		80	26	ug/L			03/07/23 14:21	80
Chloroethane	**600**		80	26	ug/L			03/07/23 14:21	80
Chloroform	**27**	**J**	80	27	ug/L			03/07/23 14:21	80
Chloromethane	ND		80	28	ug/L			03/07/23 14:21	80
cis-1,2-Dichloroethene	**12000**	**E**	80	65	ug/L			03/07/23 14:21	80
cis-1,3-Dichloropropene	ND		80	29	ug/L			03/07/23 14:21	80
Cyclohexane	ND		80	14	ug/L			03/07/23 14:21	80
Dichlorodifluoromethane	ND		80	54	ug/L			03/07/23 14:21	80
Ethylbenzene	**270**		80	59	ug/L			03/07/23 14:21	80
1,2-Dibromoethane	ND		80	58	ug/L			03/07/23 14:21	80
Isopropylbenzene	ND		80	63	ug/L			03/07/23 14:21	80
Methyl acetate	ND		200	100	ug/L			03/07/23 14:21	80
Methyl tert-butyl ether	ND		80	13	ug/L			03/07/23 14:21	80
Methylcyclohexane	ND		80	13	ug/L			03/07/23 14:21	80

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: MW-21-030223
Lab Sample ID: 480-206656-2
Date Collected: 03/02/23 14:30
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		80	35	ug/L			03/07/23 14:21	80
Styrene	ND		80	58	ug/L			03/07/23 14:21	80
Tetrachloroethene	ND		80	29	ug/L			03/07/23 14:21	80
Toluene	**560**		80	41	ug/L			03/07/23 14:21	80
trans-1,2-Dichloroethene	ND		80	72	ug/L			03/07/23 14:21	80
trans-1,3-Dichloropropene	ND		80	30	ug/L			03/07/23 14:21	80
Trichloroethene	ND		80	37	ug/L			03/07/23 14:21	80
Trichlorofluoromethane	ND		80	70	ug/L			03/07/23 14:21	80
Vinyl chloride	**3700**		80	72	ug/L			03/07/23 14:21	80
Xylenes, Total	**550**		160	53	ug/L			03/07/23 14:21	80

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/07/23 14:21*	*80*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*03/07/23 14:21*	*80*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*03/07/23 14:21*	*80*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*03/07/23 14:21*	*80*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		400	330	ug/L			03/08/23 12:49	400
1,1,2,2-Tetrachloroethane	ND		400	84	ug/L			03/08/23 12:49	400
1,1,2-Trichloroethane	ND		400	92	ug/L			03/08/23 12:49	400
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		400	120	ug/L			03/08/23 12:49	400
1,1-Dichloroethane	**7500**		400	150	ug/L			03/08/23 12:49	400
1,1-Dichloroethene	ND		400	120	ug/L			03/08/23 12:49	400
1,2,4-Trichlorobenzene	ND		400	160	ug/L			03/08/23 12:49	400
1,2-Dibromo-3-Chloropropane	ND		400	160	ug/L			03/08/23 12:49	400
1,2-Dichlorobenzene	ND		400	320	ug/L			03/08/23 12:49	400
1,2-Dichloroethane	**140**	**J**	400	84	ug/L			03/08/23 12:49	400
1,2-Dichloropropane	ND		400	290	ug/L			03/08/23 12:49	400
1,3-Dichlorobenzene	ND		400	310	ug/L			03/08/23 12:49	400
1,4-Dichlorobenzene	ND		400	340	ug/L			03/08/23 12:49	400
2-Butanone (MEK)	ND		4000	530	ug/L			03/08/23 12:49	400
2-Hexanone	ND		2000	500	ug/L			03/08/23 12:49	400
4-Methyl-2-pentanone (MIBK)	ND		2000	840	ug/L			03/08/23 12:49	400
Acetone	ND		4000	1200	ug/L			03/08/23 12:49	400
Benzene	ND		400	160	ug/L			03/08/23 12:49	400
Bromodichloromethane	ND		400	160	ug/L			03/08/23 12:49	400
Bromoform	ND		400	100	ug/L			03/08/23 12:49	400
Bromomethane	ND		400	280	ug/L			03/08/23 12:49	400
Carbon disulfide	ND		400	76	ug/L			03/08/23 12:49	400
Carbon tetrachloride	ND		400	110	ug/L			03/08/23 12:49	400
Chlorobenzene	ND		400	300	ug/L			03/08/23 12:49	400
Dibromochloromethane	ND		400	130	ug/L			03/08/23 12:49	400
Chloroethane	**630**		400	130	ug/L			03/08/23 12:49	400
Chloroform	ND		400	140	ug/L			03/08/23 12:49	400
Chloromethane	ND		400	140	ug/L			03/08/23 12:49	400
cis-1,2-Dichloroethene	**11000**		400	320	ug/L			03/08/23 12:49	400
cis-1,3-Dichloropropene	ND		400	140	ug/L			03/08/23 12:49	400

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: MW-21-030223
Lab Sample ID: 480-206656-2
Date Collected: 03/02/23 14:30
Matrix: Water
Date Received: 03/04/23 11:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		400	72	ug/L			03/08/23 12:49	400
Dichlorodifluoromethane	ND		400	270	ug/L			03/08/23 12:49	400
Ethylbenzene	ND		400	300	ug/L			03/08/23 12:49	400
1,2-Dibromoethane	ND		400	290	ug/L			03/08/23 12:49	400
Isopropylbenzene	ND		400	320	ug/L			03/08/23 12:49	400
Methyl acetate	ND		1000	520	ug/L			03/08/23 12:49	400
Methyl tert-butyl ether	ND		400	64	ug/L			03/08/23 12:49	400
Methylcyclohexane	ND		400	64	ug/L			03/08/23 12:49	400
Methylene Chloride	ND		400	180	ug/L			03/08/23 12:49	400
Styrene	ND		400	290	ug/L			03/08/23 12:49	400
Tetrachloroethene	ND		400	140	ug/L			03/08/23 12:49	400
Toluene	**560**		400	200	ug/L			03/08/23 12:49	400
trans-1,2-Dichloroethene	ND		400	360	ug/L			03/08/23 12:49	400
trans-1,3-Dichloropropene	ND		400	150	ug/L			03/08/23 12:49	400
Trichloroethene	ND		400	180	ug/L			03/08/23 12:49	400
Trichlorofluoromethane	ND		400	350	ug/L			03/08/23 12:49	400
Vinyl chloride	**3700**		400	360	ug/L			03/08/23 12:49	400
Xylenes, Total	**420**	**J**	800	260	ug/L			03/08/23 12:49	400

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/08/23 12:49*	*400*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*03/08/23 12:49*	*400*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*03/08/23 12:49*	*400*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*03/08/23 12:49*	*400*

Client Sample ID: MW-22-030223
Lab Sample ID: 480-206656-3
Date Collected: 03/02/23 15:00
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		500	410	ug/L			03/07/23 14:44	500
1,1,2,2-Tetrachloroethane	ND		500	110	ug/L			03/07/23 14:44	500
1,1,2-Trichloroethane	ND		500	120	ug/L			03/07/23 14:44	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	160	ug/L			03/07/23 14:44	500
1,1-Dichloroethane	**13000**		500	190	ug/L			03/07/23 14:44	500
1,1-Dichloroethene	ND		500	150	ug/L			03/07/23 14:44	500
1,2,4-Trichlorobenzene	ND		500	210	ug/L			03/07/23 14:44	500
1,2-Dibromo-3-Chloropropane	ND		500	200	ug/L			03/07/23 14:44	500
1,2-Dichlorobenzene	ND		500	400	ug/L			03/07/23 14:44	500
1,2-Dichloroethane	**300**	**J**	500	110	ug/L			03/07/23 14:44	500
1,2-Dichloropropane	ND		500	360	ug/L			03/07/23 14:44	500
1,3-Dichlorobenzene	ND		500	390	ug/L			03/07/23 14:44	500
1,4-Dichlorobenzene	ND		500	420	ug/L			03/07/23 14:44	500
2-Butanone (MEK)	ND		5000	660	ug/L			03/07/23 14:44	500
2-Hexanone	ND		2500	620	ug/L			03/07/23 14:44	500
4-Methyl-2-pentanone (MIBK)	ND		2500	1100	ug/L			03/07/23 14:44	500
Acetone	ND		5000	1500	ug/L			03/07/23 14:44	500
Benzene	ND		500	210	ug/L			03/07/23 14:44	500

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: MW-22-030223
Lab Sample ID: 480-206656-3
Date Collected: 03/02/23 15:00
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		500	200	ug/L			03/07/23 14:44	500
Bromoform	ND		500	130	ug/L			03/07/23 14:44	500
Bromomethane	ND		500	350	ug/L			03/07/23 14:44	500
Carbon disulfide	ND		500	95	ug/L			03/07/23 14:44	500
Carbon tetrachloride	ND		500	140	ug/L			03/07/23 14:44	500
Chlorobenzene	ND		500	380	ug/L			03/07/23 14:44	500
Dibromochloromethane	ND		500	160	ug/L			03/07/23 14:44	500
Chloroethane	**7900**		500	160	ug/L			03/07/23 14:44	500
Chloroform	ND		500	170	ug/L			03/07/23 14:44	500
Chloromethane	ND		500	180	ug/L			03/07/23 14:44	500
cis-1,2-Dichloroethene	ND		500	410	ug/L			03/07/23 14:44	500
cis-1,3-Dichloropropene	ND		500	180	ug/L			03/07/23 14:44	500
Cyclohexane	ND		500	90	ug/L			03/07/23 14:44	500
Dichlorodifluoromethane	ND		500	340	ug/L			03/07/23 14:44	500
Ethylbenzene	ND		500	370	ug/L			03/07/23 14:44	500
1,2-Dibromoethane	ND		500	370	ug/L			03/07/23 14:44	500
Isopropylbenzene	ND		500	400	ug/L			03/07/23 14:44	500
Methyl acetate	ND		1300	650	ug/L			03/07/23 14:44	500
Methyl tert-butyl ether	ND		500	80	ug/L			03/07/23 14:44	500
Methylcyclohexane	ND		500	80	ug/L			03/07/23 14:44	500
Methylene Chloride	ND		500	220	ug/L			03/07/23 14:44	500
Styrene	ND		500	370	ug/L			03/07/23 14:44	500
Tetrachloroethene	ND		500	180	ug/L			03/07/23 14:44	500
Toluene	ND		500	260	ug/L			03/07/23 14:44	500
trans-1,2-Dichloroethene	ND		500	450	ug/L			03/07/23 14:44	500
trans-1,3-Dichloropropene	ND		500	190	ug/L			03/07/23 14:44	500
Trichloroethene	ND		500	230	ug/L			03/07/23 14:44	500
Trichlorofluoromethane	ND		500	440	ug/L			03/07/23 14:44	500
Vinyl chloride	ND		500	450	ug/L			03/07/23 14:44	500
Xylenes, Total	ND		1000	330	ug/L			03/07/23 14:44	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/07/23 14:44*	*500*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*03/07/23 14:44*	*500*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*03/07/23 14:44*	*500*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*03/07/23 14:44*	*500*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1500**		20	10	ug/L		03/07/23 08:19	03/09/23 10:29	100

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*46*		*15 - 110*	*03/07/23 08:19*	*03/09/23 10:29*	*100*

Client Sample Results

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: TMW-20-030323
Lab Sample ID: 480-206656-4
Date Collected: 03/03/23 07:45
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		400	330	ug/L			03/07/23 15:07	400
1,1,2,2-Tetrachloroethane	ND		400	84	ug/L			03/07/23 15:07	400
1,1,2-Trichloroethane	ND		400	92	ug/L			03/07/23 15:07	400
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		400	120	ug/L			03/07/23 15:07	400
1,1-Dichloroethane	**39000**		400	150	ug/L			03/07/23 15:07	400
1,1-Dichloroethene	ND		400	120	ug/L			03/07/23 15:07	400
1,2,4-Trichlorobenzene	ND		400	160	ug/L			03/07/23 15:07	400
1,2-Dibromo-3-Chloropropane	ND		400	160	ug/L			03/07/23 15:07	400
1,2-Dichlorobenzene	ND		400	320	ug/L			03/07/23 15:07	400
1,2-Dichloroethane	ND		400	84	ug/L			03/07/23 15:07	400
1,2-Dichloropropane	ND		400	290	ug/L			03/07/23 15:07	400
1,3-Dichlorobenzene	ND		400	310	ug/L			03/07/23 15:07	400
1,4-Dichlorobenzene	ND		400	340	ug/L			03/07/23 15:07	400
2-Butanone (MEK)	ND		4000	530	ug/L			03/07/23 15:07	400
2-Hexanone	ND		2000	500	ug/L			03/07/23 15:07	400
4-Methyl-2-pentanone (MIBK)	ND		2000	840	ug/L			03/07/23 15:07	400
Acetone	ND		4000	1200	ug/L			03/07/23 15:07	400
Benzene	ND		400	160	ug/L			03/07/23 15:07	400
Bromodichloromethane	ND		400	160	ug/L			03/07/23 15:07	400
Bromoform	ND		400	100	ug/L			03/07/23 15:07	400
Bromomethane	ND		400	280	ug/L			03/07/23 15:07	400
Carbon disulfide	ND		400	76	ug/L			03/07/23 15:07	400
Carbon tetrachloride	ND		400	110	ug/L			03/07/23 15:07	400
Chlorobenzene	ND		400	300	ug/L			03/07/23 15:07	400
Dibromochloromethane	ND		400	130	ug/L			03/07/23 15:07	400
Chloroethane	**11000**		400	130	ug/L			03/07/23 15:07	400
Chloroform	ND		400	140	ug/L			03/07/23 15:07	400
Chloromethane	ND		400	140	ug/L			03/07/23 15:07	400
cis-1,2-Dichloroethene	ND		400	320	ug/L			03/07/23 15:07	400
cis-1,3-Dichloropropene	ND		400	140	ug/L			03/07/23 15:07	400
Cyclohexane	ND		400	72	ug/L			03/07/23 15:07	400
Dichlorodifluoromethane	ND		400	270	ug/L			03/07/23 15:07	400
Ethylbenzene	ND		400	300	ug/L			03/07/23 15:07	400
1,2-Dibromoethane	ND		400	290	ug/L			03/07/23 15:07	400
Isopropylbenzene	ND		400	320	ug/L			03/07/23 15:07	400
Methyl acetate	ND		1000	520	ug/L			03/07/23 15:07	400
Methyl tert-butyl ether	ND		400	64	ug/L			03/07/23 15:07	400
Methylcyclohexane	ND		400	64	ug/L			03/07/23 15:07	400
Methylene Chloride	ND		400	180	ug/L			03/07/23 15:07	400
Styrene	ND		400	290	ug/L			03/07/23 15:07	400
Tetrachloroethene	ND		400	140	ug/L			03/07/23 15:07	400
Toluene	ND		400	200	ug/L			03/07/23 15:07	400
trans-1,2-Dichloroethene	ND		400	360	ug/L			03/07/23 15:07	400
trans-1,3-Dichloropropene	ND		400	150	ug/L			03/07/23 15:07	400
Trichloroethene	ND		400	180	ug/L			03/07/23 15:07	400
Trichlorofluoromethane	ND		400	350	ug/L			03/07/23 15:07	400
Vinyl chloride	ND		400	360	ug/L			03/07/23 15:07	400
Xylenes, Total	ND		800	260	ug/L			03/07/23 15:07	400

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: TMW-20-030323
Lab Sample ID: 480-206656-4
Date Collected: 03/03/23 07:45
Matrix: Water
Date Received: 03/04/23 11:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/07/23 15:07*	*400*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*03/07/23 15:07*	*400*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*03/07/23 15:07*	*400*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*03/07/23 15:07*	*400*

Client Sample ID: PTMW-01-030323
Lab Sample ID: 480-206656-5
Date Collected: 03/03/23 08:50
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		130	100	ug/L			03/07/23 15:30	125
1,1,2,2-Tetrachloroethane	ND		130	26	ug/L			03/07/23 15:30	125
1,1,2-Trichloroethane	ND		130	29	ug/L			03/07/23 15:30	125
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		130	39	ug/L			03/07/23 15:30	125
1,1-Dichloroethane	**5900**		130	48	ug/L			03/07/23 15:30	125
1,1-Dichloroethene	ND		130	36	ug/L			03/07/23 15:30	125
1,2,4-Trichlorobenzene	ND		130	51	ug/L			03/07/23 15:30	125
1,2-Dibromo-3-Chloropropane	ND		130	49	ug/L			03/07/23 15:30	125
1,2-Dichlorobenzene	ND		130	99	ug/L			03/07/23 15:30	125
1,2-Dichloroethane	ND		130	26	ug/L			03/07/23 15:30	125
1,2-Dichloropropane	ND		130	90	ug/L			03/07/23 15:30	125
1,3-Dichlorobenzene	ND		130	98	ug/L			03/07/23 15:30	125
1,4-Dichlorobenzene	ND		130	110	ug/L			03/07/23 15:30	125
2-Butanone (MEK)	ND		1300	170	ug/L			03/07/23 15:30	125
2-Hexanone	ND		630	160	ug/L			03/07/23 15:30	125
4-Methyl-2-pentanone (MIBK)	ND		630	260	ug/L			03/07/23 15:30	125
Acetone	ND		1300	380	ug/L			03/07/23 15:30	125
Benzene	ND		130	51	ug/L			03/07/23 15:30	125
Bromodichloromethane	ND		130	49	ug/L			03/07/23 15:30	125
Bromoform	ND		130	33	ug/L			03/07/23 15:30	125
Bromomethane	ND		130	86	ug/L			03/07/23 15:30	125
Carbon disulfide	ND		130	24	ug/L			03/07/23 15:30	125
Carbon tetrachloride	ND		130	34	ug/L			03/07/23 15:30	125
Chlorobenzene	ND		130	94	ug/L			03/07/23 15:30	125
Dibromochloromethane	ND		130	40	ug/L			03/07/23 15:30	125
Chloroethane	**7900**		130	40	ug/L			03/07/23 15:30	125
Chloroform	ND		130	43	ug/L			03/07/23 15:30	125
Chloromethane	ND		130	44	ug/L			03/07/23 15:30	125
cis-1,2-Dichloroethene	ND		130	100	ug/L			03/07/23 15:30	125
cis-1,3-Dichloropropene	ND		130	45	ug/L			03/07/23 15:30	125
Cyclohexane	ND		130	23	ug/L			03/07/23 15:30	125
Dichlorodifluoromethane	ND		130	85	ug/L			03/07/23 15:30	125
Ethylbenzene	ND		130	93	ug/L			03/07/23 15:30	125
1,2-Dibromoethane	ND		130	91	ug/L			03/07/23 15:30	125
Isopropylbenzene	ND		130	99	ug/L			03/07/23 15:30	125
Methyl acetate	ND		310	160	ug/L			03/07/23 15:30	125
Methyl tert-butyl ether	ND		130	20	ug/L			03/07/23 15:30	125
Methylcyclohexane	ND		130	20	ug/L			03/07/23 15:30	125

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: PTMW-01-030323
Lab Sample ID: 480-206656-5
Date Collected: 03/03/23 08:50
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		130	55	ug/L			03/07/23 15:30	125
Styrene	ND		130	91	ug/L			03/07/23 15:30	125
Tetrachloroethene	ND		130	45	ug/L			03/07/23 15:30	125
Toluene	ND		130	64	ug/L			03/07/23 15:30	125
trans-1,2-Dichloroethene	ND		130	110	ug/L			03/07/23 15:30	125
trans-1,3-Dichloropropene	ND		130	46	ug/L			03/07/23 15:30	125
Trichloroethene	ND		130	58	ug/L			03/07/23 15:30	125
Trichlorofluoromethane	ND		130	110	ug/L			03/07/23 15:30	125
Vinyl chloride	ND		130	110	ug/L			03/07/23 15:30	125
Xylenes, Total	ND		250	83	ug/L			03/07/23 15:30	125

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/07/23 15:30*	*125*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*03/07/23 15:30*	*125*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*03/07/23 15:30*	*125*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*03/07/23 15:30*	*125*

Client Sample ID: MW-24-030323
Lab Sample ID: 480-206656-6
Date Collected: 03/03/23 09:50
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/07/23 15:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/07/23 15:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/07/23 15:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/07/23 15:53	1
1,1-Dichloroethane	**3.2**		1.0	0.38	ug/L			03/07/23 15:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/07/23 15:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/07/23 15:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/07/23 15:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/07/23 15:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/07/23 15:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/07/23 15:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/07/23 15:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/07/23 15:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/07/23 15:53	1
2-Hexanone	ND		5.0	1.2	ug/L			03/07/23 15:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/07/23 15:53	1
Acetone	**3.4**	**J**	10	3.0	ug/L			03/07/23 15:53	1
Benzene	ND		1.0	0.41	ug/L			03/07/23 15:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/07/23 15:53	1
Bromoform	ND		1.0	0.26	ug/L			03/07/23 15:53	1
Bromomethane	ND		1.0	0.69	ug/L			03/07/23 15:53	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/07/23 15:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/07/23 15:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/07/23 15:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/07/23 15:53	1
Chloroethane	**3.0**		1.0	0.32	ug/L			03/07/23 15:53	1

Client Sample ID: MW-24-030323
Lab Sample ID: 480-206656-6

Date Collected: 03/03/23 09:50
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.34	ug/L			03/07/23 15:53	1
Chloromethane	ND		1.0	0.35	ug/L			03/07/23 15:53	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/07/23 15:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/07/23 15:53	1
Cyclohexane	ND		1.0	0.18	ug/L			03/07/23 15:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/07/23 15:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/07/23 15:53	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/07/23 15:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/07/23 15:53	1
Methyl acetate	ND		2.5	1.3	ug/L			03/07/23 15:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/07/23 15:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/07/23 15:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/07/23 15:53	1
Styrene	ND		1.0	0.73	ug/L			03/07/23 15:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/07/23 15:53	1
Toluene	ND		1.0	0.51	ug/L			03/07/23 15:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/07/23 15:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/07/23 15:53	1
Trichloroethene	ND		1.0	0.46	ug/L			03/07/23 15:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/07/23 15:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/07/23 15:53	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/07/23 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/07/23 15:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*03/07/23 15:53*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*03/07/23 15:53*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*03/07/23 15:53*	*1*

Client Sample ID: MW-06S-030323
Lab Sample ID: 480-206656-7

Date Collected: 03/03/23 10:26
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			03/08/23 13:12	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			03/08/23 13:12	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			03/08/23 13:12	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			03/08/23 13:12	4
1,1-Dichloroethane	**34**		4.0	1.5	ug/L			03/08/23 13:12	4
1,1-Dichloroethene	**1.8**	**J**	4.0	1.2	ug/L			03/08/23 13:12	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			03/08/23 13:12	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			03/08/23 13:12	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			03/08/23 13:12	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			03/08/23 13:12	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			03/08/23 13:12	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			03/08/23 13:12	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			03/08/23 13:12	4
2-Butanone (MEK)	ND		40	5.3	ug/L			03/08/23 13:12	4

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: MW-06S-030323
Lab Sample ID: 480-206656-7
Date Collected: 03/03/23 10:26
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		20	5.0	ug/L			03/08/23 13:12	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			03/08/23 13:12	4
Acetone	ND		40	12	ug/L			03/08/23 13:12	4
Benzene	ND		4.0	1.6	ug/L			03/08/23 13:12	4
Bromodichloromethane	ND		4.0	1.6	ug/L			03/08/23 13:12	4
Bromoform	ND		4.0	1.0	ug/L			03/08/23 13:12	4
Bromomethane	ND		4.0	2.8	ug/L			03/08/23 13:12	4
Carbon disulfide	ND		4.0	0.76	ug/L			03/08/23 13:12	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			03/08/23 13:12	4
Chlorobenzene	ND		4.0	3.0	ug/L			03/08/23 13:12	4
Dibromochloromethane	ND		4.0	1.3	ug/L			03/08/23 13:12	4
Chloroethane	**130**		4.0	1.3	ug/L			03/08/23 13:12	4
Chloroform	ND		4.0	1.4	ug/L			03/08/23 13:12	4
Chloromethane	ND		4.0	1.4	ug/L			03/08/23 13:12	4
cis-1,2-Dichloroethene	**21**		4.0	3.2	ug/L			03/08/23 13:12	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			03/08/23 13:12	4
Cyclohexane	ND		4.0	0.72	ug/L			03/08/23 13:12	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			03/08/23 13:12	4
Ethylbenzene	ND		4.0	3.0	ug/L			03/08/23 13:12	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			03/08/23 13:12	4
Isopropylbenzene	ND		4.0	3.2	ug/L			03/08/23 13:12	4
Methyl acetate	ND		10	5.2	ug/L			03/08/23 13:12	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			03/08/23 13:12	4
Methylcyclohexane	ND		4.0	0.64	ug/L			03/08/23 13:12	4
Methylene Chloride	ND		4.0	1.8	ug/L			03/08/23 13:12	4
Styrene	ND		4.0	2.9	ug/L			03/08/23 13:12	4
Tetrachloroethene	ND		4.0	1.4	ug/L			03/08/23 13:12	4
Toluene	ND		4.0	2.0	ug/L			03/08/23 13:12	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			03/08/23 13:12	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			03/08/23 13:12	4
Trichloroethene	ND		4.0	1.8	ug/L			03/08/23 13:12	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			03/08/23 13:12	4
Vinyl chloride	**25**		4.0	3.6	ug/L			03/08/23 13:12	4
Xylenes, Total	ND		8.0	2.6	ug/L			03/08/23 13:12	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/08/23 13:12*	*4*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*03/08/23 13:12*	*4*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*03/08/23 13:12*	*4*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*03/08/23 13:12*	*4*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.3**		0.20	0.10	ug/L		03/07/23 08:19	03/08/23 16:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*15 - 110*	*03/07/23 08:19*	*03/08/23 16:55*	*1*

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: MW-23-030323
Lab Sample ID: 480-206656-8
Date Collected: 03/03/23 11:00
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/08/23 13:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/08/23 13:35	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/08/23 13:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/08/23 13:35	1
1,1-Dichloroethane	**3.3**		1.0	0.38	ug/L			03/08/23 13:35	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/08/23 13:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/08/23 13:35	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/08/23 13:35	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/08/23 13:35	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/08/23 13:35	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/08/23 13:35	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/08/23 13:35	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/08/23 13:35	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/08/23 13:35	1
2-Hexanone	ND		5.0	1.2	ug/L			03/08/23 13:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/08/23 13:35	1
Acetone	ND		10	3.0	ug/L			03/08/23 13:35	1
Benzene	ND		1.0	0.41	ug/L			03/08/23 13:35	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/08/23 13:35	1
Bromoform	ND		1.0	0.26	ug/L			03/08/23 13:35	1
Bromomethane	ND		1.0	0.69	ug/L			03/08/23 13:35	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/08/23 13:35	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/08/23 13:35	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/08/23 13:35	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/08/23 13:35	1
Chloroethane	**1.7**		1.0	0.32	ug/L			03/08/23 13:35	1
Chloroform	ND		1.0	0.34	ug/L			03/08/23 13:35	1
Chloromethane	ND		1.0	0.35	ug/L			03/08/23 13:35	1
cis-1,2-Dichloroethene	**65**		1.0	0.81	ug/L			03/08/23 13:35	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/08/23 13:35	1
Cyclohexane	ND		1.0	0.18	ug/L			03/08/23 13:35	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/08/23 13:35	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/08/23 13:35	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/08/23 13:35	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/08/23 13:35	1
Methyl acetate	ND		2.5	1.3	ug/L			03/08/23 13:35	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/08/23 13:35	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/08/23 13:35	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/08/23 13:35	1
Styrene	ND		1.0	0.73	ug/L			03/08/23 13:35	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/08/23 13:35	1
Toluene	ND		1.0	0.51	ug/L			03/08/23 13:35	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/08/23 13:35	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/08/23 13:35	1
Trichloroethene	ND		1.0	0.46	ug/L			03/08/23 13:35	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/08/23 13:35	1
Vinyl chloride	**13**		1.0	0.90	ug/L			03/08/23 13:35	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/08/23 13:35	1

Client Sample ID: MW-23-030323
Lab Sample ID: 480-206656-8
Date Collected: 03/03/23 11:00
Matrix: Water
Date Received: 03/04/23 11:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/08/23 13:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*03/08/23 13:35*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*03/08/23 13:35*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*03/08/23 13:35*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	21	E	0.20	0.10	ug/L		03/07/23 08:19	03/08/23 21:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*15 - 110*	*03/07/23 08:19*	*03/08/23 21:24*	*1*

Client Sample ID: MW-11R-030323
Lab Sample ID: 480-206656-9
Date Collected: 03/03/23 12:00
Matrix: Water
Date Received: 03/04/23 11:00

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.8		0.20	0.10	ug/L		03/07/23 08:19	03/08/23 21:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*15 - 110*	*03/07/23 08:19*	*03/08/23 21:46*	*1*

Client Sample ID: MW-10-030323
Lab Sample ID: 480-206656-10
Date Collected: 03/03/23 12:55
Matrix: Water
Date Received: 03/04/23 11:00

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	18		0.20	0.10	ug/L		03/07/23 08:19	03/08/23 22:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*34*		*15 - 110*	*03/07/23 08:19*	*03/08/23 22:09*	*1*

Client Sample ID: MW-09-030323
Lab Sample ID: 480-206656-11
Date Collected: 03/03/23 13:54
Matrix: Water
Date Received: 03/04/23 11:00

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.7		0.20	0.10	ug/L		03/07/23 08:19	03/08/23 22:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*15 - 110*	*03/07/23 08:19*	*03/08/23 22:31*	*1*

Client Sample ID: MW-07S-030323
Lab Sample ID: 480-206656-12
Date Collected: 03/03/23 14:22
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			03/07/23 14:35	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			03/07/23 14:35	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			03/07/23 14:35	5

Client: Ramboll US Corporation
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Job ID: 480-206656-1

Client Sample ID: MW-07S-030323
Date Collected: 03/03/23 14:22
Date Received: 03/04/23 11:00

Lab Sample ID: 480-206656-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			03/07/23 14:35	5
1,1-Dichloroethane	**16**		5.0	1.9	ug/L			03/07/23 14:35	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			03/07/23 14:35	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			03/07/23 14:35	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			03/07/23 14:35	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			03/07/23 14:35	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			03/07/23 14:35	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			03/07/23 14:35	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			03/07/23 14:35	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			03/07/23 14:35	5
2-Butanone (MEK)	ND	*+	50	6.6	ug/L			03/07/23 14:35	5
2-Hexanone	ND		25	6.2	ug/L			03/07/23 14:35	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			03/07/23 14:35	5
Acetone	ND		50	15	ug/L			03/07/23 14:35	5
Benzene	ND		5.0	2.1	ug/L			03/07/23 14:35	5
Bromodichloromethane	ND		5.0	2.0	ug/L			03/07/23 14:35	5
Bromoform	ND		5.0	1.3	ug/L			03/07/23 14:35	5
Bromomethane	ND	*1	5.0	3.5	ug/L			03/07/23 14:35	5
Carbon disulfide	ND		5.0	0.95	ug/L			03/07/23 14:35	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			03/07/23 14:35	5
Chlorobenzene	ND		5.0	3.8	ug/L			03/07/23 14:35	5
Dibromochloromethane	ND		5.0	1.6	ug/L			03/07/23 14:35	5
Chloroethane	ND		5.0	1.6	ug/L			03/07/23 14:35	5
Chloroform	ND		5.0	1.7	ug/L			03/07/23 14:35	5
Chloromethane	ND		5.0	1.8	ug/L			03/07/23 14:35	5
cis-1,2-Dichloroethene	**150**		5.0	4.1	ug/L			03/07/23 14:35	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			03/07/23 14:35	5
Cyclohexane	ND		5.0	0.90	ug/L			03/07/23 14:35	5
Dichlorodifluoromethane	ND	*+	5.0	3.4	ug/L			03/07/23 14:35	5
Ethylbenzene	ND		5.0	3.7	ug/L			03/07/23 14:35	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			03/07/23 14:35	5
Isopropylbenzene	ND		5.0	4.0	ug/L			03/07/23 14:35	5
Methyl acetate	ND		13	6.5	ug/L			03/07/23 14:35	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			03/07/23 14:35	5
Methylcyclohexane	ND		5.0	0.80	ug/L			03/07/23 14:35	5
Methylene Chloride	ND		5.0	2.2	ug/L			03/07/23 14:35	5
Styrene	ND		5.0	3.7	ug/L			03/07/23 14:35	5
Tetrachloroethene	ND		5.0	1.8	ug/L			03/07/23 14:35	5
Toluene	ND		5.0	2.6	ug/L			03/07/23 14:35	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			03/07/23 14:35	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			03/07/23 14:35	5
Trichloroethene	ND		5.0	2.3	ug/L			03/07/23 14:35	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			03/07/23 14:35	5
Vinyl chloride	**300**		5.0	4.5	ug/L			03/07/23 14:35	5
Xylenes, Total	ND		10	3.3	ug/L			03/07/23 14:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*80 - 120*		*03/07/23 14:35*	*5*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*03/07/23 14:35*	*5*

Client Sample ID: MW-07S-030323
Lab Sample ID: 480-206656-12

Date Collected: 03/03/23 14:22
Matrix: Water
Date Received: 03/04/23 11:00

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*03/07/23 14:35*	*5*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*03/07/23 14:35*	*5*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	29	E	0.20	0.10	ug/L		03/07/23 08:22	03/08/23 22:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*45*		*15 - 110*	*03/07/23 08:22*	*03/08/23 22:54*	*1*

Client Sample ID: TB-01-030323
Lab Sample ID: 480-206656-13

Date Collected: 03/03/23 00:00
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/07/23 14:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/07/23 14:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/07/23 14:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/07/23 14:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/07/23 14:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/07/23 14:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/07/23 14:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/07/23 14:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/07/23 14:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/07/23 14:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/07/23 14:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/07/23 14:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/07/23 14:59	1
2-Butanone (MEK)	ND	*+	10	1.3	ug/L			03/07/23 14:59	1
2-Hexanone	ND		5.0	1.2	ug/L			03/07/23 14:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/07/23 14:59	1
Acetone	ND		10	3.0	ug/L			03/07/23 14:59	1
Benzene	ND		1.0	0.41	ug/L			03/07/23 14:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/07/23 14:59	1
Bromoform	ND		1.0	0.26	ug/L			03/07/23 14:59	1
Bromomethane	ND	*1	1.0	0.69	ug/L			03/07/23 14:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/07/23 14:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/07/23 14:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/07/23 14:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/07/23 14:59	1
Chloroethane	ND		1.0	0.32	ug/L			03/07/23 14:59	1
Chloroform	ND		1.0	0.34	ug/L			03/07/23 14:59	1
Chloromethane	ND		1.0	0.35	ug/L			03/07/23 14:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/07/23 14:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/07/23 14:59	1
Cyclohexane	ND		1.0	0.18	ug/L			03/07/23 14:59	1
Dichlorodifluoromethane	ND	*+	1.0	0.68	ug/L			03/07/23 14:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/07/23 14:59	1

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: TB-01-030323
Lab Sample ID: 480-206656-13
Date Collected: 03/03/23 00:00
Matrix: Water
Date Received: 03/04/23 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/07/23 14:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/07/23 14:59	1
Methyl acetate	ND		2.5	1.3	ug/L			03/07/23 14:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/07/23 14:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/07/23 14:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/07/23 14:59	1
Styrene	ND		1.0	0.73	ug/L			03/07/23 14:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/07/23 14:59	1
Toluene	ND		1.0	0.51	ug/L			03/07/23 14:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/07/23 14:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/07/23 14:59	1
Trichloroethene	ND		1.0	0.46	ug/L			03/07/23 14:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/07/23 14:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/07/23 14:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/07/23 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/07/23 14:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*		*03/07/23 14:59*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*03/07/23 14:59*	*1*
Dibromofluoromethane (Surr)	*113*		*75 - 123*		*03/07/23 14:59*	*1*

Surrogate Summary

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-206656-1	TMW-02-030223	98	103	98	96
480-206656-2	MW-21-030223	100	102	98	100
480-206656-2 - DL	MW-21-030223	97	101	99	94
480-206656-3	MW-22-030223	97	103	98	102
480-206656-4	TMW-20-030323	100	106	95	102
480-206656-5	PTMW-01-030323	99	104	100	98
480-206656-6	MW-24-030323	99	99	97	95
480-206656-7	MW-06S-030323	98	102	98	96
480-206656-8	MW-23-030323	98	98	97	93
480-206656-12	MW-07S-030323	110	105	88	109
480-206656-13	TB-01-030323	98	110	92	113
LCS 480-660650/6	Lab Control Sample	93	108	93	114
LCS 480-660654/5	Lab Control Sample	98	98	98	94
LCS 480-660802/5	Lab Control Sample	98	98	99	93
LCSD 480-660650/7	Lab Control Sample Dup	92	109	90	115
MB 480-660650/9	Method Blank	92	109	88	113
MB 480-660654/7	Method Blank	98	107	96	100
MB 480-660802/7	Method Blank	94	91	92	93

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		DXE							
Lab Sample ID	Client Sample ID	(15-110)							
480-206656-3	MW-22-030223	46							
480-206656-7	MW-06S-030323	40							
480-206656-7 MS	MW-06S-030323	37							
480-206656-7 MSD	MW-06S-030323	36							
480-206656-8	MW-23-030323	39							
480-206656-9	MW-11R-030323	39							
480-206656-10	MW-10-030323	34							
480-206656-11	MW-09-030323	35							
480-206656-12	MW-07S-030323	45							
LCS 480-660656/2-A	Lab Control Sample	36							
MB 480-660656/1-A	Method Blank	33							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-660650/9
Matrix: Water
Analysis Batch: 660650

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-Trichloroethane	ND		1.0	0.82	ug/L			03/07/23 10:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/07/23 10:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/07/23 10:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/07/23 10:48	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/07/23 10:48	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/07/23 10:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/07/23 10:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/07/23 10:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/07/23 10:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/07/23 10:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/07/23 10:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/07/23 10:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/07/23 10:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/07/23 10:48	1
2-Hexanone	ND		5.0	1.2	ug/L			03/07/23 10:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/07/23 10:48	1
Acetone	ND		10	3.0	ug/L			03/07/23 10:48	1
Benzene	ND		1.0	0.41	ug/L			03/07/23 10:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/07/23 10:48	1
Bromoform	ND		1.0	0.26	ug/L			03/07/23 10:48	1
Bromomethane	ND		1.0	0.69	ug/L			03/07/23 10:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/07/23 10:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/07/23 10:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/07/23 10:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/07/23 10:48	1
Chloroethane	ND		1.0	0.32	ug/L			03/07/23 10:48	1
Chloroform	ND		1.0	0.34	ug/L			03/07/23 10:48	1
Chloromethane	ND		1.0	0.35	ug/L			03/07/23 10:48	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/07/23 10:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/07/23 10:48	1
Cyclohexane	ND		1.0	0.18	ug/L			03/07/23 10:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/07/23 10:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/07/23 10:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/07/23 10:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/07/23 10:48	1
Methyl acetate	ND		2.5	1.3	ug/L			03/07/23 10:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/07/23 10:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/07/23 10:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/07/23 10:48	1
Styrene	ND		1.0	0.73	ug/L			03/07/23 10:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/07/23 10:48	1
Toluene	ND		1.0	0.51	ug/L			03/07/23 10:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/07/23 10:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/07/23 10:48	1
Trichloroethene	ND		1.0	0.46	ug/L			03/07/23 10:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/07/23 10:48	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/07/23 10:48	1

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

Lab Sample ID: MB 480-660650/9
Matrix: Water
Analysis Batch: 660650

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	0.66	ug/L			03/07/23 10:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*03/07/23 10:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*		*03/07/23 10:48*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*03/07/23 10:48*	*1*
Dibromofluoromethane (Surr)	*113*		*75 - 123*		*03/07/23 10:48*	*1*

Lab Sample ID: LCS 480-660650/6
Matrix: Water
Analysis Batch: 660650

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-Trichloroethane	25.0	26.6		ug/L		106	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.4		ug/L		90	76 - 120
1,1,2-Trichloroethane	25.0	20.7		ug/L		83	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.1		ug/L		109	61 - 148
1,1-Dichloroethane	25.0	26.0		ug/L		104	77 - 120
1,1-Dichloroethene	25.0	25.2		ug/L		101	66 - 127
1,2,4-Trichlorobenzene	25.0	24.4		ug/L		98	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	21.8		ug/L		87	56 - 134
1,2-Dichlorobenzene	25.0	21.6		ug/L		86	80 - 124
1,2-Dichloroethane	25.0	24.7		ug/L		99	75 - 120
1,2-Dichloropropane	25.0	24.7		ug/L		99	76 - 120
1,3-Dichlorobenzene	25.0	22.3		ug/L		89	77 - 120
1,4-Dichlorobenzene	25.0	22.4		ug/L		90	80 - 120
2-Butanone (MEK)	125	265	*+	ug/L		212	57 - 140
2-Hexanone	125	115		ug/L		92	65 - 127
4-Methyl-2-pentanone (MIBK)	125	103		ug/L		82	71 - 125
Acetone	125	154		ug/L		123	56 - 142
Benzene	25.0	25.2		ug/L		101	71 - 124
Bromodichloromethane	25.0	25.1		ug/L		100	80 - 122
Bromoform	25.0	23.0		ug/L		92	61 - 132
Bromomethane	25.0	21.8		ug/L		87	55 - 144
Carbon disulfide	25.0	20.9		ug/L		84	59 - 134
Carbon tetrachloride	25.0	29.0		ug/L		116	72 - 134
Chlorobenzene	25.0	21.6		ug/L		87	80 - 120
Dibromochloromethane	25.0	23.8		ug/L		95	75 - 125
Chloroethane	25.0	20.5		ug/L		82	69 - 136
Chloroform	25.0	24.3		ug/L		97	73 - 127
Chloromethane	25.0	25.9		ug/L		104	68 - 124
cis-1,2-Dichloroethene	25.0	25.6		ug/L		102	74 - 124
cis-1,3-Dichloropropene	25.0	26.7		ug/L		107	74 - 124
Cyclohexane	25.0	24.2		ug/L		97	59 - 135
Dichlorodifluoromethane	25.0	39.7	*+	ug/L		159	59 - 135
Ethylbenzene	25.0	21.4		ug/L		86	77 - 123
1,2-Dibromoethane	25.0	22.1		ug/L		89	77 - 120

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

Lab Sample ID: LCS 480-660650/6
Matrix: Water
Analysis Batch: 660650

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Isopropylbenzene			25.0	23.2		ug/L		93	77 - 122		
Methyl acetate			50.0	62.1		ug/L		124	74 - 133		
Methyl tert-butyl ether			25.0	22.4		ug/L		90	77 - 120		
Methylcyclohexane			25.0	25.1		ug/L		100	68 - 134		
Methylene Chloride			25.0	25.0		ug/L		100	75 - 124		
Styrene			25.0	22.2		ug/L		89	80 - 120		
Tetrachloroethene			25.0	22.2		ug/L		89	74 - 122		
Toluene			25.0	20.9		ug/L		84	80 - 122		
trans-1,2-Dichloroethene			25.0	26.0		ug/L		104	73 - 127		
trans-1,3-Dichloropropene			25.0	22.1		ug/L		89	80 - 120		
Trichloroethene			25.0	25.5		ug/L		102	74 - 123		
Trichlorofluoromethane			25.0	30.9		ug/L		124	62 - 150		
Vinyl chloride			25.0	24.9		ug/L		100	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*93*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*
Dibromofluoromethane (Surr)	*114*		*75 - 123*

Lab Sample ID: LCSD 480-660650/7
Matrix: Water
Analysis Batch: 660650

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
1,1,1-Trichloroethane			25.0	27.9		ug/L		111	73 - 126	5	15
1,1,2,2-Tetrachloroethane			25.0	21.3		ug/L		85	76 - 120	5	15
1,1,2-Trichloroethane			25.0	21.4		ug/L		85	76 - 122	3	15
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	27.9		ug/L		112	61 - 148	3	20
1,1-Dichloroethane			25.0	26.9		ug/L		108	77 - 120	4	20
1,1-Dichloroethene			25.0	26.6		ug/L		106	66 - 127	5	16
1,2,4-Trichlorobenzene			25.0	20.5		ug/L		82	79 - 122	18	20
1,2-Dibromo-3-Chloropropane			25.0	21.7		ug/L		87	56 - 134	0	15
1,2-Dichlorobenzene			25.0	21.1		ug/L		84	80 - 124	2	20
1,2-Dichloroethane			25.0	25.5		ug/L		102	75 - 120	3	20
1,2-Dichloropropane			25.0	25.4		ug/L		101	76 - 120	3	20
1,3-Dichlorobenzene			25.0	22.1		ug/L		89	77 - 120	1	20
1,4-Dichlorobenzene			25.0	22.0		ug/L		88	80 - 120	2	20
2-Butanone (MEK)			125	255	*+	ug/L		204	57 - 140	3	20
2-Hexanone			125	111		ug/L		88	65 - 127	4	15
4-Methyl-2-pentanone (MIBK)			125	103		ug/L		82	71 - 125	0	35
Acetone			125	142		ug/L		113	56 - 142	8	15
Benzene			25.0	26.3		ug/L		105	71 - 124	4	13
Bromodichloromethane			25.0	26.3		ug/L		105	80 - 122	5	15
Bromoform			25.0	24.0		ug/L		96	61 - 132	4	15
Bromomethane			25.0	28.0	*1	ug/L		112	55 - 144	25	15
Carbon disulfide			25.0	22.9		ug/L		91	59 - 134	9	15

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

Lab Sample ID: LCSD 480-660650/7
Matrix: Water
Analysis Batch: 660650

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
Carbon tetrachloride			25.0	30.2		ug/L		121	72 - 134	4	15
Chlorobenzene			25.0	22.5		ug/L		90	80 - 120	4	25
Dibromochloromethane			25.0	24.2		ug/L		97	75 - 125	2	15
Chloroethane			25.0	23.4		ug/L		94	69 - 136	13	15
Chloroform			25.0	25.2		ug/L		101	73 - 127	4	20
Chloromethane			25.0	26.2		ug/L		105	68 - 124	1	15
cis-1,2-Dichloroethene			25.0	26.7		ug/L		107	74 - 124	4	15
cis-1,3-Dichloropropene			25.0	27.7		ug/L		111	74 - 124	4	15
Cyclohexane			25.0	25.3		ug/L		101	59 - 135	4	20
Dichlorodifluoromethane			25.0	39.9	*+	ug/L		160	59 - 135	0	20
Ethylbenzene			25.0	22.3		ug/L		89	77 - 123	4	15
1,2-Dibromoethane			25.0	22.6		ug/L		91	77 - 120	2	15
Isopropylbenzene			25.0	23.1		ug/L		93	77 - 122	0	20
Methyl acetate			50.0	62.3		ug/L		125	74 - 133	0	20
Methyl tert-butyl ether			25.0	23.4		ug/L		94	77 - 120	4	37
Methylcyclohexane			25.0	26.3		ug/L		105	68 - 134	5	20
Methylene Chloride			25.0	25.9		ug/L		104	75 - 124	3	15
Styrene			25.0	22.7		ug/L		91	80 - 120	2	20
Tetrachloroethene			25.0	23.1		ug/L		93	74 - 122	4	20
Toluene			25.0	21.6		ug/L		87	80 - 122	3	15
trans-1,2-Dichloroethene			25.0	27.4		ug/L		110	73 - 127	5	20
trans-1,3-Dichloropropene			25.0	22.9		ug/L		92	80 - 120	3	15
Trichloroethene			25.0	26.3		ug/L		105	74 - 123	3	16
Trichlorofluoromethane			25.0	36.3		ug/L		145	62 - 150	16	20
Vinyl chloride			25.0	25.8		ug/L		103	65 - 133	3	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*92*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*
Dibromofluoromethane (Surr)	*115*		*75 - 123*

Lab Sample ID: MB 480-660654/7
Matrix: Water
Analysis Batch: 660654

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-Trichloroethane	ND		1.0	0.82	ug/L			03/07/23 10:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/07/23 10:31	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/07/23 10:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/07/23 10:31	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/07/23 10:31	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/07/23 10:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/07/23 10:31	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/07/23 10:31	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/07/23 10:31	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/07/23 10:31	1

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

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

Lab Sample ID: MB 480-660654/7
Matrix: Water
Analysis Batch: 660654

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/07/23 10:31	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/07/23 10:31	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/07/23 10:31	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/07/23 10:31	1
2-Hexanone	ND		5.0	1.2	ug/L			03/07/23 10:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/07/23 10:31	1
Acetone	ND		10	3.0	ug/L			03/07/23 10:31	1
Benzene	ND		1.0	0.41	ug/L			03/07/23 10:31	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/07/23 10:31	1
Bromoform	ND		1.0	0.26	ug/L			03/07/23 10:31	1
Bromomethane	ND		1.0	0.69	ug/L			03/07/23 10:31	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/07/23 10:31	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/07/23 10:31	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/07/23 10:31	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/07/23 10:31	1
Chloroethane	ND		1.0	0.32	ug/L			03/07/23 10:31	1
Chloroform	ND		1.0	0.34	ug/L			03/07/23 10:31	1
Chloromethane	ND		1.0	0.35	ug/L			03/07/23 10:31	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/07/23 10:31	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/07/23 10:31	1
Cyclohexane	ND		1.0	0.18	ug/L			03/07/23 10:31	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/07/23 10:31	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/07/23 10:31	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/07/23 10:31	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/07/23 10:31	1
Methyl acetate	ND		2.5	1.3	ug/L			03/07/23 10:31	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/07/23 10:31	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/07/23 10:31	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/07/23 10:31	1
Styrene	ND		1.0	0.73	ug/L			03/07/23 10:31	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/07/23 10:31	1
Toluene	ND		1.0	0.51	ug/L			03/07/23 10:31	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/07/23 10:31	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/07/23 10:31	1
Trichloroethene	ND		1.0	0.46	ug/L			03/07/23 10:31	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/07/23 10:31	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/07/23 10:31	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/07/23 10:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/07/23 10:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*03/07/23 10:31*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*03/07/23 10:31*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*03/07/23 10:31*	*1*

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

Lab Sample ID: LCS 480-660654/5
Matrix: Water
Analysis Batch: 660654

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-Trichloroethane	25.0	24.5		ug/L		98	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.1		ug/L		92	76 - 120
1,1,2-Trichloroethane	25.0	22.6		ug/L		91	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.2		ug/L		101	61 - 148
1,1-Dichloroethane	25.0	23.9		ug/L		95	77 - 120
1,1-Dichloroethene	25.0	23.5		ug/L		94	66 - 127
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		99	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.1		ug/L		96	56 - 134
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	22.8		ug/L		91	75 - 120
1,2-Dichloropropane	25.0	23.5		ug/L		94	76 - 120
1,3-Dichlorobenzene	25.0	24.9		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	24.1		ug/L		96	80 - 120
2-Butanone (MEK)	125	117		ug/L		94	57 - 140
2-Hexanone	125	114		ug/L		91	65 - 127
4-Methyl-2-pentanone (MIBK)	125	113		ug/L		90	71 - 125
Acetone	125	116		ug/L		93	56 - 142
Benzene	25.0	24.0		ug/L		96	71 - 124
Bromodichloromethane	25.0	23.8		ug/L		95	80 - 122
Bromoform	25.0	25.7		ug/L		103	61 - 132
Bromomethane	25.0	23.7		ug/L		95	55 - 144
Carbon disulfide	25.0	22.9		ug/L		92	59 - 134
Carbon tetrachloride	25.0	25.5		ug/L		102	72 - 134
Chlorobenzene	25.0	24.1		ug/L		96	80 - 120
Dibromochloromethane	25.0	25.0		ug/L		100	75 - 125
Chloroethane	25.0	23.5		ug/L		94	69 - 136
Chloroform	25.0	21.8		ug/L		87	73 - 127
Chloromethane	25.0	23.0		ug/L		92	68 - 124
cis-1,2-Dichloroethene	25.0	21.3		ug/L		85	74 - 124
cis-1,3-Dichloropropene	25.0	24.4		ug/L		97	74 - 124
Cyclohexane	25.0	23.3		ug/L		93	59 - 135
Dichlorodifluoromethane	25.0	24.1		ug/L		96	59 - 135
Ethylbenzene	25.0	23.7		ug/L		95	77 - 123
1,2-Dibromoethane	25.0	23.4		ug/L		94	77 - 120
Isopropylbenzene	25.0	25.1		ug/L		100	77 - 122
Methyl acetate	50.0	45.9		ug/L		92	74 - 133
Methyl tert-butyl ether	25.0	22.4		ug/L		89	77 - 120
Methylcyclohexane	25.0	23.6		ug/L		94	68 - 134
Methylene Chloride	25.0	20.7		ug/L		83	75 - 124
Styrene	25.0	24.2		ug/L		97	80 - 120
Tetrachloroethene	25.0	24.0		ug/L		96	74 - 122
Toluene	25.0	24.1		ug/L		96	80 - 122
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	73 - 127
trans-1,3-Dichloropropene	25.0	24.3		ug/L		97	80 - 120
Trichloroethene	25.0	24.5		ug/L		98	74 - 123
Trichlorofluoromethane	25.0	26.7		ug/L		107	62 - 150
Vinyl chloride	25.0	25.1		ug/L		100	65 - 133

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	98		77 - 120
4-Bromofluorobenzene (Surr)	98		73 - 120
Dibromofluoromethane (Surr)	94		75 - 123

Lab Sample ID: MB 480-660802/7
Matrix: Water
Analysis Batch: 660802

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-Trichloroethane	ND		1.0	0.82	ug/L			03/08/23 11:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/08/23 11:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/08/23 11:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/08/23 11:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/08/23 11:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/08/23 11:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/08/23 11:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/08/23 11:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/08/23 11:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/08/23 11:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/08/23 11:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/08/23 11:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/08/23 11:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/08/23 11:06	1
2-Hexanone	ND		5.0	1.2	ug/L			03/08/23 11:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/08/23 11:06	1
Acetone	ND		10	3.0	ug/L			03/08/23 11:06	1
Benzene	ND		1.0	0.41	ug/L			03/08/23 11:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/08/23 11:06	1
Bromoform	ND		1.0	0.26	ug/L			03/08/23 11:06	1
Bromomethane	ND		1.0	0.69	ug/L			03/08/23 11:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/08/23 11:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/08/23 11:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/08/23 11:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/08/23 11:06	1
Chloroethane	ND		1.0	0.32	ug/L			03/08/23 11:06	1
Chloroform	ND		1.0	0.34	ug/L			03/08/23 11:06	1
Chloromethane	ND		1.0	0.35	ug/L			03/08/23 11:06	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/08/23 11:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/08/23 11:06	1
Cyclohexane	ND		1.0	0.18	ug/L			03/08/23 11:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/08/23 11:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/08/23 11:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/08/23 11:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/08/23 11:06	1
Methyl acetate	ND		2.5	1.3	ug/L			03/08/23 11:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/08/23 11:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/08/23 11:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/08/23 11:06	1
Styrene	ND		1.0	0.73	ug/L			03/08/23 11:06	1

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

Lab Sample ID: MB 480-660802/7
Matrix: Water
Analysis Batch: 660802

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.36	ug/L			03/08/23 11:06	1
Toluene	ND		1.0	0.51	ug/L			03/08/23 11:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/08/23 11:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/08/23 11:06	1
Trichloroethene	ND		1.0	0.46	ug/L			03/08/23 11:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/08/23 11:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/08/23 11:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/08/23 11:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*03/08/23 11:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*		*03/08/23 11:06*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*03/08/23 11:06*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*03/08/23 11:06*	*1*

Lab Sample ID: LCS 480-660802/5
Matrix: Water
Analysis Batch: 660802

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-Trichloroethane	25.0	24.9		ug/L		99	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.9		ug/L		92	76 - 120
1,1,2-Trichloroethane	25.0	22.6		ug/L		90	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.1		ug/L		101	61 - 148
1,1-Dichloroethane	25.0	24.0		ug/L		96	77 - 120
1,1-Dichloroethene	25.0	22.9		ug/L		92	66 - 127
1,2,4-Trichlorobenzene	25.0	23.7		ug/L		95	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.6		ug/L		99	56 - 134
1,2-Dichlorobenzene	25.0	23.4		ug/L		94	80 - 124
1,2-Dichloroethane	25.0	23.2		ug/L		93	75 - 120
1,2-Dichloropropane	25.0	23.3		ug/L		93	76 - 120
1,3-Dichlorobenzene	25.0	23.4		ug/L		94	77 - 120
1,4-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 120
2-Butanone (MEK)	125	113		ug/L		90	57 - 140
2-Hexanone	125	114		ug/L		91	65 - 127
4-Methyl-2-pentanone (MIBK)	125	109		ug/L		87	71 - 125
Acetone	125	114		ug/L		91	56 - 142
Benzene	25.0	23.6		ug/L		94	71 - 124
Bromodichloromethane	25.0	23.3		ug/L		93	80 - 122
Bromoform	25.0	26.3		ug/L		105	61 - 132
Bromomethane	25.0	24.0		ug/L		96	55 - 144
Carbon disulfide	25.0	23.7		ug/L		95	59 - 134
Carbon tetrachloride	25.0	25.8		ug/L		103	72 - 134
Chlorobenzene	25.0	23.6		ug/L		94	80 - 120
Dibromochloromethane	25.0	24.8		ug/L		99	75 - 125
Chloroethane	25.0	25.2		ug/L		101	69 - 136
Chloroform	25.0	22.0		ug/L		88	73 - 127

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

Lab Sample ID: LCS 480-660802/5
Matrix: Water
Analysis Batch: 660802

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloromethane	25.0	26.4		ug/L		106	68 - 124
cis-1,2-Dichloroethene	25.0	22.6		ug/L		90	74 - 124
cis-1,3-Dichloropropene	25.0	23.7		ug/L		95	74 - 124
Cyclohexane	25.0	23.5		ug/L		94	59 - 135
Dichlorodifluoromethane	25.0	29.2		ug/L		117	59 - 135
Ethylbenzene	25.0	23.2		ug/L		93	77 - 123
1,2-Dibromoethane	25.0	23.1		ug/L		93	77 - 120
Isopropylbenzene	25.0	24.0		ug/L		96	77 - 122
Methyl acetate	50.0	45.9		ug/L		92	74 - 133
Methyl tert-butyl ether	25.0	22.8		ug/L		91	77 - 120
Methylcyclohexane	25.0	22.9		ug/L		92	68 - 134
Methylene Chloride	25.0	21.4		ug/L		86	75 - 124
Styrene	25.0	23.5		ug/L		94	80 - 120
Tetrachloroethene	25.0	24.1		ug/L		97	74 - 122
Toluene	25.0	23.5		ug/L		94	80 - 122
trans-1,2-Dichloroethene	25.0	22.6		ug/L		90	73 - 127
trans-1,3-Dichloropropene	25.0	23.7		ug/L		95	80 - 120
Trichloroethene	25.0	23.5		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	28.2		ug/L		113	62 - 150
Vinyl chloride	25.0	27.3		ug/L		109	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*93*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-660656/1-A
Matrix: Water
Analysis Batch: 660894

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 660656

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		03/07/23 08:19	03/08/23 15:25	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*15 - 110*	*03/07/23 08:19*	*03/08/23 15:25*	*1*

Lab Sample ID: LCS 480-660656/2-A
Matrix: Water
Analysis Batch: 660894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 660656

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.07		ug/L		104	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*36*		*15 - 110*

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: 480-206656-7 MS
Client Sample ID: MW-06S-030323
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 660894
Prep Batch: 660656

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	9.3		2.00	11.3	4	ug/L		102	40 - 140		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*37*		*15 - 110*

Lab Sample ID: 480-206656-7 MSD
Client Sample ID: MW-06S-030323
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 660894
Prep Batch: 660656

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	9.3		2.00	11.2	4	ug/L		98	40 - 140	1	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*36*		*15 - 110*

GC/MS VOA

Analysis Batch: 660650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-206656-12	MW-07S-030323	Total/NA	Water	8260C	
480-206656-13	TB-01-030323	Total/NA	Water	8260C	
MB 480-660650/9	Method Blank	Total/NA	Water	8260C	
LCS 480-660650/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-660650/7	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 660654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-206656-2	MW-21-030223	Total/NA	Water	8260C	
480-206656-3	MW-22-030223	Total/NA	Water	8260C	
480-206656-4	TMW-20-030323	Total/NA	Water	8260C	
480-206656-5	PTMW-01-030323	Total/NA	Water	8260C	
480-206656-6	MW-24-030323	Total/NA	Water	8260C	
MB 480-660654/7	Method Blank	Total/NA	Water	8260C	
LCS 480-660654/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 660802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-206656-1	TMW-02-030223	Total/NA	Water	8260C	
480-206656-2 - DL	MW-21-030223	Total/NA	Water	8260C	
480-206656-7	MW-06S-030323	Total/NA	Water	8260C	
480-206656-8	MW-23-030323	Total/NA	Water	8260C	
MB 480-660802/7	Method Blank	Total/NA	Water	8260C	
LCS 480-660802/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 660656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-206656-3	MW-22-030223	Total/NA	Water	3510C	
480-206656-7	MW-06S-030323	Total/NA	Water	3510C	
480-206656-8	MW-23-030323	Total/NA	Water	3510C	
480-206656-9	MW-11R-030323	Total/NA	Water	3510C	
480-206656-10	MW-10-030323	Total/NA	Water	3510C	
480-206656-11	MW-09-030323	Total/NA	Water	3510C	
480-206656-12	MW-07S-030323	Total/NA	Water	3510C	
MB 480-660656/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-660656/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-206656-7 MS	MW-06S-030323	Total/NA	Water	3510C	
480-206656-7 MSD	MW-06S-030323	Total/NA	Water	3510C	

Analysis Batch: 660894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-206656-7	MW-06S-030323	Total/NA	Water	8270D SIM ID	660656
480-206656-8	MW-23-030323	Total/NA	Water	8270D SIM ID	660656
480-206656-9	MW-11R-030323	Total/NA	Water	8270D SIM ID	660656
480-206656-10	MW-10-030323	Total/NA	Water	8270D SIM ID	660656
480-206656-11	MW-09-030323	Total/NA	Water	8270D SIM ID	660656
480-206656-12	MW-07S-030323	Total/NA	Water	8270D SIM ID	660656
MB 480-660656/1-A	Method Blank	Total/NA	Water	8270D SIM ID	660656

GC/MS Semi VOA (Continued)

Analysis Batch: 660894 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-660656/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	660656
480-206656-7 MS	MW-06S-030323	Total/NA	Water	8270D SIM ID	660656
480-206656-7 MSD	MW-06S-030323	Total/NA	Water	8270D SIM ID	660656

Analysis Batch: 660956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-206656-3	MW-22-030223	Total/NA	Water	8270D SIM ID	660656

Lab Chronicle

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court Bldg #5

Client Sample ID: TMW-02-030223
Lab Sample ID: 480-206656-1
Date Collected: 03/02/23 13:56
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		20	660802	CR	EET BUF	03/08/23 12:27

Client Sample ID: MW-21-030223
Lab Sample ID: 480-206656-2
Date Collected: 03/02/23 14:30
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		80	660654	CR	EET BUF	03/07/23 14:21
Total/NA	Analysis	8260C	DL	400	660802	CR	EET BUF	03/08/23 12:49

Client Sample ID: MW-22-030223
Lab Sample ID: 480-206656-3
Date Collected: 03/02/23 15:00
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		500	660654	CR	EET BUF	03/07/23 14:44
Total/NA	Prep	3510C			660656	MS	EET BUF	03/07/23 08:19
Total/NA	Analysis	8270D SIM ID		100	660956	JMM	EET BUF	03/09/23 10:29

Client Sample ID: TMW-20-030323
Lab Sample ID: 480-206656-4
Date Collected: 03/03/23 07:45
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		400	660654	CR	EET BUF	03/07/23 15:07

Client Sample ID: PTMW-01-030323
Lab Sample ID: 480-206656-5
Date Collected: 03/03/23 08:50
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		125	660654	CR	EET BUF	03/07/23 15:30

Client Sample ID: MW-24-030323
Lab Sample ID: 480-206656-6
Date Collected: 03/03/23 09:50
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	660654	CR	EET BUF	03/07/23 15:53

Lab Chronicle

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Client Sample ID: MW-06S-030323
Lab Sample ID: 480-206656-7
Date Collected: 03/03/23 10:26
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	660802	CR	EET BUF	03/08/23 13:12
Total/NA	Prep	3510C			660656	MS	EET BUF	03/07/23 08:19
Total/NA	Analysis	8270D SIM ID		1	660894	JMM	EET BUF	03/08/23 16:55

Client Sample ID: MW-23-030323
Lab Sample ID: 480-206656-8
Date Collected: 03/03/23 11:00
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	660802	CR	EET BUF	03/08/23 13:35
Total/NA	Prep	3510C			660656	MS	EET BUF	03/07/23 08:19
Total/NA	Analysis	8270D SIM ID		1	660894	JMM	EET BUF	03/08/23 21:24

Client Sample ID: MW-11R-030323
Lab Sample ID: 480-206656-9
Date Collected: 03/03/23 12:00
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			660656	MS	EET BUF	03/07/23 08:19
Total/NA	Analysis	8270D SIM ID		1	660894	JMM	EET BUF	03/08/23 21:46

Client Sample ID: MW-10-030323
Lab Sample ID: 480-206656-10
Date Collected: 03/03/23 12:55
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			660656	MS	EET BUF	03/07/23 08:19
Total/NA	Analysis	8270D SIM ID		1	660894	JMM	EET BUF	03/08/23 22:09

Client Sample ID: MW-09-030323
Lab Sample ID: 480-206656-11
Date Collected: 03/03/23 13:54
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			660656	MS	EET BUF	03/07/23 08:19
Total/NA	Analysis	8270D SIM ID		1	660894	JMM	EET BUF	03/08/23 22:31

Client Sample ID: MW-07S-030323
Lab Sample ID: 480-206656-12
Date Collected: 03/03/23 14:22
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		5	660650	CB	EET BUF	03/07/23 14:35
Total/NA	Prep	3510C			660656	MS	EET BUF	03/07/23 08:22
Total/NA	Analysis	8270D SIM ID		1	660894	JMM	EET BUF	03/08/23 22:54

Lab Chronicle

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court Bldg #5

Client Sample ID: TB-01-030323
Lab Sample ID: 480-206656-13
Date Collected: 03/03/23 00:00
Matrix: Water
Date Received: 03/04/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	660650	CB	EET BUF	03/07/23 14:59

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

Method Summary

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll US Corporation
Job ID: 480-206656-1
Project/Site: Phytoremediation GW Analysis Form LM Court
Bldg #5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-206656-1	TMW-02-030223	Water	03/02/23 13:56	03/04/23 11:00
480-206656-2	MW-21-030223	Water	03/02/23 14:30	03/04/23 11:00
480-206656-3	MW-22-030223	Water	03/02/23 15:00	03/04/23 11:00
480-206656-4	TMW-20-030323	Water	03/03/23 07:45	03/04/23 11:00
480-206656-5	PTMW-01-030323	Water	03/03/23 08:50	03/04/23 11:00
480-206656-6	MW-24-030323	Water	03/03/23 09:50	03/04/23 11:00
480-206656-7	MW-06S-030323	Water	03/03/23 10:26	03/04/23 11:00
480-206656-8	MW-23-030323	Water	03/03/23 11:00	03/04/23 11:00
480-206656-9	MW-11R-030323	Water	03/03/23 12:00	03/04/23 11:00
480-206656-10	MW-10-030323	Water	03/03/23 12:55	03/04/23 11:00
480-206656-11	MW-09-030323	Water	03/03/23 13:54	03/04/23 11:00
480-206656-12	MW-07S-030323	Water	03/03/23 14:22	03/04/23 11:00
480-206656-13	TB-01-030323	Water	03/03/23 00:00	03/04/23 11:00

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

eurofins | Environment Testing

Syracuse #225

Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-182201-32176.1
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Ramboll US Corporation	PWSID:			Job #: 194010934
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-506-3236	PO #: 1940006251			
Email: jason.newton@ramboll.com	WO #:			
Project Name: Phytoremediation GW Analysis	Project #: 48021953			
Site: Farm Ln Court St bldg #5	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

480-206656 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL Volatiles	8270D_SIM_MS_ID - SIM - 1,4 Dioxane	Total Nu	Special Instructions/Note:
			Preservation Code:				A	N		
TMW-02-030223	3/2/23	1356	G	Water	N	N	X		3	
MW-21-030223	3/2/23	1430		Water	N	N	X		3	
MW-22-030223	3/2/23	1500		Water	N	N	X	X	5	
TMW-20-030323	3/3/23	0745		Water	N	N	X		3	
PTMW-01-030323		0850		Water	N	N	X		3	
MW-24-030323		0950		Water	N	N	X		3	
MW-06S-030323		1026		Water	N	N	X	X	5	
MW-23-030323		1100		Water	N	N	X	X	5	
MW-11R-030323		1200		Water	N	N		X	2	
MW-10-030323		1255		Water	N	N		X	2	
MW-09-030323		1354		Water	N	N		X	2	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	J&A	3/3/23 - 1524	Ryan	Ringlick	3-3-23, 1521	Ryan
2	Ringlick	3-3-23, 1900	Ryan	Coulter	3/4/23 1100	TAB
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #1 3.2

Ver: 01/16/2019

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information
Client Contact: Jason Newton
Company: Ramboll US Corporation
Address: 333 West Washington Street
City: Syracuse
State, Zip: NY, 13202
Phone: 315-506-3236
Email: jason.newton@ramboll.com
Project Name: Phytoremediation GW Analysis
Site: Form LM Courtst bldg #5

Sampler: Jason Newton
Phone: 315-506-3236
PWSID:
Due Date Requested:
TAT Requested (days): Standard
Compliance Project: Δ Yes Δ No
PO #: 1940006251
WO #:
Project #: 48021953
SSOW#:

Lab PM: Schove, John R
E-Mail: John.Schove@et.eurofinsus.com
State of Origin:
Carrier Tracking No(s): Syracuse #225
COC No: 480-182201-32176.1
Page: Page ~~1 of 4~~ 2 of 2
Job #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL Volatiles	8270D_SIM_MS_ID - SIM - 1,4 Dioxane	Total Number of containers	Special Instructions/Note:
Preservation Code:							A	N		
MW-07S-030323	3-3-23	1422	G	Water	N	N	X	X	5	
TB-01-030323	-	-	-	Water	-	-	X		2	
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological
Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months
Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	3/3/23 - 1524	Ramboll		3-3-23, 15:24	
Relinquished by:	3-3-23, 1900			3/4/23 1100	TAS
Relinquished by:					

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: #1

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 480-206656-1

Login Number: 206656

List Source: Eurofins Buffalo

List Number: 1

Creator: Stopa, Erik S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	RAMBOLL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

SUPPLEMENTAL INFLUENT SAMPLING

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
O'Brien & Gere Inc of North America
PO BOX 4873
Syracuse, New York 13221

Generated 1/13/2023 9:04:01 AM

JOB DESCRIPTION

Phytoremediation GW Analysis

JOB NUMBER

480-205234-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

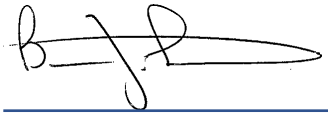
my EOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

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Authorization



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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

Job ID: 480-205234-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-205234-1

Comments
No additional comments.

Receipt
The sample was received on 1/7/2023 9:30 AM. 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 was 3.5º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Phytoremediation GW Analysis

Job ID: 480-205234-1

Client Sample ID: INFLUENT-010623

Lab Sample ID: 480-205234-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.6		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	7.8		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	3.4		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	3.1		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: O'Brien & Gere Inc of North America
Project/Site: Phytoremediation GW Analysis

Job ID: 480-205234-1

Client Sample ID: INFLUENT-010623
Date Collected: 01/06/23 10:20
Date Received: 01/07/23 09:30

Lab Sample ID: 480-205234-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/09/23 14:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/09/23 14:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/09/23 14:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/09/23 14:53	1
1,1-Dichloroethane	**2.6**		1.0	0.38	ug/L			01/09/23 14:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/09/23 14:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/09/23 14:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/09/23 14:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/09/23 14:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/09/23 14:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/09/23 14:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/09/23 14:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/09/23 14:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/09/23 14:53	1
2-Hexanone	ND		5.0	1.2	ug/L			01/09/23 14:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/09/23 14:53	1
Acetone	ND		10	3.0	ug/L			01/09/23 14:53	1
Benzene	ND		1.0	0.41	ug/L			01/09/23 14:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/09/23 14:53	1
Bromoform	ND		1.0	0.26	ug/L			01/09/23 14:53	1
Bromomethane	ND		1.0	0.69	ug/L			01/09/23 14:53	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/09/23 14:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/09/23 14:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/09/23 14:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/09/23 14:53	1
Chloroethane	ND		1.0	0.32	ug/L			01/09/23 14:53	1
Chloroform	ND		1.0	0.34	ug/L			01/09/23 14:53	1
Chloromethane	ND		1.0	0.35	ug/L			01/09/23 14:53	1
cis-1,2-Dichloroethene	**7.8**		1.0	0.81	ug/L			01/09/23 14:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/09/23 14:53	1
Cyclohexane	ND		1.0	0.18	ug/L			01/09/23 14:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/09/23 14:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/09/23 14:53	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/09/23 14:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/09/23 14:53	1
Methyl acetate	ND		2.5	1.3	ug/L			01/09/23 14:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/09/23 14:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/09/23 14:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/09/23 14:53	1
Styrene	ND		1.0	0.73	ug/L			01/09/23 14:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/09/23 14:53	1
Toluene	ND		1.0	0.51	ug/L			01/09/23 14:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/09/23 14:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/09/23 14:53	1
Trichloroethene	ND		1.0	0.46	ug/L			01/09/23 14:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/09/23 14:53	1
Vinyl chloride	**3.4**		1.0	0.90	ug/L			01/09/23 14:53	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/09/23 14:53	1

Client: O'Brien & Gere Inc of North America
Project/Site: Phytoremediation GW Analysis

Job ID: 480-205234-1

Client Sample ID: INFLUENT-010623
Date Collected: 01/06/23 10:20
Date Received: 01/07/23 09:30

Lab Sample ID: 480-205234-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		80 - 120		01/09/23 14:53	1
1,2-Dichloroethane-d4 (Surr)	118		77 - 120		01/09/23 14:53	1
4-Bromofluorobenzene (Surr)	109		73 - 120		01/09/23 14:53	1
Dibromofluoromethane (Surr)	110		75 - 123		01/09/23 14:53	1

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	3.1		0.20	0.10	ug/L		01/09/23 08:27	01/10/23 19:49	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	38		15 - 110	01/09/23 08:27	01/10/23 19:49	1

Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Phytoremediation GW Analysis

Job ID: 480-205234-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-205234-1	INFLUENT-010623	104	118	109	110
LCS 480-655350/5	Lab Control Sample	99	116	107	108
MB 480-655350/7	Method Blank	105	117	111	109

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Phytoremediation GW Analysis

Job ID: 480-205234-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		DXE							
Lab Sample ID	Client Sample ID	(15-110)							
480-205234-1	INFLUENT-010623	38							
LCS 480-655357/2-A	Lab Control Sample	38							
MB 480-655357/1-A	Method Blank	38							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-655350/7
Matrix: Water
Analysis Batch: 655350

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-Trichloroethane	ND		1.0	0.82	ug/L			01/09/23 09:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/09/23 09:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/09/23 09:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/09/23 09:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/09/23 09:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/09/23 09:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/09/23 09:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/09/23 09:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/09/23 09:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/09/23 09:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/09/23 09:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/09/23 09:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/09/23 09:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/09/23 09:52	1
2-Hexanone	ND		5.0	1.2	ug/L			01/09/23 09:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/09/23 09:52	1
Acetone	ND		10	3.0	ug/L			01/09/23 09:52	1
Benzene	ND		1.0	0.41	ug/L			01/09/23 09:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/09/23 09:52	1
Bromoform	ND		1.0	0.26	ug/L			01/09/23 09:52	1
Bromomethane	ND		1.0	0.69	ug/L			01/09/23 09:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/09/23 09:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/09/23 09:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/09/23 09:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/09/23 09:52	1
Chloroethane	ND		1.0	0.32	ug/L			01/09/23 09:52	1
Chloroform	ND		1.0	0.34	ug/L			01/09/23 09:52	1
Chloromethane	ND		1.0	0.35	ug/L			01/09/23 09:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/09/23 09:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/09/23 09:52	1
Cyclohexane	ND		1.0	0.18	ug/L			01/09/23 09:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/09/23 09:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/09/23 09:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/09/23 09:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/09/23 09:52	1
Methyl acetate	ND		2.5	1.3	ug/L			01/09/23 09:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/09/23 09:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/09/23 09:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/09/23 09:52	1
Styrene	ND		1.0	0.73	ug/L			01/09/23 09:52	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/09/23 09:52	1
Toluene	ND		1.0	0.51	ug/L			01/09/23 09:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/09/23 09:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/09/23 09:52	1
Trichloroethene	ND		1.0	0.46	ug/L			01/09/23 09:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/09/23 09:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/09/23 09:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/09/23 09:52	1

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

Lab Sample ID: MB 480-655350/7
Matrix: Water
Analysis Batch: 655350

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*105*		*80 - 120*		*01/09/23 09:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*77 - 120*		*01/09/23 09:52*	*1*
4-Bromofluorobenzene (Surr)	*111*		*73 - 120*		*01/09/23 09:52*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*01/09/23 09:52*	*1*

Lab Sample ID: LCS 480-655350/5
Matrix: Water
Analysis Batch: 655350

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-Trichloroethane	25.0	24.0		ug/L		96	73 - 126
1,1,2,2-Tetrachloroethane	25.0	21.8		ug/L		87	76 - 120
1,1,2-Trichloroethane	25.0	23.0		ug/L		92	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.3		ug/L		85	61 - 148
1,1-Dichloroethane	25.0	25.0		ug/L		100	77 - 120
1,1-Dichloroethene	25.0	23.3		ug/L		93	66 - 127
1,2,4-Trichlorobenzene	25.0	23.0		ug/L		92	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.3		ug/L		93	56 - 134
1,2-Dichlorobenzene	25.0	22.0		ug/L		88	80 - 124
1,2-Dichloroethane	25.0	25.8		ug/L		103	75 - 120
1,2-Dichloropropane	25.0	25.3		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	21.8		ug/L		87	77 - 120
1,4-Dichlorobenzene	25.0	21.9		ug/L		87	80 - 120
2-Butanone (MEK)	125	114		ug/L		91	57 - 140
2-Hexanone	125	113		ug/L		90	65 - 127
4-Methyl-2-pentanone (MIBK)	125	110		ug/L		88	71 - 125
Acetone	125	108		ug/L		86	56 - 142
Benzene	25.0	24.2		ug/L		97	71 - 124
Bromodichloromethane	25.0	26.1		ug/L		104	80 - 122
Bromoform	25.0	25.0		ug/L		100	61 - 132
Bromomethane	25.0	28.1		ug/L		112	55 - 144
Carbon disulfide	25.0	21.7		ug/L		87	59 - 134
Carbon tetrachloride	25.0	24.4		ug/L		97	72 - 134
Chlorobenzene	25.0	23.1		ug/L		92	80 - 120
Dibromochloromethane	25.0	25.3		ug/L		101	75 - 125
Chloroethane	25.0	25.1		ug/L		100	69 - 136
Chloroform	25.0	24.3		ug/L		97	73 - 127
Chloromethane	25.0	20.3		ug/L		81	68 - 124
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	24.6		ug/L		98	74 - 124
Cyclohexane	25.0	22.5		ug/L		90	59 - 135
Dichlorodifluoromethane	25.0	26.1		ug/L		104	59 - 135
Ethylbenzene	25.0	23.6		ug/L		94	77 - 123
1,2-Dibromoethane	25.0	23.5		ug/L		94	77 - 120
Isopropylbenzene	25.0	22.2		ug/L		89	77 - 122
Methyl acetate	50.0	43.2		ug/L		86	74 - 133
Methyl tert-butyl ether	25.0	23.3		ug/L		93	77 - 120
Methylcyclohexane	25.0	23.2		ug/L		93	68 - 134

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

Lab Sample ID: LCS 480-655350/5
Matrix: Water
Analysis Batch: 655350

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	23.5		ug/L		94	75 - 124
Styrene	25.0	23.0		ug/L		92	80 - 120
Tetrachloroethene	25.0	24.0		ug/L		96	74 - 122
Toluene	25.0	23.2		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	73 - 127
trans-1,3-Dichloropropene	25.0	23.5		ug/L		94	80 - 120
Trichloroethene	25.0	24.4		ug/L		98	74 - 123
Trichlorofluoromethane	25.0	29.8		ug/L		119	62 - 150
Vinyl chloride	25.0	27.1		ug/L		108	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*116*		*77 - 120*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*
Dibromofluoromethane (Surr)	*108*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-655357/1-A
Matrix: Water
Analysis Batch: 655492

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		01/09/23 08:27	01/10/23 13:26	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*15 - 110*	*01/09/23 08:27*	*01/10/23 13:26*	*1*

Lab Sample ID: LCS 480-655357/2-A
Matrix: Water
Analysis Batch: 655492

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.05		ug/L		102	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*38*		*15 - 110*

QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Phytoremediation GW Analysis

Job ID: 480-205234-1

GC/MS VOA

Analysis Batch: 655350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205234-1	INFLUENT-010623	Total/NA	Water	8260C	
MB 480-655350/7	Method Blank	Total/NA	Water	8260C	
LCS 480-655350/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 655357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205234-1	INFLUENT-010623	Total/NA	Water	3510C	
MB 480-655357/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-655357/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 655492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205234-1	INFLUENT-010623	Total/NA	Water	8270D SIM ID	655357
MB 480-655357/1-A	Method Blank	Total/NA	Water	8270D SIM ID	655357
LCS 480-655357/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	655357

Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Phytoremediation GW Analysis

Job ID: 480-205234-1

Client Sample ID: INFLUENT-010623
Date Collected: 01/06/23 10:20
Date Received: 01/07/23 09:30

Lab Sample ID: 480-205234-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	655350	CB	EET BUF	01/09/23 14:53
Total/NA	Prep	3510C			655357	MS	EET BUF	01/09/23 08:27
Total/NA	Analysis	8270D SIM ID		1	655492	JMM	EET BUF	01/10/23 19:49

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-205234-1
Project/Site: Phytoremediation GW Analysis

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Phytoremediation GW Analysis

Job ID: 480-205234-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Phytoremediation GW Analysis

Job ID: 480-205234-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-205234-1	INFLUENT-010623	Water	01/06/23 10:20	01/07/23 09:30

Chain of Custody / Analysis Report

Page 1 of 1

Ramboll

Sampler(s): Jason Newton
(Signature) J Sn

Contact: Scott Tucker
Address: 33 W. Washington St
Syracuse, NY 13221
Phone: 315-956-6100
E-mail: Scott.Tucker@Ramboll.com
Project: Photocondiction GW Analysis
Location: Former LM Court St bldg #5

Laboratory:
Attn:
Phone:

Holding Time:
Package Requirement: Match Previous Influent
EDD Format:

Laboratory Use Only
Project Number: 1402153
Job Number: 480-74232-001
Laboratory ID:

Sample Identification									Analysis Required				
	Unique Field Sample ID (sys_sample_code)	Sample Location	Date	Time	Sample Type (See Key)	Sample Matrix (See Key)	Number of Containers	Grab [G] or Composite [C] / Reporting Units	Field Filtered? (Y / N)	Preservatives: (see key at bottom)			Lab Sample ID:
1	Influent-010623		1/6/23	1020	N	WG	5	GN		3	2		
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													

8260C-TCL-Vol
8270D-SIM-NS-1D-SIM
1,4 Dioxane

Syracuse #225

480-205234 Chain of Custody

Special Instructions: Match Previous Influent / Lab PM John Schore / ~~8260~~ 8260-TCL volatiles 8270D-SIM_NS_1D-SIM - 1,4 Dioxane / PO is TBD

Use this space if shipped via courier (e.g., Fed Ex)

Relinquished by: J Sn	Date: 1/6/23	Courier Name: RECD. Tracking #: RENGLIN SYR.	Date: 1-6-23	Condition:	Other Comments or Notes regarding condition of samples as received:
Of: Ramboll	Time: 1043		Time: 10 to 13		
Relinquished by: RENGLIN	Date: 1-6-23	Received By:	Date:	Custody Seals Intact?	
Of:	Time: 1900	Of:	Time:		
Relinquished by:	Date:	Received By:	Date: 1-7-23	Cooler Temperature: 3.5 #1	
Of:	Time:	Of:	Time: 9:40		

Sample Type: N = Normal env. sample, FD = field duplicate, EB = Equipment Blank, TB = Trip Blank, MS = Lab Matrix Spike, Other (Specify):
Sample Matrix: SE = Sediment, SO = Soil, WG = Groundwater, WQ = Water Quality, WS = Surface Water, WW = Waste Water, WP = Potable Water, AA = Ambient Air, Other (Specify):
Preservative Code: 0 = none, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = Zn Acetate, 6 = MeOH, 7 = $NaHSO_4$, 8 = other

Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-205234-1

Login Number: 205234

List Source: Eurofins Buffalo

List Number: 1

Creator: Stopa, Erik S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	RAMBOLL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll US Corporation
333 West Washington Street
Syracuse, New York 13202

Generated 2/16/2023 2:19:35 PM

JOB DESCRIPTION

Phytoremediation Court Street Building 5

JOB NUMBER

480-206146-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

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 Northeast, LLC Project Manager.

Authorization



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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

Job ID: 480-206146-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-206146-1

Comments
No additional comments.

Receipt
The sample was received on 2/11/2023 8:00 AM. 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 was 3.1° C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-658514 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte, the data are reported. The associated sample is impacted: INFLUENT-021023 (480-206146-1).

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

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Ramboll US Corporation
Job ID: 480-206146-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-021023
Lab Sample ID: 480-206146-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.3		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	6.4		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	3.6		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	3.8		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll US Corporation
Job ID: 480-206146-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-021023
Lab Sample ID: 480-206146-1
Date Collected: 02/10/23 09:30
Matrix: Water
Date Received: 02/11/23 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/13/23 13:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/13/23 13:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/13/23 13:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/13/23 13:37	1
1,1-Dichloroethane	**2.3**		1.0	0.38	ug/L			02/13/23 13:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/13/23 13:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/13/23 13:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/13/23 13:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/13/23 13:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/13/23 13:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/13/23 13:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/13/23 13:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/13/23 13:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/13/23 13:37	1
2-Hexanone	ND		5.0	1.2	ug/L			02/13/23 13:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/13/23 13:37	1
Acetone	ND		10	3.0	ug/L			02/13/23 13:37	1
Benzene	ND		1.0	0.41	ug/L			02/13/23 13:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/13/23 13:37	1
Bromoform	ND		1.0	0.26	ug/L			02/13/23 13:37	1
Bromomethane	ND		1.0	0.69	ug/L			02/13/23 13:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/13/23 13:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/13/23 13:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/13/23 13:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/13/23 13:37	1
Chloroethane	ND		1.0	0.32	ug/L			02/13/23 13:37	1
Chloroform	ND		1.0	0.34	ug/L			02/13/23 13:37	1
Chloromethane	ND		1.0	0.35	ug/L			02/13/23 13:37	1
cis-1,2-Dichloroethene	**6.4**		1.0	0.81	ug/L			02/13/23 13:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/13/23 13:37	1
Cyclohexane	ND		1.0	0.18	ug/L			02/13/23 13:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/13/23 13:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/13/23 13:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/13/23 13:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/13/23 13:37	1
Methyl acetate	ND		2.5	1.3	ug/L			02/13/23 13:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/13/23 13:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/13/23 13:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/13/23 13:37	1
Styrene	ND		1.0	0.73	ug/L			02/13/23 13:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/13/23 13:37	1
Toluene	ND		1.0	0.51	ug/L			02/13/23 13:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/13/23 13:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/13/23 13:37	1
Trichloroethene	ND		1.0	0.46	ug/L			02/13/23 13:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/13/23 13:37	1
Vinyl chloride	**3.6**		1.0	0.90	ug/L			02/13/23 13:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/13/23 13:37	1

Client: Ramboll US Corporation
Job ID: 480-206146-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-021023
Lab Sample ID: 480-206146-1
Date Collected: 02/10/23 09:30
Matrix: Water
Date Received: 02/11/23 08:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*02/13/23 13:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*77 - 120*		*02/13/23 13:37*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*02/13/23 13:37*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*02/13/23 13:37*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.8**		0.20	0.10	ug/L		02/13/23 15:09	02/14/23 17:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*15 - 110*	*02/13/23 15:09*	*02/14/23 17:59*	*1*

Surrogate Summary

Client: Ramboll US Corporation
Job ID: 480-206146-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-206146-1	INFLUENT-021023	102	118	98	104
LCS 480-658514/5	Lab Control Sample	105	108	100	101
MB 480-658514/7	Method Blank	103	106	96	106

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll US Corporation
Job ID: 480-206146-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		DXE							
Lab Sample ID	Client Sample ID	(15-110)							
480-206146-1	INFLUENT-021023	38							
LCS 480-658581/2-A	Lab Control Sample	41							
MB 480-658581/1-A	Method Blank	42							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-658514/7
Matrix: Water
Analysis Batch: 658514

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-Trichloroethane	ND		1.0	0.82	ug/L			02/13/23 10:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/13/23 10:14	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/13/23 10:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/13/23 10:14	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/13/23 10:14	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/13/23 10:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/13/23 10:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/13/23 10:14	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/13/23 10:14	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/13/23 10:14	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/13/23 10:14	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/13/23 10:14	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/13/23 10:14	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/13/23 10:14	1
2-Hexanone	ND		5.0	1.2	ug/L			02/13/23 10:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/13/23 10:14	1
Acetone	ND		10	3.0	ug/L			02/13/23 10:14	1
Benzene	ND		1.0	0.41	ug/L			02/13/23 10:14	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/13/23 10:14	1
Bromoform	ND		1.0	0.26	ug/L			02/13/23 10:14	1
Bromomethane	ND		1.0	0.69	ug/L			02/13/23 10:14	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/13/23 10:14	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/13/23 10:14	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/13/23 10:14	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/13/23 10:14	1
Chloroethane	ND		1.0	0.32	ug/L			02/13/23 10:14	1
Chloroform	ND		1.0	0.34	ug/L			02/13/23 10:14	1
Chloromethane	ND		1.0	0.35	ug/L			02/13/23 10:14	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/13/23 10:14	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/13/23 10:14	1
Cyclohexane	ND		1.0	0.18	ug/L			02/13/23 10:14	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/13/23 10:14	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/13/23 10:14	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/13/23 10:14	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/13/23 10:14	1
Methyl acetate	ND		2.5	1.3	ug/L			02/13/23 10:14	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/13/23 10:14	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/13/23 10:14	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/13/23 10:14	1
Styrene	ND		1.0	0.73	ug/L			02/13/23 10:14	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/13/23 10:14	1
Toluene	ND		1.0	0.51	ug/L			02/13/23 10:14	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/13/23 10:14	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/13/23 10:14	1
Trichloroethene	ND		1.0	0.46	ug/L			02/13/23 10:14	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/13/23 10:14	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/13/23 10:14	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/13/23 10:14	1

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

Lab Sample ID: MB 480-658514/7
Matrix: Water
Analysis Batch: 658514

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*103*		*80 - 120*		*02/13/23 10:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*02/13/23 10:14*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*02/13/23 10:14*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*02/13/23 10:14*	*1*

Lab Sample ID: LCS 480-658514/5
Matrix: Water
Analysis Batch: 658514

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-Trichloroethane	25.0	23.6		ug/L		94	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.0		ug/L		92	76 - 120
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.6		ug/L		87	61 - 148
1,1-Dichloroethane	25.0	21.1		ug/L		84	77 - 120
1,1-Dichloroethene	25.0	21.3		ug/L		85	66 - 127
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		95	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	27.2		ug/L		109	56 - 134
1,2-Dichlorobenzene	25.0	23.1		ug/L		92	80 - 124
1,2-Dichloroethane	25.0	24.1		ug/L		97	75 - 120
1,2-Dichloropropane	25.0	23.7		ug/L		95	76 - 120
1,3-Dichlorobenzene	25.0	23.8		ug/L		95	77 - 120
1,4-Dichlorobenzene	25.0	22.6		ug/L		91	80 - 120
2-Butanone (MEK)	125	140		ug/L		112	57 - 140
2-Hexanone	125	131		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125
Acetone	125	138		ug/L		110	56 - 142
Benzene	25.0	22.9		ug/L		92	71 - 124
Bromodichloromethane	25.0	24.5		ug/L		98	80 - 122
Bromoform	25.0	29.4		ug/L		118	61 - 132
Bromomethane	25.0	20.7		ug/L		83	55 - 144
Carbon disulfide	25.0	20.1		ug/L		80	59 - 134
Carbon tetrachloride	25.0	24.5		ug/L		98	72 - 134
Chlorobenzene	25.0	23.8		ug/L		95	80 - 120
Dibromochloromethane	25.0	26.3		ug/L		105	75 - 125
Chloroethane	25.0	20.8		ug/L		83	69 - 136
Chloroform	25.0	21.7		ug/L		87	73 - 127
Chloromethane	25.0	17.5		ug/L		70	68 - 124
cis-1,2-Dichloroethene	25.0	21.5		ug/L		86	74 - 124
cis-1,3-Dichloropropene	25.0	26.8		ug/L		107	74 - 124
Cyclohexane	25.0	21.3		ug/L		85	59 - 135
Dichlorodifluoromethane	25.0	19.8		ug/L		79	59 - 135
Ethylbenzene	25.0	24.1		ug/L		96	77 - 123
1,2-Dibromoethane	25.0	24.4		ug/L		98	77 - 120
Isopropylbenzene	25.0	25.0		ug/L		100	77 - 122
Methyl acetate	50.0	50.8		ug/L		102	74 - 133
Methyl tert-butyl ether	25.0	22.2		ug/L		89	77 - 120
Methylcyclohexane	25.0	21.9		ug/L		88	68 - 134

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

Lab Sample ID: LCS 480-658514/5
Matrix: Water
Analysis Batch: 658514

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	22.1		ug/L		88	75 - 124
Styrene	25.0	25.0		ug/L		100	80 - 120
Tetrachloroethene	25.0	25.0		ug/L		100	74 - 122
Toluene	25.0	24.2		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	20.7		ug/L		83	73 - 127
trans-1,3-Dichloropropene	25.0	26.9		ug/L		108	80 - 120
Trichloroethene	25.0	22.7		ug/L		91	74 - 123
Trichlorofluoromethane	25.0	23.0		ug/L		92	62 - 150
Vinyl chloride	25.0	21.0		ug/L		84	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*105*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-658581/1-A
Matrix: Water
Analysis Batch: 658627

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658581

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		02/13/23 15:09	02/14/23 12:42	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*15 - 110*	*02/13/23 15:09*	*02/14/23 12:42*	*1*

Lab Sample ID: LCS 480-658581/2-A
Matrix: Water
Analysis Batch: 658627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.03		ug/L		101	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*41*		*15 - 110*

QC Association Summary

Client: Ramboll US Corporation
Job ID: 480-206146-1
Project/Site: Phytoremediation Court Street Building 5

GC/MS VOA

Analysis Batch: 658514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-206146-1	INFLUENT-021023	Total/NA	Water	8260C	
MB 480-658514/7	Method Blank	Total/NA	Water	8260C	
LCS 480-658514/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 658581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-206146-1	INFLUENT-021023	Total/NA	Water	3510C	
MB 480-658581/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-658581/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 658627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-206146-1	INFLUENT-021023	Total/NA	Water	8270D SIM ID	658581
MB 480-658581/1-A	Method Blank	Total/NA	Water	8270D SIM ID	658581
LCS 480-658581/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	658581

Lab Chronicle

Client: Ramboll US Corporation
Job ID: 480-206146-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-021023
Lab Sample ID: 480-206146-1
Date Collected: 02/10/23 09:30
Matrix: Water
Date Received: 02/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	658514	CR	EET BUF	02/13/23 13:37
Total/NA	Prep	3510C			658581	LSC	EET BUF	02/13/23 15:09
Total/NA	Analysis	8270D SIM ID		1	658627	JMM	EET BUF	02/14/23 17:59

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll US Corporation
Job ID: 480-206146-1
Project/Site: Phytoremediation Court Street Building 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

Method Summary

Client: Ramboll US Corporation
Job ID: 480-206146-1
Project/Site: Phytoremediation Court Street Building 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll US Corporation
Job ID: 480-206146-1
Project/Site: Phytoremediation Court Street Building 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-206146-1	INFLUENT-021023	Water	02/10/23 09:30	02/11/23 08:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

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Syracuse

Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-182201-32176.1
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: #225	Page: Page 1 of 4
Company: Ramboll US Corporation	PWSID:			Job #: 1940101434
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-956-6379	PO #: 1940006251			
Email: jason.newton@obg.com	WO #:			
Project Name: Phytoremediation GW Analysis	Project #: 48021953			
Site: Former Un Const St bldg #5	SSOW#:			

Analysis Requested

480-206146 Chain of Custody

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL Volatiles	8270D_SIM_MS_ID - SIM - 1,4 Dioxane	Total Num	Special Instructions/Note:
			Preservation Code:				A	N		
Influent-021023	2/10/23	0930	G	Water	N	N	X	X	5	Match Previous Influent
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Match Previous Influent

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2/10/23 - 1028	Ramboll		2-10-23, 1028	
2	Relinquished by:	Date/Time: 2-10-23, 1900	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 2/11/23 800	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.1 #1 ICE

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 480-206146-1

Login Number: 206146

List Source: Eurofins Buffalo

List Number: 1

Creator: Stopa, Erik S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	RAMBOLL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll US Corporation
333 West Washington Street
Syracuse, New York 13202

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JOB DESCRIPTION

Phytoremediation Court Street Building 5

JOB NUMBER

480-207644-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

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 Northeast, LLC Project Manager.

Authorization



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Authorized for release by
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Designee for
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Definitions/Glossary

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance 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

Job ID: 480-207644-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-207644-1

Comments
No additional comments.

Receipt
The sample was received on 4/8/2023 9:00 AM. 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 was 2.8º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 664702 recovered above the upper control limit for 2-Hexanone, cis-1,3-Dichloropropene, Styrene, trans-1,3-Dichloropropene, Chlorodibromomethane, 4-Methyl-2-pentanone (MIBK), and 2-Butanone (MEK). The samples associated with this CCV were not detected above the reporting limit (RL) for the affected analytes; therefore, the data have been reported. The associated sample is impacted: INFLUENT-040723 (480-207644-1).

Method 8260C: The laboratory control sample (LCS) for analytical batch 480-664702 recovered outside control limits for the following analytes: 2-Hexanone, trans-1,3-Dichloropropene, Chlorodibromomethane, 4-Methyl-2-pentanone (MIBK), Bromoform and 2-Butanone (MEK). These analytes were biased high in the LCS and were not detected above the reporting limit (RL) in the associated samples; therefore, the data have been reported. The associated sample is impacted: INFLUENT-040723 (480-207644-1).

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

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-040723
Lab Sample ID: 480-207644-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.5		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	6.0		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	5.1		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	3.2		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-040723
Lab Sample ID: 480-207644-1
Date Collected: 04/07/23 08:46
Matrix: Water
Date Received: 04/08/23 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/11/23 14:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/11/23 14:02	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/11/23 14:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/11/23 14:02	1
1,1-Dichloroethane	**2.5**		1.0	0.38	ug/L			04/11/23 14:02	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/11/23 14:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/11/23 14:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/11/23 14:02	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/11/23 14:02	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/11/23 14:02	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/11/23 14:02	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/11/23 14:02	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/11/23 14:02	1
2-Butanone (MEK)	ND	*+	10	1.3	ug/L			04/11/23 14:02	1
2-Hexanone	ND	*+	5.0	1.2	ug/L			04/11/23 14:02	1
4-Methyl-2-pentanone (MIBK)	ND	*+	5.0	2.1	ug/L			04/11/23 14:02	1
Acetone	ND		10	3.0	ug/L			04/11/23 14:02	1
Benzene	ND		1.0	0.41	ug/L			04/11/23 14:02	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/11/23 14:02	1
Bromoform	ND	*+	1.0	0.26	ug/L			04/11/23 14:02	1
Bromomethane	ND		1.0	0.69	ug/L			04/11/23 14:02	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/11/23 14:02	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/11/23 14:02	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/11/23 14:02	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			04/11/23 14:02	1
Chloroethane	ND		1.0	0.32	ug/L			04/11/23 14:02	1
Chloroform	ND		1.0	0.34	ug/L			04/11/23 14:02	1
Chloromethane	ND		1.0	0.35	ug/L			04/11/23 14:02	1
cis-1,2-Dichloroethene	**6.0**		1.0	0.81	ug/L			04/11/23 14:02	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/11/23 14:02	1
Cyclohexane	ND		1.0	0.18	ug/L			04/11/23 14:02	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/11/23 14:02	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/11/23 14:02	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/11/23 14:02	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/11/23 14:02	1
Methyl acetate	ND		2.5	1.3	ug/L			04/11/23 14:02	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/11/23 14:02	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/11/23 14:02	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/11/23 14:02	1
Styrene	ND		1.0	0.73	ug/L			04/11/23 14:02	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/11/23 14:02	1
Toluene	ND		1.0	0.51	ug/L			04/11/23 14:02	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/11/23 14:02	1
trans-1,3-Dichloropropene	ND	*+	1.0	0.37	ug/L			04/11/23 14:02	1
Trichloroethene	ND		1.0	0.46	ug/L			04/11/23 14:02	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/11/23 14:02	1
Vinyl chloride	**5.1**		1.0	0.90	ug/L			04/11/23 14:02	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/11/23 14:02	1

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-040723
Lab Sample ID: 480-207644-1
Date Collected: 04/07/23 08:46
Matrix: Water
Date Received: 04/08/23 09:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*04/11/23 14:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*		*04/11/23 14:02*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*04/11/23 14:02*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*04/11/23 14:02*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	3.2		0.20	0.10	ug/L		04/10/23 16:36	04/12/23 05:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*30*		*15 - 110*	*04/10/23 16:36*	*04/12/23 05:06*	*1*

Surrogate Summary

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-207644-1	INFLUENT-040723	93	109	96	104
LCS 480-664702/6	Lab Control Sample	102	100	103	97
MB 480-664702/8	Method Blank	96	105	93	105

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)								
		DXE								
Lab Sample ID	Client Sample ID	(15-110)								
480-207644-1	INFLUENT-040723	30								
LCS 480-664608/2-A	Lab Control Sample	35								
MB 480-664608/1-A	Method Blank	29								

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-664702/8
Matrix: Water
Analysis Batch: 664702

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-Trichloroethane	ND		1.0	0.82	ug/L			04/11/23 13:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/11/23 13:04	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/11/23 13:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/11/23 13:04	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/11/23 13:04	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/11/23 13:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/11/23 13:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/11/23 13:04	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/11/23 13:04	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/11/23 13:04	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/11/23 13:04	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/11/23 13:04	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/11/23 13:04	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/11/23 13:04	1
2-Hexanone	ND		5.0	1.2	ug/L			04/11/23 13:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/11/23 13:04	1
Acetone	ND		10	3.0	ug/L			04/11/23 13:04	1
Benzene	ND		1.0	0.41	ug/L			04/11/23 13:04	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/11/23 13:04	1
Bromoform	ND		1.0	0.26	ug/L			04/11/23 13:04	1
Bromomethane	ND		1.0	0.69	ug/L			04/11/23 13:04	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/11/23 13:04	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/11/23 13:04	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/11/23 13:04	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/11/23 13:04	1
Chloroethane	ND		1.0	0.32	ug/L			04/11/23 13:04	1
Chloroform	ND		1.0	0.34	ug/L			04/11/23 13:04	1
Chloromethane	ND		1.0	0.35	ug/L			04/11/23 13:04	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/11/23 13:04	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/11/23 13:04	1
Cyclohexane	ND		1.0	0.18	ug/L			04/11/23 13:04	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/11/23 13:04	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/11/23 13:04	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/11/23 13:04	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/11/23 13:04	1
Methyl acetate	ND		2.5	1.3	ug/L			04/11/23 13:04	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/11/23 13:04	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/11/23 13:04	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/11/23 13:04	1
Styrene	ND		1.0	0.73	ug/L			04/11/23 13:04	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/11/23 13:04	1
Toluene	ND		1.0	0.51	ug/L			04/11/23 13:04	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/11/23 13:04	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/11/23 13:04	1
Trichloroethene	ND		1.0	0.46	ug/L			04/11/23 13:04	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/11/23 13:04	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/11/23 13:04	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/11/23 13:04	1

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

Lab Sample ID: MB 480-664702/8
Matrix: Water
Analysis Batch: 664702

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/11/23 13:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*04/11/23 13:04*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*04/11/23 13:04*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*04/11/23 13:04*	*1*

Lab Sample ID: LCS 480-664702/6
Matrix: Water
Analysis Batch: 664702

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-Trichloroethane	25.0	24.3		ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	25.0	29.6		ug/L		118	76 - 120
1,1,2-Trichloroethane	25.0	29.0		ug/L		116	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.2		ug/L		93	61 - 148
1,1-Dichloroethane	25.0	24.6		ug/L		98	77 - 120
1,1-Dichloroethene	25.0	23.1		ug/L		92	66 - 127
1,2,4-Trichlorobenzene	25.0	20.5		ug/L		82	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	30.7		ug/L		123	56 - 134
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	25.8		ug/L		103	75 - 120
1,2-Dichloropropane	25.0	25.9		ug/L		104	76 - 120
1,3-Dichlorobenzene	25.0	26.1		ug/L		105	77 - 120
1,4-Dichlorobenzene	25.0	26.0		ug/L		104	80 - 120
2-Butanone (MEK)	125	185	*+	ug/L		148	57 - 140
2-Hexanone	125	195	*+	ug/L		156	65 - 127
4-Methyl-2-pentanone (MIBK)	125	162	*+	ug/L		130	71 - 125
Acetone	125	170		ug/L		136	56 - 142
Benzene	25.0	25.6		ug/L		102	71 - 124
Bromodichloromethane	25.0	28.0		ug/L		112	80 - 122
Bromoform	25.0	34.7	*+	ug/L		139	61 - 132
Bromomethane	25.0	23.3		ug/L		93	55 - 144
Carbon disulfide	25.0	24.0		ug/L		96	59 - 134
Carbon tetrachloride	25.0	28.0		ug/L		112	72 - 134
Chlorobenzene	25.0	27.0		ug/L		108	80 - 120
Dibromochloromethane	25.0	31.8	*+	ug/L		127	75 - 125
Chloroethane	25.0	20.0		ug/L		80	69 - 136
Chloroform	25.0	23.1		ug/L		93	73 - 127
Chloromethane	25.0	22.6		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	29.2		ug/L		117	74 - 124
Cyclohexane	25.0	24.4		ug/L		98	59 - 135
Dichlorodifluoromethane	25.0	22.0		ug/L		88	59 - 135
Ethylbenzene	25.0	27.4		ug/L		110	77 - 123
1,2-Dibromoethane	25.0	29.2		ug/L		117	77 - 120
Isopropylbenzene	25.0	27.6		ug/L		111	77 - 122
Methyl acetate	50.0	55.9		ug/L		112	74 - 133
Methyl tert-butyl ether	25.0	23.7		ug/L		95	77 - 120
Methylcyclohexane	25.0	25.1		ug/L		100	68 - 134

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

Lab Sample ID: LCS 480-664702/6
Matrix: Water
Analysis Batch: 664702

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	24.2		ug/L		97	75 - 124
Styrene	25.0	29.1		ug/L		117	80 - 120
Tetrachloroethene	25.0	28.8		ug/L		115	74 - 122
Toluene	25.0	26.9		ug/L		108	80 - 122
trans-1,2-Dichloroethene	25.0	24.1		ug/L		96	73 - 127
trans-1,3-Dichloropropene	25.0	32.9	*+	ug/L		132	80 - 120
Trichloroethene	25.0	25.3		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	23.9		ug/L		96	62 - 150
Vinyl chloride	25.0	22.9		ug/L		92	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-664608/1-A
Matrix: Water
Analysis Batch: 664691

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 664608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/10/23 16:36	04/11/23 19:24	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*29*		*15 - 110*	*04/10/23 16:36*	*04/11/23 19:24*	*1*

Lab Sample ID: LCS 480-664608/2-A
Matrix: Water
Analysis Batch: 664691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 664608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.13		ug/L		106	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*35*		*15 - 110*

QC Association Summary

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

GC/MS VOA

Analysis Batch: 664702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207644-1	INFLUENT-040723	Total/NA	Water	8260C	
MB 480-664702/8	Method Blank	Total/NA	Water	8260C	
LCS 480-664702/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 664608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207644-1	INFLUENT-040723	Total/NA	Water	3510C	
MB 480-664608/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-664608/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 664691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-664608/1-A	Method Blank	Total/NA	Water	8270D SIM ID	664608
LCS 480-664608/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	664608

Analysis Batch: 664693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207644-1	INFLUENT-040723	Total/NA	Water	8270D SIM ID	664608

Lab Chronicle

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-040723
Lab Sample ID: 480-207644-1
Date Collected: 04/07/23 08:46
Matrix: Water
Date Received: 04/08/23 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	664702	ATG	EET BUF	04/11/23 14:02
Total/NA	Prep	3510C			664608	SJM	EET BUF	04/10/23 16:36
Total/NA	Analysis	8270D SIM ID		1	664693	JMM	EET BUF	04/12/23 05:06

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll US Corporation
Job ID: 480-207644-1
Project/Site: Phytoremediation Court Street Building 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-207644-1	INFLUENT-040723	Water	04/07/23 08:46	04/08/23 09:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

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Syracuse

Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s): #225	COC No: 480-182201-32176.1
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 4
Company: Ramboll US Corporation	PWSID:			Job #: 1940101934
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-506-3236	PO #: 1940006251			
Email: jason.newton@obg.com	WO #:			
Project Name: Phytoremediation GW Analysis	Project #: 48021953			
Site: former LM Courtst bldg #5	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, 2SO3, 2S2O3, SO4, Dodecahydrate, one, A, -5, a, (specify)

480-207644 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL Volatiles	8270D_SIM_MS_ID - SIM - 1,4 Dioxane	Total Number o	Special Instructions/Note:
			Preservation Code:				A	N		
Influent-040723	4/7/23	0846	G	Water	NN		X	X	5	Match previous influent
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/7/23 - 0915	Ramboll	R. English	4.7.23, 0915	SJA
2	R. English	4-7-23, 1900	SJA	[signature]	4/8/23 0400	TAB
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #1 2.8

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 480-207644-1

Login Number: 207644

List Source: Eurofins Buffalo

List Number: 1

Creator: Wallace, Cameron

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll US Corporation
333 West Washington Street
Syracuse, New York 13202

Generated 5/10/2023 1:19:40 PM

JOB DESCRIPTION

Former LM Court St Bldg# 5

JOB NUMBER

480-208606-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

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 Northeast, LLC Project Manager.

Authorization



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5/10/2023 1:19:40 PM

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Client: Ramboll US Corporation
Job ID: 480-208606-1
Project/Site: Former LM Court St Bldg# 5

Glossary

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

Case Narrative

Client: Ramboll US Corporation
Project/Site: Former LM Court St Bldg# 5

Job ID: 480-208606-1

Job ID: 480-208606-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-208606-1

Receipt
The sample was received on 5/5/2023 10:00 AM. 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 2.6°C

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

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

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

Detection Summary

Client: Ramboll US Corporation
Job ID: 480-208606-1
Project/Site: Former LM Court St Bldg# 5

Client Sample ID: INFLUENT-050423
Lab Sample ID: 480-208606-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.4		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	6.4		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	4.7		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	4.0		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll US Corporation
Job ID: 480-208606-1
Project/Site: Former LM Court St Bldg# 5

Client Sample ID: INFLUENT-050423
Lab Sample ID: 480-208606-1
Date Collected: 05/04/23 09:30
Matrix: Water
Date Received: 05/05/23 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/09/23 06:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/09/23 06:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/09/23 06:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/09/23 06:26	1
1,1-Dichloroethane	**2.4**		1.0	0.38	ug/L			05/09/23 06:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/09/23 06:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/09/23 06:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/09/23 06:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/09/23 06:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/09/23 06:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/09/23 06:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/09/23 06:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/09/23 06:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/09/23 06:26	1
2-Hexanone	ND		5.0	1.2	ug/L			05/09/23 06:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/09/23 06:26	1
Acetone	ND		10	3.0	ug/L			05/09/23 06:26	1
Benzene	ND		1.0	0.41	ug/L			05/09/23 06:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/09/23 06:26	1
Bromoform	ND		1.0	0.26	ug/L			05/09/23 06:26	1
Bromomethane	ND		1.0	0.69	ug/L			05/09/23 06:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/09/23 06:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/09/23 06:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/09/23 06:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/09/23 06:26	1
Chloroethane	ND		1.0	0.32	ug/L			05/09/23 06:26	1
Chloroform	ND		1.0	0.34	ug/L			05/09/23 06:26	1
Chloromethane	ND		1.0	0.35	ug/L			05/09/23 06:26	1
cis-1,2-Dichloroethene	**6.4**		1.0	0.81	ug/L			05/09/23 06:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/09/23 06:26	1
Cyclohexane	ND		1.0	0.18	ug/L			05/09/23 06:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/09/23 06:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/09/23 06:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/09/23 06:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/09/23 06:26	1
Methyl acetate	ND		2.5	1.3	ug/L			05/09/23 06:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/09/23 06:26	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/09/23 06:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/09/23 06:26	1
Styrene	ND		1.0	0.73	ug/L			05/09/23 06:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/09/23 06:26	1
Toluene	ND		1.0	0.51	ug/L			05/09/23 06:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/09/23 06:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/09/23 06:26	1
Trichloroethene	ND		1.0	0.46	ug/L			05/09/23 06:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/09/23 06:26	1
Vinyl chloride	**4.7**		1.0	0.90	ug/L			05/09/23 06:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/09/23 06:26	1

Client: Ramboll US Corporation
Job ID: 480-208606-1
Project/Site: Former LM Court St Bldg# 5

Client Sample ID: INFLUENT-050423
Lab Sample ID: 480-208606-1
Date Collected: 05/04/23 09:30
Matrix: Water
Date Received: 05/05/23 10:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/09/23 06:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*05/09/23 06:26*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*05/09/23 06:26*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*05/09/23 06:26*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.0**		0.20	0.10	ug/L		05/06/23 10:00	05/08/23 17:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*15 - 110*	*05/06/23 10:00*	*05/08/23 17:17*	*1*

Surrogate Summary

Client: Ramboll US Corporation
Project/Site: Former LM Court St Bldg# 5

Job ID: 480-208606-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-208606-1	INFLUENT-050423	98	92	95	93
LCS 480-668668/6	Lab Control Sample	100	98	102	96
MB 480-668668/8	Method Blank	101	102	101	99

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll US Corporation
Project/Site: Former LM Court St Bldg# 5

Job ID: 480-208606-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		DXE							
Lab Sample ID	Client Sample ID	(15-110)							
480-208606-1	INFLUENT-050423	33							
LCS 480-668432/2-A	Lab Control Sample	36							
MB 480-668432/1-A	Method Blank	33							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Client: Ramboll US Corporation
Project/Site: Former LM Court St Bldg# 5

Job ID: 480-208606-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-668668/8
Matrix: Water
Analysis Batch: 668668

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-Trichloroethane	ND		1.0	0.82	ug/L			05/09/23 03:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/09/23 03:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/09/23 03:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/09/23 03:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/09/23 03:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/09/23 03:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/09/23 03:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/09/23 03:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/09/23 03:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/09/23 03:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/09/23 03:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/09/23 03:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/09/23 03:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/09/23 03:20	1
2-Hexanone	ND		5.0	1.2	ug/L			05/09/23 03:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/09/23 03:20	1
Acetone	ND		10	3.0	ug/L			05/09/23 03:20	1
Benzene	ND		1.0	0.41	ug/L			05/09/23 03:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/09/23 03:20	1
Bromoform	ND		1.0	0.26	ug/L			05/09/23 03:20	1
Bromomethane	ND		1.0	0.69	ug/L			05/09/23 03:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/09/23 03:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/09/23 03:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/09/23 03:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/09/23 03:20	1
Chloroethane	ND		1.0	0.32	ug/L			05/09/23 03:20	1
Chloroform	ND		1.0	0.34	ug/L			05/09/23 03:20	1
Chloromethane	ND		1.0	0.35	ug/L			05/09/23 03:20	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/09/23 03:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/09/23 03:20	1
Cyclohexane	ND		1.0	0.18	ug/L			05/09/23 03:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/09/23 03:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/09/23 03:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/09/23 03:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/09/23 03:20	1
Methyl acetate	ND		2.5	1.3	ug/L			05/09/23 03:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/09/23 03:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/09/23 03:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/09/23 03:20	1
Styrene	ND		1.0	0.73	ug/L			05/09/23 03:20	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/09/23 03:20	1
Toluene	ND		1.0	0.51	ug/L			05/09/23 03:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/09/23 03:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/09/23 03:20	1
Trichloroethene	ND		1.0	0.46	ug/L			05/09/23 03:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/09/23 03:20	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/09/23 03:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/09/23 03:20	1

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

Lab Sample ID: MB 480-668668/8
Matrix: Water
Analysis Batch: 668668

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/09/23 03:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*05/09/23 03:20*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*05/09/23 03:20*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*05/09/23 03:20*	*1*

Lab Sample ID: LCS 480-668668/6
Matrix: Water
Analysis Batch: 668668

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-Trichloroethane	25.0	25.8		ug/L		103	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.6		ug/L		102	76 - 120
1,1,2-Trichloroethane	25.0	25.8		ug/L		103	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.0		ug/L		112	61 - 148
1,1-Dichloroethane	25.0	25.3		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	25.6		ug/L		102	66 - 127
1,2,4-Trichlorobenzene	25.0	24.9		ug/L		99	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.2		ug/L		93	56 - 134
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	23.8		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	24.0		ug/L		96	76 - 120
1,3-Dichlorobenzene	25.0	26.0		ug/L		104	77 - 120
1,4-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 120
2-Butanone (MEK)	125	131		ug/L		105	57 - 140
2-Hexanone	125	136		ug/L		109	65 - 127
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	71 - 125
Acetone	125	145		ug/L		116	56 - 142
Benzene	25.0	24.5		ug/L		98	71 - 124
Bromodichloromethane	25.0	23.2		ug/L		93	80 - 122
Bromoform	25.0	23.2		ug/L		93	61 - 132
Bromomethane	25.0	26.4		ug/L		106	55 - 144
Carbon disulfide	25.0	28.2		ug/L		113	59 - 134
Carbon tetrachloride	25.0	25.2		ug/L		101	72 - 134
Chlorobenzene	25.0	25.2		ug/L		101	80 - 120
Dibromochloromethane	25.0	24.3		ug/L		97	75 - 125
Chloroethane	25.0	25.1		ug/L		100	69 - 136
Chloroform	25.0	23.8		ug/L		95	73 - 127
Chloromethane	25.0	23.8		ug/L		95	68 - 124
cis-1,2-Dichloroethene	25.0	23.9		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	23.3		ug/L		93	74 - 124
Cyclohexane	25.0	27.4		ug/L		110	59 - 135
Dichlorodifluoromethane	25.0	22.6		ug/L		90	59 - 135
Ethylbenzene	25.0	26.3		ug/L		105	77 - 123
1,2-Dibromoethane	25.0	24.8		ug/L		99	77 - 120
Isopropylbenzene	25.0	27.1		ug/L		109	77 - 122
Methyl acetate	50.0	48.2		ug/L		96	74 - 133
Methyl tert-butyl ether	25.0	24.1		ug/L		96	77 - 120
Methylcyclohexane	25.0	26.8		ug/L		107	68 - 134

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

Lab Sample ID: LCS 480-668668/6
Matrix: Water
Analysis Batch: 668668

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	23.6		ug/L		95	75 - 124
Styrene	25.0	25.8		ug/L		103	80 - 120
Tetrachloroethene	25.0	26.2		ug/L		105	74 - 122
Toluene	25.0	25.2		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	73 - 127
trans-1,3-Dichloropropene	25.0	24.3		ug/L		97	80 - 120
Trichloroethene	25.0	24.1		ug/L		96	74 - 123
Trichlorofluoromethane	25.0	26.6		ug/L		107	62 - 150
Vinyl chloride	25.0	26.0		ug/L		104	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-668432/1-A
Matrix: Water
Analysis Batch: 668567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 668432

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		05/06/23 10:00	05/08/23 12:45	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*15 - 110*	*05/06/23 10:00*	*05/08/23 12:45*	*1*

Lab Sample ID: LCS 480-668432/2-A
Matrix: Water
Analysis Batch: 668567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 668432

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.28		ug/L		114	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*36*		*15 - 110*

QC Association Summary

Client: Ramboll US Corporation
Project/Site: Former LM Court St Bldg# 5

Job ID: 480-208606-1

GC/MS VOA

Analysis Batch: 668668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208606-1	INFLUENT-050423	Total/NA	Water	8260C	
MB 480-668668/8	Method Blank	Total/NA	Water	8260C	
LCS 480-668668/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 668432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208606-1	INFLUENT-050423	Total/NA	Water	3510C	
MB 480-668432/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-668432/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 668567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208606-1	INFLUENT-050423	Total/NA	Water	8270D SIM ID	668432
MB 480-668432/1-A	Method Blank	Total/NA	Water	8270D SIM ID	668432
LCS 480-668432/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	668432

Lab Chronicle

Client: Ramboll US Corporation
Job ID: 480-208606-1
Project/Site: Former LM Court St Bldg# 5

Client Sample ID: INFLUENT-050423
Lab Sample ID: 480-208606-1
Date Collected: 05/04/23 09:30
Matrix: Water
Date Received: 05/05/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	668668	ATG	EET BUF	05/09/23 06:26
Total/NA	Prep	3510C			668432	JMP	EET BUF	05/06/23 10:00
Total/NA	Analysis	8270D SIM ID		1	668567	JMM	EET BUF	05/08/23 17:17

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll US Corporation
Job ID: 480-208606-1
Project/Site: Former LM Court St Bldg# 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Ramboll US Corporation
Job ID: 480-208606-1
Project/Site: Former LM Court St Bldg# 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll US Corporation
Job ID: 480-208606-1
Project/Site: Former LM Court St Bldg# 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-208606-1	INFLUENT-050423	Water	05/04/23 09:30	05/05/23 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

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Syracuse

Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s): #225	COC No: 480-182201-32176.1
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page ~~1 of 4~~ 1 of 1
Company: Ramboll US Corporation	PWSID:			Job #: 194010194
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-506-3236	PO #: 1940006251			
Email: jason.newton@obg.com	WO #:			
Project Name: Phytoremediation GW Analysis	Project #: 48021953			
Site: Farm LN Contest bldg #5	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL Volatiles	8270D_SIM_MS_ID - SIM - 1,4 Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
Influent - 050423	5/4/23	0430	G	Water	N	N	X	X	5	Match Previous Influent
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

480-208606 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:		Date/Time: 5/4/23 - 1034	Company: Ramboll	Received by:		Date/Time: 5-4-23, 10:34	Company: Eyn
Relinquished by:		Date/Time: 5-4-23, 1900	Company: Eyn	Received by:		Date/Time: 5/5/23 1000	Company: LAS
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: # 1, 2, 6

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 480-208606-1

Login Number: 208606

List Source: Eurofins Buffalo

List Number: 1

Creator: Yeager, Brian A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	RAMBOLL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll US Corporation
333 West Washington Street
Syracuse, New York 13202

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JOB DESCRIPTION

Phytoremediation Court Street Building 5

JOB NUMBER

480-210691-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

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 Northeast, LLC Project Manager.

Authorization



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Authorized for release by
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Glossary

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

Case Narrative

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

Job ID: 480-210691-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-210691-1

Comments
No additional comments.

Receipt
The sample was received on 7/12/2023 10:00 AM. 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 was 2.5º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-071123
Lab Sample ID: 480-210691-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.6		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	5.7		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	4.4		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	5.0		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-071123
Lab Sample ID: 480-210691-1
Date Collected: 07/11/23 09:00
Matrix: Water
Date Received: 07/12/23 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/23 06:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/23 06:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/23 06:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/23 06:20	1
1,1-Dichloroethane	**2.6**		1.0	0.38	ug/L			07/15/23 06:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/23 06:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/23 06:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/23 06:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/23 06:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/23 06:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/23 06:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/23 06:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/23 06:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/23 06:20	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/23 06:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/23 06:20	1
Acetone	ND		10	3.0	ug/L			07/15/23 06:20	1
Benzene	ND		1.0	0.41	ug/L			07/15/23 06:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/23 06:20	1
Bromoform	ND		1.0	0.26	ug/L			07/15/23 06:20	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/23 06:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/23 06:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/23 06:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/23 06:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/23 06:20	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/23 06:20	1
Chloroform	ND		1.0	0.34	ug/L			07/15/23 06:20	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/23 06:20	1
cis-1,2-Dichloroethene	**5.7**		1.0	0.81	ug/L			07/15/23 06:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/23 06:20	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/23 06:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/23 06:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/23 06:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/23 06:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/23 06:20	1
Methyl acetate	ND		2.5	1.3	ug/L			07/15/23 06:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/23 06:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/23 06:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/23 06:20	1
Styrene	ND		1.0	0.73	ug/L			07/15/23 06:20	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/15/23 06:20	1
Toluene	ND		1.0	0.51	ug/L			07/15/23 06:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/15/23 06:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/23 06:20	1
Trichloroethene	ND		1.0	0.46	ug/L			07/15/23 06:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/23 06:20	1
Vinyl chloride	**4.4**		1.0	0.90	ug/L			07/15/23 06:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/23 06:20	1

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-071123
Lab Sample ID: 480-210691-1
Date Collected: 07/11/23 09:00
Matrix: Water
Date Received: 07/12/23 10:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/15/23 06:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/15/23 06:20*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*07/15/23 06:20*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*07/15/23 06:20*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.0**		0.20	0.10	ug/L		07/12/23 14:52	07/13/23 16:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*15 - 110*	*07/12/23 14:52*	*07/13/23 16:53*	*1*

Surrogate Summary

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-210691-1	INFLUENT-071123	98	96	103	97
LCS 480-676454/6	Lab Control Sample	98	101	98	98
LCSD 480-676454/7	Lab Control Sample Dup	99	100	98	97
MB 480-676454/9	Method Blank	99	99	101	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		DXE							
Lab Sample ID	Client Sample ID	(15-110)							
480-210691-1	INFLUENT-071123	35							
LCS 480-676099/2-A	Lab Control Sample	33							
MB 480-676099/1-A	Method Blank	42							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-676454/9
Matrix: Water
Analysis Batch: 676454

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-Trichloroethane	ND		1.0	0.82	ug/L			07/15/23 05:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/23 05:57	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/23 05:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/23 05:57	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/15/23 05:57	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/23 05:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/23 05:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/23 05:57	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/23 05:57	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/23 05:57	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/23 05:57	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/23 05:57	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/23 05:57	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/23 05:57	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/23 05:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/23 05:57	1
Acetone	ND		10	3.0	ug/L			07/15/23 05:57	1
Benzene	ND		1.0	0.41	ug/L			07/15/23 05:57	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/23 05:57	1
Bromoform	ND		1.0	0.26	ug/L			07/15/23 05:57	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/23 05:57	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/23 05:57	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/23 05:57	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/23 05:57	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/23 05:57	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/23 05:57	1
Chloroform	ND		1.0	0.34	ug/L			07/15/23 05:57	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/23 05:57	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/15/23 05:57	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/23 05:57	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/23 05:57	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/23 05:57	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/23 05:57	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/23 05:57	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/23 05:57	1
Methyl acetate	ND		2.5	1.3	ug/L			07/15/23 05:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/23 05:57	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/23 05:57	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/23 05:57	1
Styrene	ND		1.0	0.73	ug/L			07/15/23 05:57	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/15/23 05:57	1
Toluene	ND		1.0	0.51	ug/L			07/15/23 05:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/15/23 05:57	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/23 05:57	1
Trichloroethene	ND		1.0	0.46	ug/L			07/15/23 05:57	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/23 05:57	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/15/23 05:57	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/23 05:57	1

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

Lab Sample ID: MB 480-676454/9
Matrix: Water
Analysis Batch: 676454

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/15/23 05:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*07/15/23 05:57*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*07/15/23 05:57*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*07/15/23 05:57*	*1*

Lab Sample ID: LCS 480-676454/6
Matrix: Water
Analysis Batch: 676454

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-Trichloroethane	25.0	26.2		ug/L		105	73 - 126
1,1,2,2-Tetrachloroethane	25.0	27.8		ug/L		111	76 - 120
1,1,2-Trichloroethane	25.0	27.0		ug/L		108	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.2		ug/L		113	61 - 148
1,1-Dichloroethane	25.0	27.0		ug/L		108	77 - 120
1,1-Dichloroethene	25.0	27.7		ug/L		111	66 - 127
1,2,4-Trichlorobenzene	25.0	26.7		ug/L		107	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	28.7		ug/L		115	56 - 134
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	24.5		ug/L		98	75 - 120
1,2-Dichloropropane	25.0	27.3		ug/L		109	76 - 120
1,3-Dichlorobenzene	25.0	26.0		ug/L		104	77 - 120
1,4-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 120
2-Butanone (MEK)	125	133		ug/L		106	57 - 140
2-Hexanone	125	138		ug/L		110	65 - 127
4-Methyl-2-pentanone (MIBK)	125	138		ug/L		110	71 - 125
Acetone	125	125		ug/L		100	56 - 142
Benzene	25.0	26.8		ug/L		107	71 - 124
Bromodichloromethane	25.0	26.6		ug/L		106	80 - 122
Bromoform	25.0	28.0		ug/L		112	61 - 132
Bromomethane	25.0	20.6		ug/L		83	55 - 144
Carbon disulfide	25.0	26.8		ug/L		107	59 - 134
Carbon tetrachloride	25.0	26.2		ug/L		105	72 - 134
Chlorobenzene	25.0	25.8		ug/L		103	80 - 120
Dibromochloromethane	25.0	27.8		ug/L		111	75 - 125
Chloroethane	25.0	22.3		ug/L		89	69 - 136
Chloroform	25.0	25.6		ug/L		102	73 - 127
Chloromethane	25.0	21.2		ug/L		85	68 - 124
cis-1,2-Dichloroethene	25.0	25.3		ug/L		101	74 - 124
cis-1,3-Dichloropropene	25.0	26.6		ug/L		107	74 - 124
Cyclohexane	25.0	28.5		ug/L		114	59 - 135
Dichlorodifluoromethane	25.0	22.7		ug/L		91	59 - 135
Ethylbenzene	25.0	26.5		ug/L		106	77 - 123
1,2-Dibromoethane	25.0	26.8		ug/L		107	77 - 120
Isopropylbenzene	25.0	27.9		ug/L		112	77 - 122
Methyl acetate	50.0	57.4		ug/L		115	74 - 133
Methyl tert-butyl ether	25.0	25.9		ug/L		104	77 - 120
Methylcyclohexane	25.0	27.8		ug/L		111	68 - 134

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

Lab Sample ID: LCS 480-676454/6
Matrix: Water
Analysis Batch: 676454

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	25.4		ug/L		101	75 - 124
Styrene	25.0	26.8		ug/L		107	80 - 120
Tetrachloroethene	25.0	29.2		ug/L		117	74 - 122
Toluene	25.0	26.1		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	26.0		ug/L		104	73 - 127
trans-1,3-Dichloropropene	25.0	27.7		ug/L		111	80 - 120
Trichloroethene	25.0	26.0		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	23.0		ug/L		92	62 - 150
Vinyl chloride	25.0	23.1		ug/L		92	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*

Lab Sample ID: LCSD 480-676454/7
Matrix: Water
Analysis Batch: 676454

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
1,1,1-Trichloroethane	25.0	26.4		ug/L		105	73 - 126	1	15
1,1,2,2-Tetrachloroethane	25.0	28.3		ug/L		113	76 - 120	2	15
1,1,2-Trichloroethane	25.0	26.8		ug/L		107	76 - 122	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.6		ug/L		114	61 - 148	1	20
1,1-Dichloroethane	25.0	27.5		ug/L		110	77 - 120	2	20
1,1-Dichloroethene	25.0	28.0		ug/L		112	66 - 127	1	16
1,2,4-Trichlorobenzene	25.0	27.4		ug/L		110	79 - 122	3	20
1,2-Dibromo-3-Chloropropane	25.0	28.6		ug/L		115	56 - 134	0	15
1,2-Dichlorobenzene	25.0	26.3		ug/L		105	80 - 124	2	20
1,2-Dichloroethane	25.0	25.0		ug/L		100	75 - 120	2	20
1,2-Dichloropropane	25.0	27.6		ug/L		110	76 - 120	1	20
1,3-Dichlorobenzene	25.0	27.1		ug/L		108	77 - 120	4	20
1,4-Dichlorobenzene	25.0	26.6		ug/L		106	80 - 120	3	20
2-Butanone (MEK)	125	130		ug/L		104	57 - 140	2	20
2-Hexanone	125	138		ug/L		110	65 - 127	0	15
4-Methyl-2-pentanone (MIBK)	125	138		ug/L		110	71 - 125	0	35
Acetone	125	123		ug/L		98	56 - 142	2	15
Benzene	25.0	27.2		ug/L		109	71 - 124	1	13
Bromodichloromethane	25.0	26.0		ug/L		104	80 - 122	2	15
Bromoform	25.0	28.2		ug/L		113	61 - 132	1	15
Bromomethane	25.0	21.4		ug/L		86	55 - 144	4	15
Carbon disulfide	25.0	27.6		ug/L		110	59 - 134	3	15
Carbon tetrachloride	25.0	26.6		ug/L		106	72 - 134	2	15
Chlorobenzene	25.0	26.2		ug/L		105	80 - 120	2	25
Dibromochloromethane	25.0	27.8		ug/L		111	75 - 125	0	15
Chloroethane	25.0	22.0		ug/L		88	69 - 136	1	15
Chloroform	25.0	25.8		ug/L		103	73 - 127	1	20

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

Lab Sample ID: LCSD 480-676454/7
Matrix: Water
Analysis Batch: 676454

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
Chloromethane			25.0	22.4		ug/L		90	68 - 124	6	15
cis-1,2-Dichloroethene			25.0	26.4		ug/L		106	74 - 124	4	15
cis-1,3-Dichloropropene			25.0	26.8		ug/L		107	74 - 124	1	15
Cyclohexane			25.0	28.8		ug/L		115	59 - 135	1	20
Dichlorodifluoromethane			25.0	24.5		ug/L		98	59 - 135	8	20
Ethylbenzene			25.0	27.0		ug/L		108	77 - 123	2	15
1,2-Dibromoethane			25.0	26.3		ug/L		105	77 - 120	2	15
Isopropylbenzene			25.0	29.2		ug/L		117	77 - 122	4	20
Methyl acetate			50.0	54.9		ug/L		110	74 - 133	4	20
Methyl tert-butyl ether			25.0	25.8		ug/L		103	77 - 120	0	37
Methylcyclohexane			25.0	29.2		ug/L		117	68 - 134	5	20
Methylene Chloride			25.0	26.3		ug/L		105	75 - 124	4	15
Styrene			25.0	26.8		ug/L		107	80 - 120	0	20
Tetrachloroethene			25.0	29.8		ug/L		119	74 - 122	2	20
Toluene			25.0	26.8		ug/L		107	80 - 122	2	15
trans-1,2-Dichloroethene			25.0	26.9		ug/L		108	73 - 127	3	20
trans-1,3-Dichloropropene			25.0	27.5		ug/L		110	80 - 120	1	15
Trichloroethene			25.0	26.5		ug/L		106	74 - 123	2	16
Trichlorofluoromethane			25.0	23.5		ug/L		94	62 - 150	2	20
Vinyl chloride			25.0	23.7		ug/L		95	65 - 133	3	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-676099/1-A
Matrix: Water
Analysis Batch: 676185

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 676099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		07/12/23 14:52	07/13/23 14:41	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*15 - 110*	*07/12/23 14:52*	*07/13/23 14:41*	*1*

Lab Sample ID: LCS 480-676099/2-A
Matrix: Water
Analysis Batch: 676185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 676099

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.27		ug/L		113	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*33*		*15 - 110*

QC Association Summary

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

GC/MS VOA

Analysis Batch: 676454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210691-1	INFLUENT-071123	Total/NA	Water	8260C	
MB 480-676454/9	Method Blank	Total/NA	Water	8260C	
LCS 480-676454/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-676454/7	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 676099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210691-1	INFLUENT-071123	Total/NA	Water	3510C	
MB 480-676099/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-676099/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 676185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210691-1	INFLUENT-071123	Total/NA	Water	8270D SIM ID	676099
MB 480-676099/1-A	Method Blank	Total/NA	Water	8270D SIM ID	676099
LCS 480-676099/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	676099

Lab Chronicle

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-071123
Lab Sample ID: 480-210691-1
Date Collected: 07/11/23 09:00
Matrix: Water
Date Received: 07/12/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	676454	ATG	EET BUF	07/15/23 06:20
Total/NA	Prep	3510C			676099	LSC	EET BUF	07/12/23 14:52
Total/NA	Analysis	8270D SIM ID		1	676185	JMM	EET BUF	07/13/23 16:53

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll US Corporation
Job ID: 480-210691-1
Project/Site: Phytoremediation Court Street Building 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-210691-1	INFLUENT-071123	Water	07/11/23 09:00	07/12/23 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

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Client Information
Client Contact: Jason Newton
Company: Ramboll US Corporation
Address: 333 West Washington Street
City: Syracuse
State, Zip: NY, 13202
Phone: 315-506-3236
Email: jason.newton@obg.com
Project Name: Phytoremediation GW Analysis
Site: former Carrier bldg #5

Sampler: Jason Newton
Phone: 315-506-3236
PWSID:
Due Date Requested:
TAT Requested (days): Standard
Compliance Project: Δ Yes Δ No
PO #: 1940006251
WO #:
Project #: 48021953
SSOW#:

Lab PM: Schove, John R
E-Mail: John.Schove@et.eurofinsus.com
Carrier Tracking No(s):
State of Origin: Syracuse #225

COC No: 480-182201-32176.1
Page: Page 1 of 1
Job #: 194010193 4

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone

480-210691 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL Volatiles	8270D_SIM_MS_ID - SIM - 1,4 Dioxane	Total Number	Special Instructions/Note:
			Preservation Code:				A	N		
Influent-071123	7/11/23	0900	G	Water	N	N	X	X	5	Match Previous Methods
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		7-11-23 0930	Ramboll		7-11-23 0930	
2		7-11-23, 1900			7/12/23 1000	
3						

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: #1 2.5

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 480-210691-1

Login Number: 210691

List Source: Eurofins Buffalo

List Number: 1

Creator: Wallace, Cameron

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	False	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll US Corporation
333 West Washington Street
Syracuse, New York 13202

Generated 8/18/2023 11:13:01 AM

JOB DESCRIPTION

Phytoremediation Court Street Building 5

JOB NUMBER

480-211817-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Eurofins Buffalo

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 Northeast, LLC Project Manager.

Authorization



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8/18/2023 11:13:01 AM

Authorized for release by
Rebecca Jones, Project Management Assistant I
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Designee for
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Definitions/Glossary

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

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

Case Narrative

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

Job ID: 480-211817-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-211817-1

Comments
No additional comments.

Receipt
The sample was received on 8/12/2023 10:00 AM. 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 was 2.6º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT - 081123
Lab Sample ID: 480-211817-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.6		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	4.6		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	0.46	J	1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	2.1		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	3.6		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT - 081123
Lab Sample ID: 480-211817-1
Date Collected: 08/11/23 09:24
Matrix: Water
Date Received: 08/12/23 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/16/23 14:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/16/23 14:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/16/23 14:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/16/23 14:59	1
1,1-Dichloroethane	**2.6**		1.0	0.38	ug/L			08/16/23 14:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/16/23 14:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/16/23 14:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/16/23 14:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/16/23 14:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/16/23 14:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/16/23 14:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/16/23 14:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/16/23 14:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/16/23 14:59	1
2-Hexanone	ND		5.0	1.2	ug/L			08/16/23 14:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/16/23 14:59	1
Acetone	ND		10	3.0	ug/L			08/16/23 14:59	1
Benzene	ND		1.0	0.41	ug/L			08/16/23 14:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/16/23 14:59	1
Bromoform	ND		1.0	0.26	ug/L			08/16/23 14:59	1
Bromomethane	ND		1.0	0.69	ug/L			08/16/23 14:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/16/23 14:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/16/23 14:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/16/23 14:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/16/23 14:59	1
Chloroethane	ND		1.0	0.32	ug/L			08/16/23 14:59	1
Chloroform	ND		1.0	0.34	ug/L			08/16/23 14:59	1
Chloromethane	ND		1.0	0.35	ug/L			08/16/23 14:59	1
cis-1,2-Dichloroethene	**4.6**		1.0	0.81	ug/L			08/16/23 14:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/16/23 14:59	1
Cyclohexane	ND		1.0	0.18	ug/L			08/16/23 14:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/16/23 14:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/16/23 14:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/16/23 14:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/16/23 14:59	1
Methyl acetate	ND		2.5	1.3	ug/L			08/16/23 14:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/16/23 14:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/16/23 14:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/16/23 14:59	1
Styrene	ND		1.0	0.73	ug/L			08/16/23 14:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/16/23 14:59	1
Toluene	ND		1.0	0.51	ug/L			08/16/23 14:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/16/23 14:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/16/23 14:59	1
Trichloroethene	**0.46**	**J**	1.0	0.46	ug/L			08/16/23 14:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/16/23 14:59	1
Vinyl chloride	**2.1**		1.0	0.90	ug/L			08/16/23 14:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/16/23 14:59	1

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT - 081123
Lab Sample ID: 480-211817-1
Date Collected: 08/11/23 09:24
Matrix: Water
Date Received: 08/12/23 10:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*116*		*80 - 120*		*08/16/23 14:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*08/16/23 14:59*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*08/16/23 14:59*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*08/16/23 14:59*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.6**		0.20	0.10	ug/L		08/14/23 14:30	08/15/23 16:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*15 - 110*	*08/14/23 14:30*	*08/15/23 16:39*	*1*

Surrogate Summary

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-211817-1	INFLUENT - 081123	116	99	99	93
LCS 480-680203/6	Lab Control Sample	114	101	102	98
MB 480-680203/8	Method Blank	115	103	99	92

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)						
		DXE						
Lab Sample ID	Client Sample ID	(15-110)						
480-211817-1	INFLUENT - 081123	38						
480-211817-1 MS	INFLUENT - 081123	33						
480-211817-1 MSD	INFLUENT - 081123	34						
LCS 480-679950/2-A	Lab Control Sample	38						
MB 480-679950/1-A	Method Blank	42						

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-680203/8
Matrix: Water
Analysis Batch: 680203

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-Trichloroethane	ND		1.0	0.82	ug/L			08/16/23 12:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/16/23 12:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/16/23 12:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/16/23 12:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/16/23 12:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/16/23 12:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/16/23 12:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/16/23 12:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/16/23 12:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/16/23 12:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/16/23 12:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/16/23 12:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/16/23 12:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/16/23 12:51	1
2-Hexanone	ND		5.0	1.2	ug/L			08/16/23 12:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/16/23 12:51	1
Acetone	ND		10	3.0	ug/L			08/16/23 12:51	1
Benzene	ND		1.0	0.41	ug/L			08/16/23 12:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/16/23 12:51	1
Bromoform	ND		1.0	0.26	ug/L			08/16/23 12:51	1
Bromomethane	ND		1.0	0.69	ug/L			08/16/23 12:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/16/23 12:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/16/23 12:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/16/23 12:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/16/23 12:51	1
Chloroethane	ND		1.0	0.32	ug/L			08/16/23 12:51	1
Chloroform	ND		1.0	0.34	ug/L			08/16/23 12:51	1
Chloromethane	ND		1.0	0.35	ug/L			08/16/23 12:51	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/16/23 12:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/16/23 12:51	1
Cyclohexane	ND		1.0	0.18	ug/L			08/16/23 12:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/16/23 12:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/16/23 12:51	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/16/23 12:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/16/23 12:51	1
Methyl acetate	ND		2.5	1.3	ug/L			08/16/23 12:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/16/23 12:51	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/16/23 12:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/16/23 12:51	1
Styrene	ND		1.0	0.73	ug/L			08/16/23 12:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/16/23 12:51	1
Toluene	ND		1.0	0.51	ug/L			08/16/23 12:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/16/23 12:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/16/23 12:51	1
Trichloroethene	ND		1.0	0.46	ug/L			08/16/23 12:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/16/23 12:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/16/23 12:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/16/23 12:51	1

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

Lab Sample ID: MB 480-680203/8
Matrix: Water
Analysis Batch: 680203

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*115*		*80 - 120*		*08/16/23 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*08/16/23 12:51*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*08/16/23 12:51*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*08/16/23 12:51*	*1*

Lab Sample ID: LCS 480-680203/6
Matrix: Water
Analysis Batch: 680203

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-Trichloroethane	25.0	24.1		ug/L		96	73 - 126
1,1,2,2-Tetrachloroethane	25.0	27.8		ug/L		111	76 - 120
1,1,2-Trichloroethane	25.0	27.3		ug/L		109	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.6		ug/L		98	61 - 148
1,1-Dichloroethane	25.0	25.2		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	26.2		ug/L		105	66 - 127
1,2,4-Trichlorobenzene	25.0	27.1		ug/L		109	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.1		ug/L		96	56 - 134
1,2-Dichlorobenzene	25.0	25.9		ug/L		104	80 - 124
1,2-Dichloroethane	25.0	24.9		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	25.9		ug/L		104	76 - 120
1,3-Dichlorobenzene	25.0	26.0		ug/L		104	77 - 120
1,4-Dichlorobenzene	25.0	25.9		ug/L		104	80 - 120
2-Butanone (MEK)	125	134		ug/L		107	57 - 140
2-Hexanone	125	150		ug/L		120	65 - 127
4-Methyl-2-pentanone (MIBK)	125	141		ug/L		113	71 - 125
Acetone	125	129		ug/L		103	56 - 142
Benzene	25.0	25.6		ug/L		102	71 - 124
Bromodichloromethane	25.0	24.1		ug/L		97	80 - 122
Bromoform	25.0	24.1		ug/L		96	61 - 132
Bromomethane	25.0	25.3		ug/L		101	55 - 144
Carbon disulfide	25.0	24.5		ug/L		98	59 - 134
Carbon tetrachloride	25.0	23.0		ug/L		92	72 - 134
Chlorobenzene	25.0	26.0		ug/L		104	80 - 120
Dibromochloromethane	25.0	25.2		ug/L		101	75 - 125
Chloroethane	25.0	26.1		ug/L		104	69 - 136
Chloroform	25.0	24.5		ug/L		98	73 - 127
Chloromethane	25.0	25.3		ug/L		101	68 - 124
cis-1,2-Dichloroethene	25.0	24.6		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	24.3		ug/L		97	74 - 124
Cyclohexane	25.0	26.8		ug/L		107	59 - 135
Dichlorodifluoromethane	25.0	28.5		ug/L		114	59 - 135
Ethylbenzene	25.0	26.3		ug/L		105	77 - 123
1,2-Dibromoethane	25.0	26.4		ug/L		106	77 - 120
Isopropylbenzene	25.0	27.1		ug/L		108	77 - 122
Methyl acetate	50.0	49.9		ug/L		100	74 - 133
Methyl tert-butyl ether	25.0	24.0		ug/L		96	77 - 120
Methylcyclohexane	25.0	28.1		ug/L		112	68 - 134

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

Lab Sample ID: LCS 480-680203/6
Matrix: Water
Analysis Batch: 680203

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	24.5		ug/L		98	75 - 124
Styrene	25.0	26.2		ug/L		105	80 - 120
Tetrachloroethene	25.0	27.1		ug/L		108	74 - 122
Toluene	25.0	26.4		ug/L		106	80 - 122
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	73 - 127
trans-1,3-Dichloropropene	25.0	26.2		ug/L		105	80 - 120
Trichloroethene	25.0	25.6		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	26.7		ug/L		107	62 - 150
Vinyl chloride	25.0	26.4		ug/L		106	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*114*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-679950/1-A
Matrix: Water
Analysis Batch: 680049

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 679950

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		08/14/23 14:30	08/15/23 15:30	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*15 - 110*	*08/14/23 14:30*	*08/15/23 15:30*	*1*

Lab Sample ID: LCS 480-679950/2-A
Matrix: Water
Analysis Batch: 680049

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 679950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.08		ug/L		104	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*38*		*15 - 110*

Lab Sample ID: 480-211817-1 MS
Matrix: Water
Analysis Batch: 680049

Client Sample ID: INFLUENT - 081123
Prep Type: Total/NA
Prep Batch: 679950

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	3.6		2.00	5.63		ug/L		104	40 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*33*		*15 - 110*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: 480-211817-1 MSD
Client Sample ID: INFLUENT - 081123
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 680049
Prep Batch: 679950

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	3.6		2.00	5.73		ug/L		109	40 - 140	2	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*34*		*15 - 110*

QC Association Summary

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

GC/MS VOA

Analysis Batch: 680203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211817-1	INFLUENT - 081123	Total/NA	Water	8260C	
MB 480-680203/8	Method Blank	Total/NA	Water	8260C	
LCS 480-680203/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 679950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211817-1	INFLUENT - 081123	Total/NA	Water	3510C	
MB 480-679950/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-679950/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-211817-1 MS	INFLUENT - 081123	Total/NA	Water	3510C	
480-211817-1 MSD	INFLUENT - 081123	Total/NA	Water	3510C	

Analysis Batch: 680049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211817-1	INFLUENT - 081123	Total/NA	Water	8270D SIM ID	679950
MB 480-679950/1-A	Method Blank	Total/NA	Water	8270D SIM ID	679950
LCS 480-679950/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	679950
480-211817-1 MS	INFLUENT - 081123	Total/NA	Water	8270D SIM ID	679950
480-211817-1 MSD	INFLUENT - 081123	Total/NA	Water	8270D SIM ID	679950

Lab Chronicle

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT - 081123
Lab Sample ID: 480-211817-1
Date Collected: 08/11/23 09:24
Matrix: Water
Date Received: 08/12/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	680203	ATG	EET BUF	08/16/23 14:59
Total/NA	Prep	3510C			679950	LSC	EET BUF	08/14/23 14:30
Total/NA	Analysis	8270D SIM ID		1	680049	JMM	EET BUF	08/15/23 16:39

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll US Corporation
Job ID: 480-211817-1
Project/Site: Phytoremediation Court Street Building 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-211817-1	INFLUENT - 081123	Water	08/11/23 09:24	08/12/23 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

eurofins Environment Testing

Syracuse

Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s): #225	COC No: 480-182201-32176.1
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: Ramboll US Corporation	PWSID:			Job #: 1940101934
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-506-3236	PO #: 1940006251			
Email: jason.newton@obg.com	WO #:			
Project Name: Phytoremediation GW Analysis	Project #: 48021953			
Site: Former LSM Court St bldg # 5	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL Volatiles	8270D_SIM_MS_ID - SIM - 1,4 Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
Influent - 081123	8/11/23	0924	G	Water	N	N	X	X	5	Match Previous Influent
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

480-211817 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 8-11-23 / 0945	Company: Ramboll	Received by: R English
Relinquished by: R English	Date/Time: 8-11-23, 1900	Company: Eurofins	Received by: E Walker
Relinquished by:	Date/Time:	Company:	Received by:

Received by:	Date/Time: 8-11-23, 0945	Company: Eurofins
Received by: E Walker	Date/Time: 8/12/23 1000	Company: FedEx
Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #1 2.6

Ver: 01/16/2019

8/18/2023

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 480-211817-1

Login Number: 211817

List Source: Eurofins Buffalo

List Number: 1

Creator: Sabuda, Brendan D

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.6 #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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll Americas Engineering Solutions
333 West Washington Street
Syracuse, New York 13202

Generated 10/13/2023 11:16:00 AM

JOB DESCRIPTION

Former LM Court St. Bldg. #5

JOB NUMBER

480-213483-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

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 Northeast, LLC Project Manager.

Authorization



Generated
10/13/2023 11:16:00 AM

Authorized for release by
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

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Definitions/Glossary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-213483-1
Project/Site: Former LM Court St. Bldg. #5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

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

Job ID: 480-213483-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-213483-1

Receipt
The sample was received on 10/7/2023 10:30 AM. 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 was 2.8º C.

GC/MS VOA
Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 480-686790 recovered outside control limits for the following analyte: Acetone. The associated sample is impacted: INFLUENT 100623 (480-213483-1).

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

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-213483-1
Project/Site: Former LM Court St. Bldg. #5

Client Sample ID: INFLUENT 100623
Lab Sample ID: 480-213483-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.9		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	3.3		1.0	0.81	ug/L	1		8260C	Total/NA
1,4-Dioxane	3.2		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll Americas Engineering Solutions
Job ID: 480-213483-1
Project/Site: Former LM Court St. Bldg. #5

Client Sample ID: INFLUENT 100623
Lab Sample ID: 480-213483-1
Date Collected: 10/06/23 09:48
Matrix: Water
Date Received: 10/07/23 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/10/23 17:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/23 17:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/23 17:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/23 17:56	1
1,1-Dichloroethane	**2.9**		1.0	0.38	ug/L			10/10/23 17:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/23 17:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/23 17:56	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/10/23 17:56	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/23 17:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/23 17:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/23 17:56	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/23 17:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/23 17:56	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/23 17:56	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/23 17:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/23 17:56	1
Acetone	ND	*1	10	3.0	ug/L			10/10/23 17:56	1
Benzene	ND		1.0	0.41	ug/L			10/10/23 17:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/23 17:56	1
Bromoform	ND		1.0	0.26	ug/L			10/10/23 17:56	1
Bromomethane	ND		1.0	0.69	ug/L			10/10/23 17:56	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/10/23 17:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/23 17:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/23 17:56	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/23 17:56	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/23 17:56	1
Chloroform	ND		1.0	0.34	ug/L			10/10/23 17:56	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/23 17:56	1
cis-1,2-Dichloroethene	**3.3**		1.0	0.81	ug/L			10/10/23 17:56	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/23 17:56	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/23 17:56	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/10/23 17:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/23 17:56	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/23 17:56	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/23 17:56	1
Methyl acetate	ND		2.5	1.3	ug/L			10/10/23 17:56	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/23 17:56	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/23 17:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/23 17:56	1
Styrene	ND		1.0	0.73	ug/L			10/10/23 17:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/10/23 17:56	1
Toluene	ND		1.0	0.51	ug/L			10/10/23 17:56	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/23 17:56	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/10/23 17:56	1
Trichloroethene	ND		1.0	0.46	ug/L			10/10/23 17:56	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/23 17:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/10/23 17:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/23 17:56	1

Client: Ramboll Americas Engineering Solutions
Project/Site: Former LM Court St. Bldg. #5

Job ID: 480-213483-1

Client Sample ID: INFLUENT 100623
Date Collected: 10/06/23 09:48
Date Received: 10/07/23 10:30

Lab Sample ID: 480-213483-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/10/23 17:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*10/10/23 17:56*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*10/10/23 17:56*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*10/10/23 17:56*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.2**		0.20	0.10	ug/L		10/09/23 16:06	10/11/23 16:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*34*		*15 - 110*	*10/09/23 16:06*	*10/11/23 16:51*	*1*

Surrogate Summary

Client: Ramboll Americas Engineering Solutions
Project/Site: Former LM Court St. Bldg. #5

Job ID: 480-213483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-213483-1	INFLUENT 100623	98	102	97	99
LCS 480-686790/6	Lab Control Sample	102	95	96	92
LCSD 480-686790/29	Lab Control Sample Dup	102	99	98	95
MB 480-686790/8	Method Blank	100	98	98	97

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-213483-1
Project/Site: Former LM Court St. Bldg. #5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		DXE							
Lab Sample ID	Client Sample ID	(15-110)							
480-213483-1	INFLUENT 100623	34							
480-213483-1 MS	INFLUENT 100623	35							
480-213483-1 MSD	INFLUENT 100623	34							
LCS 480-686665/2-A	Lab Control Sample	32							
MB 480-686665/1-A	Method Blank	24							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Client: Ramboll Americas Engineering Solutions
Project/Site: Former LM Court St. Bldg. #5

Job ID: 480-213483-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-686790/8
Matrix: Water
Analysis Batch: 686790

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-Trichloroethane	ND		1.0	0.82	ug/L			10/10/23 17:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/23 17:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/23 17:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/23 17:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/10/23 17:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/23 17:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/23 17:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/10/23 17:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/23 17:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/23 17:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/23 17:11	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/23 17:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/23 17:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/23 17:11	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/23 17:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/23 17:11	1
Acetone	ND		10	3.0	ug/L			10/10/23 17:11	1
Benzene	ND		1.0	0.41	ug/L			10/10/23 17:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/23 17:11	1
Bromoform	ND		1.0	0.26	ug/L			10/10/23 17:11	1
Bromomethane	ND		1.0	0.69	ug/L			10/10/23 17:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/10/23 17:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/23 17:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/23 17:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/23 17:11	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/23 17:11	1
Chloroform	ND		1.0	0.34	ug/L			10/10/23 17:11	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/23 17:11	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/10/23 17:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/23 17:11	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/23 17:11	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/10/23 17:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/23 17:11	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/23 17:11	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/23 17:11	1
Methyl acetate	ND		2.5	1.3	ug/L			10/10/23 17:11	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/23 17:11	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/23 17:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/23 17:11	1
Styrene	ND		1.0	0.73	ug/L			10/10/23 17:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/10/23 17:11	1
Toluene	ND		1.0	0.51	ug/L			10/10/23 17:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/23 17:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/10/23 17:11	1
Trichloroethene	ND		1.0	0.46	ug/L			10/10/23 17:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/23 17:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/10/23 17:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/23 17:11	1

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

Lab Sample ID: MB 480-686790/8
Matrix: Water
Analysis Batch: 686790

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/10/23 17:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*10/10/23 17:11*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*10/10/23 17:11*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*10/10/23 17:11*	*1*

Lab Sample ID: LCS 480-686790/6
Matrix: Water
Analysis Batch: 686790

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-Trichloroethane	25.0	24.7		ug/L		99	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.1		ug/L		88	76 - 120
1,1,2-Trichloroethane	25.0	22.0		ug/L		88	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.9		ug/L		88	61 - 148
1,1-Dichloroethane	25.0	22.0		ug/L		88	77 - 120
1,1-Dichloroethene	25.0	21.0		ug/L		84	66 - 127
1,2,4-Trichlorobenzene	25.0	23.4		ug/L		93	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.2		ug/L		101	56 - 134
1,2-Dichlorobenzene	25.0	22.3		ug/L		89	80 - 124
1,2-Dichloroethane	25.0	21.7		ug/L		87	75 - 120
1,2-Dichloropropane	25.0	22.8		ug/L		91	76 - 120
1,3-Dichlorobenzene	25.0	23.4		ug/L		94	77 - 120
1,4-Dichlorobenzene	25.0	22.9		ug/L		92	80 - 120
2-Butanone (MEK)	125	115		ug/L		92	57 - 140
2-Hexanone	125	111		ug/L		89	65 - 127
4-Methyl-2-pentanone (MIBK)	125	112		ug/L		90	71 - 125
Acetone	125	101		ug/L		81	56 - 142
Benzene	25.0	22.4		ug/L		90	71 - 124
Bromodichloromethane	25.0	23.9		ug/L		95	80 - 122
Bromoform	25.0	24.8		ug/L		99	61 - 132
Bromomethane	25.0	20.2		ug/L		81	55 - 144
Carbon disulfide	25.0	21.2		ug/L		85	59 - 134
Carbon tetrachloride	25.0	28.1		ug/L		113	72 - 134
Chlorobenzene	25.0	23.1		ug/L		92	80 - 120
Dibromochloromethane	25.0	25.6		ug/L		103	75 - 125
Chloroethane	25.0	21.1		ug/L		84	69 - 136
Chloroform	25.0	22.1		ug/L		88	73 - 127
Chloromethane	25.0	20.2		ug/L		81	68 - 124
cis-1,2-Dichloroethene	25.0	21.5		ug/L		86	74 - 124
cis-1,3-Dichloropropene	25.0	23.8		ug/L		95	74 - 124
Cyclohexane	25.0	23.8		ug/L		95	59 - 135
Dichlorodifluoromethane	25.0	21.7		ug/L		87	59 - 135
Ethylbenzene	25.0	24.6		ug/L		98	77 - 123
1,2-Dibromoethane	25.0	22.1		ug/L		88	77 - 120
Isopropylbenzene	25.0	25.9		ug/L		104	77 - 122
Methyl acetate	50.0	44.4		ug/L		89	74 - 133
Methyl tert-butyl ether	25.0	20.0		ug/L		80	77 - 120
Methylcyclohexane	25.0	23.6		ug/L		94	68 - 134

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

Lab Sample ID: LCS 480-686790/6
Matrix: Water
Analysis Batch: 686790

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	20.5		ug/L		82	75 - 124
Styrene	25.0	23.7		ug/L		95	80 - 120
Tetrachloroethene	25.0	25.5		ug/L		102	74 - 122
Toluene	25.0	24.1		ug/L		96	80 - 122
trans-1,2-Dichloroethene	25.0	22.1		ug/L		88	73 - 127
trans-1,3-Dichloropropene	25.0	23.5		ug/L		94	80 - 120
Trichloroethene	25.0	24.0		ug/L		96	74 - 123
Trichlorofluoromethane	25.0	21.7		ug/L		87	62 - 150
Vinyl chloride	25.0	20.9		ug/L		84	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*92*		*75 - 123*

Lab Sample ID: LCSD 480-686790/29
Matrix: Water
Analysis Batch: 686790

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
1,1,1-Trichloroethane	25.0	24.3		ug/L		97	73 - 126	1	15
1,1,2,2-Tetrachloroethane	25.0	21.4		ug/L		86	76 - 120	3	15
1,1,2-Trichloroethane	25.0	22.8		ug/L		91	76 - 122	3	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.3		ug/L		89	61 - 148	2	20
1,1-Dichloroethane	25.0	22.4		ug/L		90	77 - 120	2	20
1,1-Dichloroethene	25.0	21.1		ug/L		84	66 - 127	1	16
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	79 - 122	5	20
1,2-Dibromo-3-Chloropropane	25.0	25.5		ug/L		102	56 - 134	1	15
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 124	4	20
1,2-Dichloroethane	25.0	22.8		ug/L		91	75 - 120	5	20
1,2-Dichloropropane	25.0	23.9		ug/L		96	76 - 120	5	20
1,3-Dichlorobenzene	25.0	23.1		ug/L		92	77 - 120	2	20
1,4-Dichlorobenzene	25.0	22.8		ug/L		91	80 - 120	0	20
2-Butanone (MEK)	125	125		ug/L		100	57 - 140	9	20
2-Hexanone	125	117		ug/L		93	65 - 127	5	15
4-Methyl-2-pentanone (MIBK)	125	118		ug/L		94	71 - 125	4	35
Acetone	125	124	*1	ug/L		100	56 - 142	20	15
Benzene	25.0	22.6		ug/L		90	71 - 124	1	13
Bromodichloromethane	25.0	23.6		ug/L		94	80 - 122	1	15
Bromoform	25.0	23.3		ug/L		93	61 - 132	6	15
Bromomethane	25.0	19.4		ug/L		78	55 - 144	4	15
Carbon disulfide	25.0	20.8		ug/L		83	59 - 134	2	15
Carbon tetrachloride	25.0	28.1		ug/L		112	72 - 134	0	15
Chlorobenzene	25.0	23.7		ug/L		95	80 - 120	3	25
Dibromochloromethane	25.0	24.9		ug/L		100	75 - 125	3	15
Chloroethane	25.0	21.2		ug/L		85	69 - 136	1	15
Chloroform	25.0	22.4		ug/L		90	73 - 127	2	20

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

Lab Sample ID: LCSD 480-686790/29
Matrix: Water
Analysis Batch: 686790

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
Chloromethane			25.0	22.2		ug/L		89	68 - 124	9	15
cis-1,2-Dichloroethene			25.0	21.6		ug/L		87	74 - 124	0	15
cis-1,3-Dichloropropene			25.0	22.9		ug/L		92	74 - 124	4	15
Cyclohexane			25.0	24.2		ug/L		97	59 - 135	2	20
Dichlorodifluoromethane			25.0	23.0		ug/L		92	59 - 135	6	20
Ethylbenzene			25.0	24.7		ug/L		99	77 - 123	1	15
1,2-Dibromoethane			25.0	22.9		ug/L		92	77 - 120	4	15
Isopropylbenzene			25.0	25.3		ug/L		101	77 - 122	2	20
Methyl acetate			50.0	46.7		ug/L		93	74 - 133	5	20
Methyl tert-butyl ether			25.0	21.0		ug/L		84	77 - 120	5	37
Methylcyclohexane			25.0	23.5		ug/L		94	68 - 134	0	20
Methylene Chloride			25.0	21.0		ug/L		84	75 - 124	2	15
Styrene			25.0	23.8		ug/L		95	80 - 120	0	20
Tetrachloroethene			25.0	25.1		ug/L		100	74 - 122	2	20
Toluene			25.0	24.2		ug/L		97	80 - 122	1	15
trans-1,2-Dichloroethene			25.0	22.0		ug/L		88	73 - 127	0	20
trans-1,3-Dichloropropene			25.0	23.1		ug/L		93	80 - 120	1	15
Trichloroethene			25.0	24.1		ug/L		97	74 - 123	0	16
Trichlorofluoromethane			25.0	22.5		ug/L		90	62 - 150	3	20
Vinyl chloride			25.0	21.7		ug/L		87	65 - 133	4	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-686665/1-A
Matrix: Water
Analysis Batch: 686906

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686665

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		10/09/23 16:06	10/11/23 15:43	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*24*		*15 - 110*	*10/09/23 16:06*	*10/11/23 15:43*	*1*

Lab Sample ID: LCS 480-686665/2-A
Matrix: Water
Analysis Batch: 686906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686665

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.50		ug/L		125	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*32*		*15 - 110*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: 480-213483-1 MS
Client Sample ID: INFLUENT 100623
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 686906
Prep Batch: 686665

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	3.2		2.00	5.53		ug/L		118	40 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*35*		*15 - 110*

Lab Sample ID: 480-213483-1 MSD
Client Sample ID: INFLUENT 100623
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 686906
Prep Batch: 686665

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	3.2		2.00	5.43		ug/L		113	40 - 140	2	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*34*		*15 - 110*

QC Association Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-213483-1
Project/Site: Former LM Court St. Bldg. #5

GC/MS VOA

Analysis Batch: 686790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213483-1	INFLUENT 100623	Total/NA	Water	8260C	
MB 480-686790/8	Method Blank	Total/NA	Water	8260C	
LCS 480-686790/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-686790/29	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 686665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213483-1	INFLUENT 100623	Total/NA	Water	3510C	
MB 480-686665/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-686665/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-213483-1 MS	INFLUENT 100623	Total/NA	Water	3510C	
480-213483-1 MSD	INFLUENT 100623	Total/NA	Water	3510C	

Analysis Batch: 686906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213483-1	INFLUENT 100623	Total/NA	Water	8270D SIM ID	686665
MB 480-686665/1-A	Method Blank	Total/NA	Water	8270D SIM ID	686665
LCS 480-686665/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	686665
480-213483-1 MS	INFLUENT 100623	Total/NA	Water	8270D SIM ID	686665
480-213483-1 MSD	INFLUENT 100623	Total/NA	Water	8270D SIM ID	686665

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Job ID: 480-213483-1
Project/Site: Former LM Court St. Bldg. #5

Client Sample ID: INFLUENT 100623
Lab Sample ID: 480-213483-1
Date Collected: 10/06/23 09:48
Matrix: Water
Date Received: 10/07/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	686790	CR	EET BUF	10/10/23 17:56
Total/NA	Prep	3510C			686665	SJM	EET BUF	10/09/23 16:06
Total/NA	Analysis	8270D SIM ID		1	686906	JMM	EET BUF	10/11/23 16:51

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-213483-1
Project/Site: Former LM Court St. Bldg. #5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-213483-1
Project/Site: Former LM Court St. Bldg. #5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll Americas Engineering Solutions
Project/Site: Former LM Court St. Bldg. #5

Job ID: 480-213483-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-213483-1	INFLUENT 100623	Water	10/06/23 09:48	10/07/23 10:30

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

Syracuse eurofins Environment Testing

#225

Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-179639-22571.2
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page ~~2 of 2~~ 1 of 1
Company: Ramboll US Corporation	PWSID:			Job #: 194010934-1
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-506-3236	PO #: 1940006251			
Email: jason.newton@ramboll.com	WO #: ~~60622666~~			
Project Name: ~~Lockheed Martin Court~~ Phyto GW Analysis,	Project #: 48009333 48021953			
Site: ~~New York~~ Former 101 Court St bldg #5	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL list VOCs	8270D_SIM_MS_ID_SIM 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A			
Influent - 100623	10/6/23	0948	G	Water	N	N	X	X		Match previous influent

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify); Other:

480-213483 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:		Date/Time: 10/6/23 - 1000	Company: Ramboll	Received by:		Date/Time: 10.6.23, 10'00	Company: Eye
Relinquished by:		Date/Time: 10.6.23, 1900	Company: Eye	Received by:		Date/Time: 10/7/23 1030	Company: TAS
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:		#1 2.8	

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll Americas Engineering Solutions

Job Number: 480-213483-1

Login Number: 213483

List Source: Eurofins Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	RAMBOLL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll Americas Engineering Solutions
333 West Washington Street
Syracuse, New York 13202

Generated 11/15/2023 8:08:39 AM

JOB DESCRIPTION

Court St Bldg #5

JOB NUMBER

480-214704-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Eurofins Buffalo

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.

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Authorization



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Definitions/Glossary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-214704-1
Project/Site: Court St Bldg #5

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

Job ID: 480-214704-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-214704-1

Receipt
The sample was received on 11/9/2023 10:30 AM. 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 was 3.3º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-214704-1
Project/Site: Court St Bldg #5

Client Sample ID: INFUENT
Lab Sample ID: 480-214704-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.8		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	5.8		1.0	0.81	ug/L	1		8260C	Total/NA
1,4-Dioxane	4.1		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll Americas Engineering Solutions
Job ID: 480-214704-1
Project/Site: Court St Bldg #5

Client Sample ID: INFUENT
Lab Sample ID: 480-214704-1

Date Collected: 11/08/23 17:20
Matrix: Water
Date Received: 11/09/23 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/12/23 09:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/12/23 09:58	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/12/23 09:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/12/23 09:58	1
1,1-Dichloroethane	**2.8**		1.0	0.38	ug/L			11/12/23 09:58	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/12/23 09:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/12/23 09:58	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/12/23 09:58	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/12/23 09:58	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/12/23 09:58	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/12/23 09:58	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/12/23 09:58	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/12/23 09:58	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/12/23 09:58	1
2-Hexanone	ND		5.0	1.2	ug/L			11/12/23 09:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/12/23 09:58	1
Acetone	ND		10	3.0	ug/L			11/12/23 09:58	1
Benzene	ND		1.0	0.41	ug/L			11/12/23 09:58	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/12/23 09:58	1
Bromoform	ND		1.0	0.26	ug/L			11/12/23 09:58	1
Bromomethane	ND		1.0	0.69	ug/L			11/12/23 09:58	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/12/23 09:58	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/12/23 09:58	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/12/23 09:58	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/12/23 09:58	1
Chloroethane	ND		1.0	0.32	ug/L			11/12/23 09:58	1
Chloroform	ND		1.0	0.34	ug/L			11/12/23 09:58	1
Chloromethane	ND		1.0	0.35	ug/L			11/12/23 09:58	1
cis-1,2-Dichloroethene	**5.8**		1.0	0.81	ug/L			11/12/23 09:58	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/12/23 09:58	1
Cyclohexane	ND		1.0	0.18	ug/L			11/12/23 09:58	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/12/23 09:58	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/12/23 09:58	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/12/23 09:58	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/12/23 09:58	1
Methyl acetate	ND		2.5	1.3	ug/L			11/12/23 09:58	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/12/23 09:58	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/12/23 09:58	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/12/23 09:58	1
Styrene	ND		1.0	0.73	ug/L			11/12/23 09:58	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/12/23 09:58	1
Toluene	ND		1.0	0.51	ug/L			11/12/23 09:58	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/12/23 09:58	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/12/23 09:58	1
Trichloroethene	ND		1.0	0.46	ug/L			11/12/23 09:58	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/12/23 09:58	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/12/23 09:58	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/12/23 09:58	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-214704-1
Project/Site: Court St Bldg #5

Client Sample ID: INFUENT
Lab Sample ID: 480-214704-1

Date Collected: 11/08/23 17:20
Matrix: Water
Date Received: 11/09/23 10:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/12/23 09:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/12/23 09:58*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*11/12/23 09:58*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*11/12/23 09:58*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.1**		0.20	0.10	ug/L		11/10/23 16:08	11/13/23 19:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*43*		*15 - 110*	*11/10/23 16:08*	*11/13/23 19:53*	*1*

Surrogate Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-214704-1
Project/Site: Court St Bldg #5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-214704-1	INFUENT	102	101	101	103
LCS 480-691523/6	Lab Control Sample	99	100	100	101
MB 480-691523/8	Method Blank	101	101	98	103

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-214704-1
Project/Site: Court St Bldg #5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
480-214704-1	INFUENT	43							
LCS 480-691463/2-A	Lab Control Sample	49							
MB 480-691463/1-A	Method Blank	33							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Client: Ramboll Americas Engineering Solutions
Project/Site: Court St Bldg #5

Job ID: 480-214704-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-691523/8
Matrix: Water
Analysis Batch: 691523

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-Trichloroethane	ND		1.0	0.82	ug/L			11/12/23 02:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/12/23 02:38	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/12/23 02:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/12/23 02:38	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/12/23 02:38	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/12/23 02:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/12/23 02:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/12/23 02:38	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/12/23 02:38	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/12/23 02:38	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/12/23 02:38	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/12/23 02:38	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/12/23 02:38	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/12/23 02:38	1
2-Hexanone	ND		5.0	1.2	ug/L			11/12/23 02:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/12/23 02:38	1
Acetone	ND		10	3.0	ug/L			11/12/23 02:38	1
Benzene	ND		1.0	0.41	ug/L			11/12/23 02:38	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/12/23 02:38	1
Bromoform	ND		1.0	0.26	ug/L			11/12/23 02:38	1
Bromomethane	ND		1.0	0.69	ug/L			11/12/23 02:38	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/12/23 02:38	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/12/23 02:38	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/12/23 02:38	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/12/23 02:38	1
Chloroethane	ND		1.0	0.32	ug/L			11/12/23 02:38	1
Chloroform	ND		1.0	0.34	ug/L			11/12/23 02:38	1
Chloromethane	ND		1.0	0.35	ug/L			11/12/23 02:38	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/12/23 02:38	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/12/23 02:38	1
Cyclohexane	ND		1.0	0.18	ug/L			11/12/23 02:38	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/12/23 02:38	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/12/23 02:38	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/12/23 02:38	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/12/23 02:38	1
Methyl acetate	ND		2.5	1.3	ug/L			11/12/23 02:38	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/12/23 02:38	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/12/23 02:38	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/12/23 02:38	1
Styrene	ND		1.0	0.73	ug/L			11/12/23 02:38	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/12/23 02:38	1
Toluene	ND		1.0	0.51	ug/L			11/12/23 02:38	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/12/23 02:38	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/12/23 02:38	1
Trichloroethene	ND		1.0	0.46	ug/L			11/12/23 02:38	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/12/23 02:38	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/12/23 02:38	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/12/23 02:38	1

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

Lab Sample ID: MB 480-691523/8
Matrix: Water
Analysis Batch: 691523

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*101*		*80 - 120*		*11/12/23 02:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/12/23 02:38*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*11/12/23 02:38*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*11/12/23 02:38*	*1*

Lab Sample ID: LCS 480-691523/6
Matrix: Water
Analysis Batch: 691523

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-Trichloroethane	25.0	23.1		ug/L		92	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.3		ug/L		93	76 - 120
1,1,2-Trichloroethane	25.0	23.0		ug/L		92	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.7		ug/L		91	61 - 148
1,1-Dichloroethane	25.0	23.0		ug/L		92	77 - 120
1,1-Dichloroethene	25.0	23.2		ug/L		93	66 - 127
1,2,4-Trichlorobenzene	25.0	23.1		ug/L		93	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.4		ug/L		98	56 - 134
1,2-Dichlorobenzene	25.0	22.7		ug/L		91	80 - 124
1,2-Dichloroethane	25.0	22.6		ug/L		90	75 - 120
1,2-Dichloropropane	25.0	22.8		ug/L		91	76 - 120
1,3-Dichlorobenzene	25.0	22.4		ug/L		90	77 - 120
1,4-Dichlorobenzene	25.0	22.3		ug/L		89	80 - 120
2-Butanone (MEK)	125	128		ug/L		102	57 - 140
2-Hexanone	125	120		ug/L		96	65 - 127
4-Methyl-2-pentanone (MIBK)	125	120		ug/L		96	71 - 125
Acetone	125	142		ug/L		113	56 - 142
Benzene	25.0	22.9		ug/L		91	71 - 124
Bromodichloromethane	25.0	23.5		ug/L		94	80 - 122
Bromoform	25.0	25.7		ug/L		103	61 - 132
Bromomethane	25.0	22.9		ug/L		92	55 - 144
Carbon disulfide	25.0	21.2		ug/L		85	59 - 134
Carbon tetrachloride	25.0	26.2		ug/L		105	72 - 134
Chlorobenzene	25.0	22.7		ug/L		91	80 - 120
Dibromochloromethane	25.0	25.0		ug/L		100	75 - 125
Chloroethane	25.0	27.3		ug/L		109	69 - 136
Chloroform	25.0	22.1		ug/L		89	73 - 127
Chloromethane	25.0	25.5		ug/L		102	68 - 124
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	74 - 124
cis-1,3-Dichloropropene	25.0	22.6		ug/L		91	74 - 124
Cyclohexane	25.0	23.4		ug/L		93	59 - 135
Dichlorodifluoromethane	25.0	28.0		ug/L		112	59 - 135
Ethylbenzene	25.0	23.1		ug/L		92	77 - 123
1,2-Dibromoethane	25.0	23.4		ug/L		93	77 - 120
Isopropylbenzene	25.0	23.5		ug/L		94	77 - 122
Methyl acetate	50.0	49.6		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	22.5		ug/L		90	77 - 120
Methylcyclohexane	25.0	23.8		ug/L		95	68 - 134

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

Lab Sample ID: LCS 480-691523/6
Matrix: Water
Analysis Batch: 691523

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	23.3		ug/L		93	75 - 124
Styrene	25.0	23.0		ug/L		92	80 - 120
Tetrachloroethene	25.0	23.2		ug/L		93	74 - 122
Toluene	25.0	22.3		ug/L		89	80 - 122
trans-1,2-Dichloroethene	25.0	23.6		ug/L		94	73 - 127
trans-1,3-Dichloropropene	25.0	22.8		ug/L		91	80 - 120
Trichloroethene	25.0	23.0		ug/L		92	74 - 123
Trichlorofluoromethane	25.0	27.4		ug/L		110	62 - 150
Vinyl chloride	25.0	27.3		ug/L		109	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-691463/1-A
Matrix: Water
Analysis Batch: 691653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 691463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		11/10/23 16:08	11/13/23 15:49	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*15 - 110*	*11/10/23 16:08*	*11/13/23 15:49*	*1*

Lab Sample ID: LCS 480-691463/2-A
Matrix: Water
Analysis Batch: 691653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 691463

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.16		ug/L		108	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*49*		*15 - 110*

QC Association Summary

Client: Ramboll Americas Engineering Solutions
Project/Site: Court St Bldg #5

Job ID: 480-214704-1

GC/MS VOA

Analysis Batch: 691523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214704-1	INFUENT	Total/NA	Water	8260C	
MB 480-691523/8	Method Blank	Total/NA	Water	8260C	
LCS 480-691523/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 691463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214704-1	INFUENT	Total/NA	Water	3510C	
MB 480-691463/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-691463/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 691653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214704-1	INFUENT	Total/NA	Water	8270D SIM ID	691463
MB 480-691463/1-A	Method Blank	Total/NA	Water	8270D SIM ID	691463
LCS 480-691463/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	691463

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Project/Site: Court St Bldg #5

Job ID: 480-214704-1

Client Sample ID: INFUENT

Date Collected: 11/08/23 17:20
Date Received: 11/09/23 10:30

Lab Sample ID: 480-214704-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	691523	AXK	EET BUF	11/12/23 09:58
Total/NA	Prep	3510C			691463	SJM	EET BUF	11/10/23 16:08
Total/NA	Analysis	8270D SIM ID		1	691653	EMD	EET BUF	11/13/23 19:53

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-214704-1
Project/Site: Court St Bldg #5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Ramboll Americas Engineering Solutions
Project/Site: Court St Bldg #5

Job ID: 480-214704-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll Americas Engineering Solutions
Project/Site: Court St Bldg #5

Job ID: 480-214704-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-214704-1	INFUENT	Water	11/08/23 17:20	11/09/23 10:30

Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testi

Client Information

Client Contact: Mr. Scott Tucker	Sampler: Scott Tucker	Lab PM: Schove, John R	Carrier Tracking No(s): Syracuse #225	COC No: 480-179634-12212.1
Company: O'Brien & Gere Inc of North America	Phone: 315-391-0758	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Address: 333 West Washington St. PO BOX 4873	PWSID:	Due Date Requested:	Analysis Requested	Job #:
City: East Syracuse		TAT Requested (days): Standard		
State, Zip: NY, 13221		Compliance Project: Δ Yes Δ No		
Phone: 315-956-6100		PO #: 1940002243 6251 (SP)		
Email: scott.tucker@ramboll.com		WO #: 60622666 (SP)		
Project Name: Lockheed Martin Court		Project #: 48000881 (SP) 48021953		
Site: (SP) New York Former LM Court St B/d#5		SSOW#:		

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Zinc	8260C - TCL Volatiles	2540C_Calcd - TDS	9040C - pH	8270D_SIM_MS_ID - 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N	N	N		
~~QUARTERLY~~ INFLUENT	11/5/23	1720	G	Water				X			X		
~~QUARTERLY EFFLUENT~~ (SP)				Water									
~~TRIP BLANK~~ (SP)				Water									

480-214704 Chain of Custody

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by: Scott Tucker	Date/Time: 11/5/23 1733	Company	Received by:	Date/Time: 11/6/23 1735	Company FEDEX	
Relinquished by: R. English	Date/Time: 11-8-23, 1900	Company	Received by:	Date/Time: 11/9/23 1030	Company TA	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.3 # 1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll Americas Engineering Solutions

Job Number: 480-214704-1

Login Number: 214704
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	OBG
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

APPENDIX I
LABORATORY ANALYSIS RESULTS (NOT INCLUDED WITHIN ELECTRONIC SUBMITTAL)

APPENDIX B
2024 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Intended for

Lockheed Martin Corporation

Document type

FINAL REPORT

Date

January 2025

2024 Annual Operations and Maintenance Report

Former GE Court Street Building 5 Site

RAMBOLL Bright ideas. Sustainable change.

2024 Annual Operations and Maintenance Report
Former GE Court Street Building 5 Site

Project no.	**1940106233**
Recipient	**Lockheed Martin Corporation**
Document type	**Final Report**
Date	**---**

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F. Court Street Building Slab Inspection Report
G. O&M Inspection Forms
H. Year 5 Phytoremediation Pilot Test Report
I. Laboratory Analysis Results (not included within electronic submittal)

1. Introduction

1.1 2024 Highlights

Highlights of remedial activities during 2024 at the Former GE Court Street Building 5 site (herein referred to as the "site") are listed below:

- Compliance with the Effluent Limitations and Monitoring Requirements issued by the New York State Department of Environmental Conservation (NYSDEC) on December 6, 1999.
- On January 10, 2024, Lockheed Martin Corporation (Lockheed Martin) submitted the 2023 Annual Operation and Maintenance (O&M) Report, including the Year 4 Phytoremediation Pilot Test Report included as an appendix.
- On January 10, 2024, NYSDEC confirmed receipt of the Annual O&M Report.
- On January 23, 2024, the 2023 Annual O&M Report was received by the document repository (East Syracuse Free Library).
- On February 6, 2024, Lockheed Martin submitted a separate request to the NYSDEC to transition the remediation system to seasonal operation. Supplemental information was also provided to the NYSDEC following a June 13, 2024 call.
- During the growing season, Lockheed Martin continued management of the hybrid poplar poles, including stand inspections. During May, July, and September of 2024, in accordance with the Work Plan approved in 2020, stand inspections were completed. The Year 5 Phytoremediation Pilot Test Report is included as an attachment to this report.
- On July 9, 2024, following the June 2024 meeting with the NYSDEC, Lockheed Martin provided a letter containing supplemental information in support of the seasonal operation of the treatment system for the NYSDEC consideration.
- On July 18, 2024, NYSDEC provided approval to Lockheed Martin's request for seasonal operation of the treatment system with certain applicable conditions.
- On November 18, 2024, Lockheed Martin performed the annual slab inspection of Building 5. This was the 14th annual slab inspection to identify potential new slab breaches since the inspection performed in 2010 and the last round of soil vapor intrusion sampling that was conducted during the 2008/2009 heating season. As outlined in the inspection program, the results of the inspection are included within this report.

1.2 Background

This report has been prepared to provide an overview of the O&M activities conducted to implement the remedial program during 2024 at the site. The Record of Decision (ROD) was issued by the NYSDEC for the site in March 1999. The ROD selected No Further Action as the remedy for the site. The remedy consists of the continued O&M of the groundwater and collection treatment (GCT) system [operated as an Interim Remedial Measure (IRM) since January 1998], and monitoring of site conditions.

In January 1998, the construction of the GCT system was completed at the site to prevent migration of residual volatile organic compounds (VOCs) in the groundwater towards Sanders Creek and the South Branch of Ley Creek, and to reduce the mass of VOCs in the groundwater. The GCT system began treating groundwater collected from the collection trench on February 11, 1998 and has operated consistently since that time.

The following summarizes the history of the Firms associated with the O&M of the GCT system on behalf of Lockheed Martin:

- Initial start-up to April 13, 2000 - Parsons Engineering Science, Inc.
- April 14, 2000 to December 31, 2002 - Bergmann Associates
- January 1, 2003 to September 14, 2003 - ENSR
- September 15, 2003 to current – Ramboll Americas Engineering Solutions, Inc (formerly O'Brien & Gere Engineers, Inc. – pre 2019)

Figure 1 is a site plan showing the location of the GCT system, including the collection trench and treatment building. The GCT system removes VOCs from collected groundwater using an air stripper. A Carbtrol multistage diffuser air stripper was used since startup of the GCT until being replaced in 2008 with a new QED EZ-Stacker Low Profile Air Stripper system. After treatment, the collected groundwater is discharged to Sanders Creek in accordance with effluent limitations and monitoring requirements issued by the NYSDEC.

In 2006, the Building 5 property was owned by DE&JD Associates, Inc., and was used as an active warehouse and distribution facility (operated by Climax) until its sale to B&B Family Limited Partnership in the summer of 2006. Current use of the building is now associated with manufacturing of hardwood flooring (operations planned for the building include cutting, molding, and planing of lumber) by Premier Hardwood Products, Inc. The Building 5A property is owned by G&A Properties, LLC and is occupied by WJW Associates and Raymond Corporation. In December 1999, the NYSDEC granted a petition by G&A Properties, LLC to modify the site boundary to exclude the area where Building 5A is located. The site area was reduced from approximately 14 acres to approximately 10 acres as a result.

In June 1999, the NYSDEC reclassified the site from Class 3 to Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites. A Class 4 site is a site that has been properly closed, but requires continued operation, maintenance and/or monitoring.

1.3 Report Overview

This Annual O&M Report contains a summary of:

- GCT system operations
- GCT system performance
- Storm sewer outfall quality
- Groundwater quality
- Building slab inspection

2. GCT Systems Operational Summary

Construction of the GCT system was completed in January 1998 and has since operated consistently, as approved, through 2024. This section briefly describes the GCT system, system shut-down and alarm conditions encountered, modifications made to the GCT system process and monitoring requirements, and other miscellaneous site O&M activities completed during the year.

2.1 GCT System Description

The GCT system includes a collection trench and sump from which groundwater is pumped to a treatment system as shown on Figure 1. The collection trench and treatment system is briefly described in this section. Details regarding the operation and installation of the GCT system are available in the Interim Remedial Measures Work Plan for the Groundwater Collection and Treatment System (EMCON, November 1997), the Certification Report for the Groundwater Collection and Treatment System Installation (Blasland, Bouck & Lee, Inc., Revised May 1998), and the Operations and Maintenance Plan for the Groundwater Collection and Treatment System (IT Corporation, Revised January 2000). The January 2000 O&M Plan was accepted by the NYSDEC in March 2000.

The groundwater collection trench is approximately 830 feet in total length, with a collection pipe slope of 0.2 percent and a collection sump at the northeast end. Based on variations in the ground surface elevation, the final depth of the collection trench ranges from 8 to 14 feet below grade. Pumps are located within the collection sump to transfer groundwater to the treatment building.

The groundwater is discharged into the air stripper designed to remove VOCs. The treated water flows by gravity from the air stripper to a catch basin (CB 2) and ultimately through storm sewer piping to Sanders Creek (OF 01A).

2.2 System Shut-Down and Alarm Conditions

GCT system shut-downs and alarms periodically occurred during the operation of the GCT system. For each alarm response, an initial assessment and corrective action occurred within four hours. In 2024, there were no major unscheduled shut-down events, with the exception of the delayed seasonal restart of the system planned for November 2024 based on the system's programmable logic controller (PLC) failure. The PLC and associated equipment were ordered, received, replaced and programmed in November and December 2024 and the system was restarted on December 13, 2024. The seasonal shut-down occurred from July 19 through December 13, 2024. Minor shut-downs and alarms occurred throughout the year due to either high water level in the collection sump due to area flooding or high blower temperatures due to spring or summer weather conditions. In addition, there were no scheduled system shut-downs in 2024.

Overall, the GCT system has operated consistently with no significant operational concerns.

2.3 GCT System Monitoring and Process Modifications

During 2024, no major GCT system monitoring and process modifications were performed. However, as described in the following sections, the Phytoremediation Pilot Study continued throughout the year at the site.

2.4 Miscellaneous Site O&M Activities

The following additional site O&M activities were completed or performed in 2024:

- Throughout the year, the Phytoremediation Pilot Test was continued from 2020. Stand inspections were completed in May, July and September of 2024 with reports issued for each. Copies of these reports are included within the Year 5 Phytoremediation Pilot Test Report located in Appendix H. Activities conducted in 2024, in addition to the documented inspections, included tree watering, tree pruning and removal of ground vegetation.
- As required by NYSDEC as set forth in a letter from the NYSDEC to Lockheed Martin, dated December 9, 2009, Lockheed Martin instituted a slab inspection program for Building 5 associated with the soil vapor intrusion assessment performed at the Site. On November 18, 2024, Lockheed Martin performed the slab inspection of Building 5. This was the 14th annual slab inspection to identify new slab breaches since the first inspection performed in 2010 and the last round of soil vapor intrusion sampling that was conducted during the 2008/2009 heating season. As outlined in the inspection program, the results of the inspection are included within Appendix F.

3. GCT System Performance Summary

This section addresses the performance of the GCT system with brief discussions on the quantity and quality of the groundwater collected. A review of system mass removal, hydraulic containment, and evaluation of treated groundwater quality and air emissions are included for the operational year.

3.1 Groundwater Collection System Performance

The following is a summary of the quantity and quality of groundwater collected and treated by the GCT system. This section includes annual totalized flow, groundwater quality, estimated VOC mass removal, and a discussion on hydraulic containment.

3.1.1 Quantity of Collected Groundwater

The quantity of collected groundwater is monitored by totaling flow meters located within the GCT system treatment building. Figure 2 shows the total gallons of groundwater that has been collected and treated during the operational year. Figure 3 presents the average monthly flow rate of groundwater collected and treated between each normal O&M event of the year. These figures demonstrate that the GCT system has been operating in a stable, consistent mode throughout the year. Over the year, the GCT system collected and treated VOC impacted groundwater. The amount is consistent with historical annual groundwater quantities collected and treated as summarized below:

Table 3.1 Historical Summary – Amount of Groundwater Collected and Treated

Year	Amount of Groundwater Collected and Treated (million gallons)
1998	1.90
1999	1.60
2000	1.73
2001	1.71
2002	1.86
2003	1.78
2004	1.88
2005	1.98
2006	2.49
2007	1.63
2008	1.5
2009	1.7
2010	1.56
2011	2.37
2012	1.46
2013	1.91
2014	1.91
2015	1.22
2016	1.57
2017	2.03
2018	1.84

Year	Amount of Groundwater Collected and Treated (million gallons)
2019	2.14
2020	1.69
2021	1.74
2022	1.59
2023	1.70
2024*	1.38

* Seasonal operation (shut down between July 1st – December 13th)

The semi-annual flow rates are consistent with flow rates encountered during previous years of operation and are consistent with weather conditions during that portion of the year. The flow rates are summarized in the following table:

Table 3.2 Historical Summary – Average Groundwater Collection Rate

Year	January – June (gpm)	July – December (gpm)
1998	6.2	2.9
1999	6.3	1.4
2000	5.3	1.55
2001	4.55	2.11
2002	5.24	1.72
2003	4.77	2.11
2004	5.53	2.13
2005	5.31	2.11
2006	6.03	3.29
2007	5.84	1.2
2008	5.23	1.89
2009	4.55	2.06
2010	3.58	2.43
2011	6.71	2.16
2012	4.77	0.72
2013	4.65	2.7
2014	5.98	1.41
2015	2.46	2.09
2016	4.96	1.19
2017	5.52	2.09
2018	5.0	2.03
2019	5.43	2.89
2020	5.25	1.21
2021	3.25	3.26
2022	4.89	1.25
2023	4.83	1.70
2024 *	4.33	0.28

*Seasonal operation (shut down between July 19th – December 13th)

3.1.2 Quality of Collected Groundwater

The quality of the collected groundwater is monitored by collecting influent samples prior to treatment within the GCT treatment building. During 2024, quarterly monitoring of VOC concentrations was conducted. Additionally, Lockheed Martin sampled for influent groundwater pH, and total dissolved solids (TDS) to evaluate the system. Appendix A provides a summary of influent groundwater quality data.

Appendix A summarizes the concentration of VOCs in the influent groundwater samples collected during the year. The operational year data is consistent with historical data, additionally, influent data prior to phytoremediation pilot test implementation compared to Year 5 influent data indicates a general decrease in VOC concentrations.

3.1.3 VOC Mass Removal Estimate

An estimate of VOC mass removal for individual compounds from the groundwater due to operation of the GCT system has been calculated using the following assumption:

- The influent VOC concentrations of individual compounds measured from a specific sampling event remain constant until the next sampling event.

Appendix B presents the calculated estimate of VOC mass removed. In summary, approximately 0.11 pounds of VOCs have been removed from the groundwater during the year. The total VOC mass removal is broken down by compound as follows:

- 0.02 pounds of 1,1-dichloroethane
- 0.057 pounds of 1,2-dichloroethene
- 0.000 pounds of chloroethane
- 0.034 pounds of vinyl chloride
- 0.000 pounds of trichloroethene

A summary of VOC mass removal for previous years based on treatment system flows is provided below:

Table 3.3 Historical Summary – Estimate of Total VOC Mass Removal

Year	Estimate of Total VOC Mass Removal (lbs)
1998	4.00
1999	3.20
2000	2.20
2001	1.72
2002	1.84
2003	1.52
2004	1.50
2005	2.29
2006	1.56
2007	1.76
2008	0.53
2009	0.69

Year	Estimate of Total VOC Mass Removal (lbs)
2010	0.52
2011	0.95
2012	0.35
2013	0.28
2014	0.46
2015	0.12
2016	0.25
2017	0.42 [1]
2018	0.22
2019	0.24
2020	0.19
2021	0.27
2022	0.25
2023	0.13
2024*	0.11

[1] Due to a laboratory error, the 4th quarter influent sample was not analyzed completely, and therefore, is not included in the total mass removed calculation for the 2017 year.

* Seasonal operation (shut down between July 19th – December 13th)

In addition to the mass of VOCs removed from the groundwater through operation of the GCT system, additional VOC mass was reduced by natural degradation.

3.1.4 Hydraulic Containment

Groundwater elevations were measured from shallow monitoring wells, staff gauges and the collection trench clean-out risers. Groundwater elevation monitoring data was collected semi-annually (March and September) during 2024 from MW-1S, MW-2S, MW-3S, MW-4S, MW-6S, MW-7S, MW-8S, MW-9, MW-10, MW-11R, MW-12, MW-13, MW-15, MW-16AR, MW-17A, MW-18A, MW-19S, SG-1R, SG-2R, SG-3R, SG-5R, SG-7R, SG-8, SG-9, CO-N and CO-S. These data are summarized in Table 1.

The GCT system has consistently maintained lower heads along the collection trench relative to the surrounding groundwater regime, as evidenced by the lower elevations measured within the collection trench (*i.e.*, cleanouts CO-N and CO-S) compared to nearby monitoring wells, piezometers and staff gauges. The collection system has established hydraulic control of the VOC-impacted shallow groundwater, thereby preventing migration of the VOC-impacted shallow groundwater, located east of the collection trench, toward the South Branch of Ley Creek and Sanders Creek. Continued operation of the GCT system will prevent and control the migration of VOC-impacted shallow groundwater.

In addition to the semi-annual measurements, groundwater flow within the collection trench is confirmed by inspection of the collection system cleanouts (CO-N and CO-S) during the year. Each of the inspections indicated that water was freely draining from the collection trench toward the collection sump.

3.2 Groundwater Treatment System Performance

This section addresses the GCT system performance by examining both groundwater effluent discharges and air emissions. Both discharges are reviewed on a quarterly basis to confirm compliance with NYSDEC effluent limitations and are discussed in detail in the sections below.

3.2.1 Treated Groundwater Effluent Discharge Quality

The quality of treated groundwater effluent discharge is monitored by collecting effluent samples from GCT system piping located within the GCT system treatment building following treatment. During 2024, sample collection and analysis was performed in accordance with the Effluent Limitations and Monitoring Requirements established for the system by the NYSDEC. Quarterly monitoring of flow rate, VOC concentrations (1,1-dichloroethane, 1,2-dichloroethene, vinyl chloride, trichloroethene), pH, TDS, and zinc was conducted. In addition, at the request of the NYSDEC, 1,4-dioxane has been included in the quarterly events.

Appendix C presents a summary of effluent analytical data generated during operation of the GCT system during the year. As shown in Appendix C, no effluent limitations were exceeded during the year.

3.2.2 Air Emission Evaluation

The O&M Plan provided an evaluation method to confirm that the VOCs emitted from the air stripper do not create ambient air quality impacts above short-term guideline concentrations (SGCs) or annual guideline concentrations (AGCs) defined in the NYSDEC's Guidelines for the Control of Toxic Ambient Contaminants - Air Guide 1 (NYSDEC, Draft 1991). In the NYSDEC's response to the 2022 Annual O&M Report (comments letter dated March 23, 2023), it was requested that Lockheed Martin update the air emissions evaluation consistent with current DAR-1 requirements.

Based on the request, Lockheed Martin has updated the original air emissions evaluation for the Site by modeling mass emissions from the GCT system using the highest treatment flow rate (gpm) recorded in the past operational quarters multiplied by the highest individual influent COC concentrations observed in the year and assumed that mass emission occurred every hour of the year. This modeling was performed using the AERSCREEN air dispersion model and included site-specific source information (including, but not limited to, stack height, stack diameter, building dimensions and other information). The results of the model, which are summarized in the Table 2, indicate that projected air quality impacts are well below current SGCs and AGCs. LMC will update these results on an annual basis, as part of each Annual O&M Report.

4. Storm Sewer Outfall Quality

A storm sewer outfall sample was collected from outfall OF-02 on April 9, 2024 and analyzed for VOCs. Outfall OF-02 discharges to the South Branch of Ley Creek, as shown in Figure 1. The sample was collected during a “dry weather” period, meaning that surface water was not flowing into the catch basins at the time of sample collection. Lockheed Martin received laboratory analytical data for the annual dry weather storm sewer sampling performed at the outfall and notified the NYSDEC of the results. A summary of the storm sewer outfall sampling analytical results showing detected concentrations of VOCs using EPA Method 8260 is presented in Appendix D. The outfall analysis data from the event is consistent with historical data for the site.

During April 2025, Outfall OF-02 will be sampled during “dry weather” conditions as specified in the August 1997 Storm Sewer IRM Work Plan, and Lockheed Martin’s June 30, 1998 letter and NYSDEC’s August 28, 1998 letter regarding the Storm Sewer IRM.

5. Groundwater Quality

In March 2024, groundwater samples were collected and analyzed from monitoring wells MW-1S, MW-2S, MW-8S, MW-10, MW-11R, MW-12, MW-16AR, MW-17A, MW-18A and MW-19S.

A summary of groundwater monitoring well analytical results showing detected concentrations of VOCs using EPA Method 8260 is presented in Appendix E. Monitoring well locations are shown on Figure 1. The groundwater analysis data from the event are consistent with historical data for the site.

During March 2025, groundwater samples will be collected from monitoring wells MW-1S, MW-2S, MW-8S, MW-10, MW-11R, MW-12, MW-16AR, MW-17A, MW-18A and MW-19S.

6. Conclusions

This section provides conclusions drawn based upon the operation of the GCT system during 2024 and remedial goals for the site as specified in the ROD.

6.1 GCT System Operational Performance

The GCT system collected approximately 1.38 million gallons of groundwater during 2024 and has treated this groundwater in compliance with NYSDEC requirements for air emissions and treated water discharges. The GCT system has operated consistently, experiencing minimal shut-down periods with no significant operational concerns.

The GCT system has consistently maintained lower heads along the collection trench relative to the surrounding shallow groundwater regime. Therefore, hydraulic control has been established, preventing migration of the VOC-impacted shallow groundwater, located east of the collection trench, toward the South Branch of Ley Creek and Sanders Creek.

6.2 Attainment of Remedial Goals

The remedial goals specified in the ROD for the site (NYSDEC, March 1999) are as follows:

- Prevent the migration of VOC impacted shallow groundwater to the South Branch of Ley Creek and to Sanders Creek, to the extent feasible considering site conditions.
- Reduce the level of residual VOCs in the shallow groundwater to attain NYSDEC groundwater standards (6 NYCRR Part 703), to the extent feasible considering site conditions, currently available technology, implementability, and cost-effectiveness.
- Reduce the level of residual VOCs in site soils to attain NYSDEC Soil Cleanup Objectives (NYSDEC Technical and Administrative Guidance Memorandum 4046), to the extent feasible considering site conditions, currently available technology, implementability, and cost-effectiveness.

The GCT system has been successful in establishing hydraulic control, preventing migration of the VOC-impacted shallow groundwater, located south and east of the collection trench, toward the South Branch of Ley Creek and Sanders Creek. Additional VOC-impacted groundwater is being collected and controlled from areas located north and west of the collection trench. The concentration of VOCs in the storm sewer outfall OF-02 (South Branch of Ley Creek) continue to be at trace levels, similar to past sample results.

The GCT system has removed 0.11 pounds of VOCs from groundwater during 2024 in pursuit of reducing the level of residual VOCs in the shallow groundwater. Additional VOC mass reduction has also been accomplished through natural degradation. As discussed in the Feasibility Study (EMCON, January 1999), it is anticipated that groundwater quality at portions of the site (*e.g.*, near former source areas) will not achieve groundwater standards, criteria, and guidelines (SCGs) (6 NYCRR Part 703) for a number of decades. It is also anticipated that shutdown of the GCT system may be appropriate prior to achieving groundwater quality SCGs across the site. In accordance with the FS and the ROD, O&M of the GCT system will continue until groundwater concentrations of site-related VOCs have leveled off at a relatively low concentration over the majority of the site, significant quantities of contaminants are no longer being removed, or it can

be demonstrated that the full-scale phytoremediation system and/or natural attenuation of VOCs will be protective of water quality in the South Branch of Ley Creek and Sanders Creek.

6.3 Plans for 2025

The following bullets present Lockheed Martin's plans for the site in 2025 in addition to the operation of the GCT system and regular sampling activities:

- Continue to review and assess operational improvement options for their potential effectiveness for future use at the site.
- Continue implementation of the Phytoremediation Pilot Test Work Plan with tree stand inspections, tree pruning, vegetation management and monthly influent/effluent monitoring and analysis.
- Complete the inspection report and perform next round of visual inspections on the building slab associated with vapor intrusion (VI). Results of the inspections will be summarized in a report to the NYSDEC.
- As discussed in the Year 5 Phytoremediation Pilot Test Report (located in Appendix H), the seasonal shutdown from July 19 through December 13, 2024 did not appear to have any negative effect(s). VOCs were detected during the annual sampling event in wells MW-10 and MW-11R, which are immediately upgradient of wells MW-17A and MW-18A; however, no VOCs were detected in MW-17A and MW-18A during the annual and post-shutdown sampling events (in March and October 2024, respectively). There was a low detection of 1,4-dioxane in well MW-17A during the post-shutdown event; however, no prior 1,4-dioxane results are available for this monitoring well.
- As discussed in the Year 5 Phytoremediation Pilot Test Report (located in Appendix H), the data collected to date demonstrate that the concentrations of CVOCs in the treatment system influent (collection trench effluent) are reliably below the substantive requirements established by NYSDEC for discharge to the storm sewer. Lockheed Martin is requesting approval from NYSDEC for a 5-month seasonal shutdown for 2025 (from July 1 through November 30, 2025) subject to the same conditions established by NYSDEC in 2024.

TABLES

Table 1
Semi-Annual Groundwater Elevation Data
2024 Annual Operations and Maintenance Report
Former GE Court Street Building 5 Site

Well	March 7, 2024 Groundwater Elevation (ft. MSL)	September 9, 2024 Groundwater Elevation (ft. MSL)
MW-1S	381.01	379.85
MW-2S	380.48	377.52
MW-3S	378.12	376.96
MW-4S	377.24	376.39
MW-6S	382.72	376.40
MW-7S	380.91	375.85
MW-8S	377.41	375.55
MW-9	379.93	375.48
MW-10	379.50	Dry
MW-11R	381.10	375.84
MW-12	378.22	376.14
MW-13	375.94	Not Measured
MW-15	379.81	Dry
MW-16AR	375.91	376.27
MW-17A	377.25	374.28
MW-18A	378.58	375.50
MW-19S	378.23	377.48
SG-1R	375.08	374.41
SG-2R	Damaged	Damaged
SG-3R	373.09	372.46
SG-5R	375.26	374.37
SG-7R	374.44	DRY
SG-8	372.98	372.26
SG-9	373.02	372.32
CO-N	372.84	376.92
CO-S	373.41	376.94

Notes:

1. March comparison of groundwater elevations recorded on both sides of the trench to elevations recorded in the collection trench (i.e., interpolation based on cleanouts) confirm an inward hydraulic gradient.

2. Treatment system was deactivated on July 19th, 2024. As expected, an inward hydralic gradient was not observed on September 9th, 2024.

Table 2
Toxics AERSCREEN Modeling Results
Lockheed Martin - Court St Site
Syracuse, New York

Pollutants	CAS Number	Water Treatment Flow Rate (gal/min)	Concentration in Water (µg/L)	Emission Rate[a] (lb/hr)	Normalized Short-Term Concentration[b] (µg/m³/lb/hr)	Normalized Annual Concentration[b] (µg/m³/lb/hr)	Short-Term Concentration[c] (µg/m³)	Annual Concentration[c] (µg/m³)	Short-Term Guideline Concentration (SGC)[d] (µg/m³)	Annual Guideline Concentration (AGC)[d] (µg/m³)	% SGC	% AGC	Emission Rate to Meet SGC[e] (lb/hr)	Concentration in Water to Meet SGC[f] (µg/L)	Emission Rate to Meet AGC[e] (lb/hr)	Concentration in Water to Meet AGC[f] (µg/L)	Maximum Allowable Concentration in Water (µg/L)
		4.39															
Vinyl Chloride	00075-01-4		4.7	1.03E-05	1,589	159	1.64E-02	1.64E-03	180,000	0.11	<1	1	113	51,538,567	6.92E-04	315	315
1, 1-Dichloroethane	00075-34-3		2.8	6.15E-06	1,589	159	9.78E-03	9.78E-04	---	0.63	---	<1	---	---	3.96E-03	1,804	1,804
1, 2-Dichloroethene	00156-59-2		7.8	1.71E-05	1,589	159	2.72E-02	2.72E-03	---	63	---	<1	---	---	0.396	180,385	180,385
Trichloroethylene	00079-01-6		1	2.20E-06	1,589	159	3.49E-03	3.49E-04	20	0.21	<1	<1	1.26E-02	5,727	1.32E-03	601	601
Chloroethane	00075-00-3		1	2.20E-06	1,589	159	3.49E-03	3.49E-04	---	10,000	---	<1	---	---	62.9	28,632,537	28,632,537
1,4-Dioxane	00123-91-1		2	4.40E-06	1,589	159	6.99E-03	6.99E-04	3,000	0.20	<1	<1	1.89	858,976	1.26E-03	573	573

Notes:
(a) Emission Rate (lb/hr) = Water Treatment Flow Rate (gal/min) x 60 (min/hr) x Concentration in Water (µg/L) x 3.785 (L/gal) ÷ 1,000,000 (µg/g) ÷ 453.592 (g/lb)
(b) AERSCREEN modeling was performed on a normalized basis with an emission rate of 1 lb/hr.
(c) Short-Term/Annual Concentration (µg/m^3) = Emission Rate (lb/hr) x Normalized Short-Term/Annual Concentration (µg/m^3)
(d) AGCs and SGCs were obtained from the February 21, 2021 version of NYSDEC's DAR-1.
(e) Emission Rate to Meet SGC/AGC (lb/hr) = SGC/AGC (µg/m^3) ÷ Normalized Short-Term/Annual Concentration (µg/m^3/lb/hr)
(f) Concentration in Water to Meet SGC/AGC (µg/L) = Emission Rate to Meet SGC/AGC (lb/hr) x 453.592 (g/lb) x 1,000,000 (µg/g) ÷ 60 (min/hr) ÷ Water Treatment Flow Rate (gal/min) ÷ 3.785 (L/gal)

FIGURES

N

DEERE ROAD

298

FORMER SG-1

CREEK

SANDERS

BUILDING 5

BUILDING 5A

EXISTING STORM SEWER LINES AND EXISTING EFFLUENT LINE (COMBINED FROM CB-2)

COLLECTION SUMP

MW-19S

INFLUENT LINES

SG-2

MW-3S

CB-3

CB-2

MW-1S

CLEANOUT RISER (CR-SOUTH)

MW-12

OF-02

CREEK

(SOUTH BRANCH)

FORMER SG-5

MW-6S

MW-2S

TREATMENT BUILDING

CB-20

MW-4S

OF-01A

CB-4

MW-16A

MW-11R

MW-18A

MW-7S

SG-6

FLOW

LEY

MW-8S

MW-9

MW-10

ROUTE

SG-8

MW-13

FORMER SG-4

LOCATION OF GROUNDWATER COLLECTION SYSTEM TRENCH

SG-3

MW-17A

SG-9

FORMER EFFLUENT LINE

MW-15

CLEANOUT RISER (CR-NORTH)

SG-7

0 120 240

SCALE IN FEET

1" 1/2" 0" 1"

LEGEND:

- MONITORING WELL (ONLY THOSE WELLS INCLUDED IN PERIODIC HYDRAULIC OR GROUNDWATER MONITORING ARE SHOWN)
- STAFF GAUGE
- OUTFALL
- CATCH BASIN
- EXISTING STORM SEWER LINES
- YARD PIPING (APPROXIMATE LOCATIONS COLLECTION TRENCH AND INFLUENT LINE)
- FORMER EFFLUENT LINE
- EXISTING EFFLUENT LINE

NOTE: ORIGINAL BASED ON EMCON DRAWING DATED 2/1998

FIGURE 1

ANNUAL OPERATIONS AND MAINTENANCE REPORT
FORMER GE COURT STREET BUILDING 5

SITE PLAN

Figure 2
Total Gallons of Groundwater Collected and Treated
2024 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

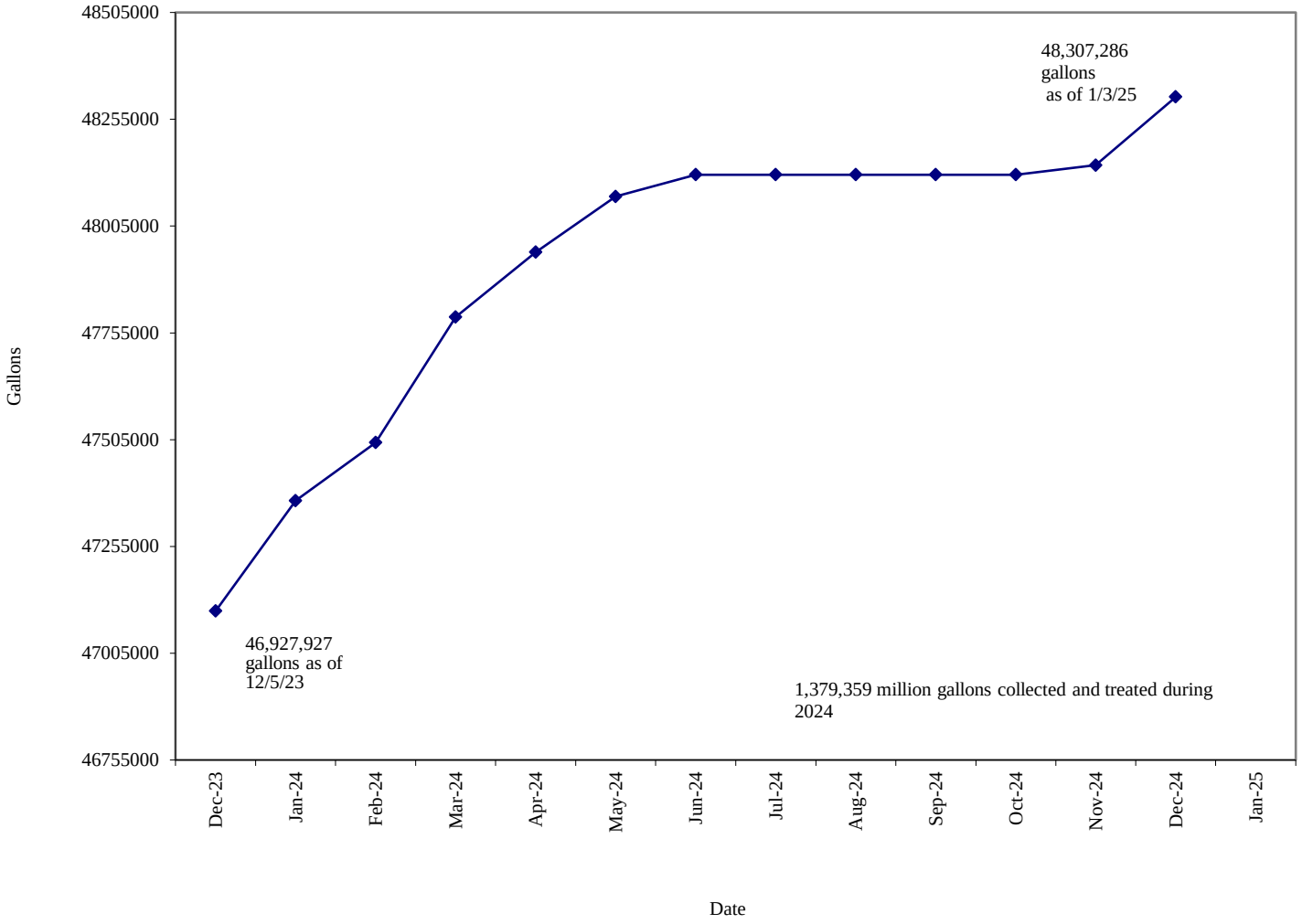
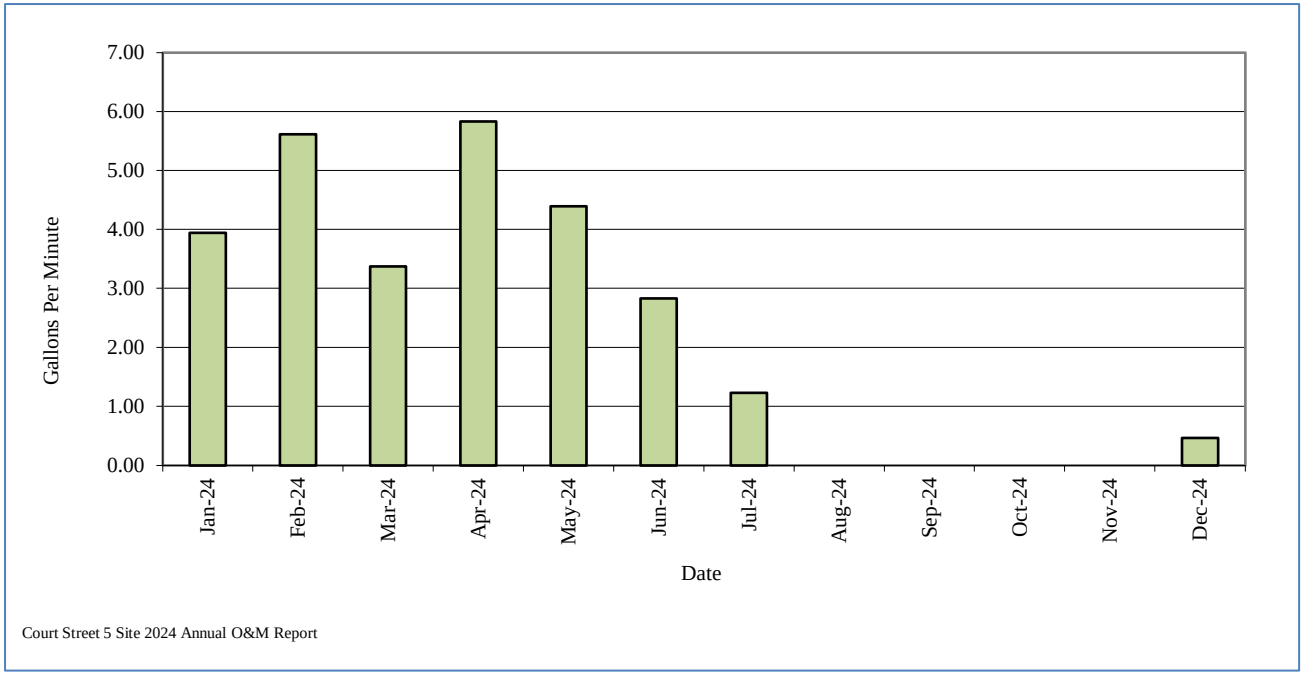


Figure 3
Average Flow Rate of Groundwater Collected and Treated
2024 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site



Court Street 5 Site 2024 Annual O&M Report

APPENDICES

Appendix A

Influent Groundwater Quality

Appendix A
Influent Groundwater Quality
2024 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

Event Identification	Date	Total Ground-water Treated (gallons)	Instant. Flow Rate (gpm)	pH (S.U.)	Total Dis. Solids (mg/l)	Vinyl Chloride (µg/L)	1,1-DCA (µg/L)	1,2-DCE (Total) (µg/L)	TCE (µg/L)	Chloroethane (µg/L)	1,4-Dioxane (µg/L)
Normal O&M Week #1363 Quarterly Sample, Influent	03/05/24	47,498,347	4.35	8.37	933	2.2	1.8	3.8	<1.0	<1.0	NA
Normal O&M Week #1376 Quarterly Sample, Influent	06/04/24	48,074,061	4.39	7.34	746	4.7	2.8	7.8	<1.0	<1.0	NA
Normal O&M Week #1389 Quarterly Sample, Influent	09/03/24	48,074,061	0.00	NA	NA	NA	NA	NA	NA	NA	NA
Normal O&M Week #1403 Quarterly Sample, Influent	12/13/24	48,147,685	0.56	7.24	638	1.3	0.7	2.3	<1.0	<1.0	2.0
				Minimum Value:	638	1.3	0.7	2.3	<1.0	<1.0	NA
				Maximum Value:	933	4.7	2.8	7.8	<1.0	<1.0	2.00
				Number of Detections/Number of Analyses :	3/3	3/3	3/3	3/3	0/3	0/3	1/1

Notes:
1. Influent pH, and TDS is not required for the site O&M monitoring; however, during certain O&M events LMC may sample these parameters for system evaluation.
2. Laboratory analysis performed by TestAmerica Laboratories, Inc.
3. Per the request of Mr. Joshua Cook, (NYSDEC), chloroethane and 1,4 dioxane results are for the effluent sample only for normal operations.
4. 1,4 dioxane effluent result included at NYSDEC request for system startup after seasonal shutdown.
5. cis-1,2-DCE reported as 1,2-DCE
6. System was in seasonal shutdown from July 1, 2024 - November 1, 2024 and then through December 13, 2024 for repairs.

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

Appendix B

Estimate of VOC Mass Removed

Appendix B
Estimate of VOC Mass Removed
2024 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

Quarter 2024	From Date	To Date	GW Treated during Period (gallons)	Vinyl Chloride (lb.)	1,1-DCA (lb.)	1,2-DCE (Total) (lb.)	TCE (lb.)	Chloroethane (lb.)
1st Quarter Jan - Mar.	12/05/23	03/05/24	570,420	0.010	0.009	0.018	0.000	0.000
2nd Quarter Mar. - June	03/05/24	06/04/24	575,714	0.023	0.013	0.037	0.000	0.000
3rd Quarter June - Sept.	06/04/24	09/03/24	0	0.000	0.000	0.000	0.000	0.000
4th Quarter Sept. - Dec.	09/03/24	12/13/24	73,624	0.001	0.000	0.001	0.000	0.000
Estimated Mass (lbs) of Individual VOCs Removed by the GCT System in 2024:				**0.034**	**0.02**	**0.057**	**0.000**	**0.000**

Estimated Mass (lbs) of Total VOCs Removed by the GCT System in 2024:	**0.11**

Sample Calculation:

Estimate of Mass of 1,1-DCA Removed Between December 5, 2023 and March 5, 2024.

$$C_1 \times \frac{1 \text{ pound}}{454 \times 10^6 \text{ ug}} \times (Q_2 - Q_1) \times \frac{3.785 \text{ liters}}{1 \text{ gallon}} = M$$

where:

M=Mass (pounds) of 1,1-DCA Removed during the period.

Q_1=Quantity (gallons) of groundwater treated as of December 5, 2023.

Q_2=Quantity (gallons) of groundwater treated as of March 5, 2024.

C_1=Concentration (ug/l) of 1,1-DCA in sample collected March 5, 2024.

Solution:

Q_1= 46,927,927 gallons

Q_2= 47,498,347 gallons

C_1= 1.8 ug/l

M= 0.009 pounds

Appendix C

Treated Groundwater Effluent Discharge Quality

Appendix C
Treated Groundwater Effluent Discharge Quality
2024 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

Event Identification	Date	Total Ground-water Treated (gallons)	Instant. Flow Rate (gpm)	pH (S.U.)	Total Dis. Solids (mg/L)	Zn Total (µg/L)	Vinyl Chloride (µg/L)	1,1-DCA (µg/L)	1,2-DCE (Total) (µg/L)	TCE (µg/L)	Chloroethane (µg/L)	1,4 Dioxane (µg/L)
Effluent Limitations :			**Monitor**	**6 - 9**	**Monitor**	**400**	**50**	**30**	**30**	**10**	**NA**	**NA**
Normal O&M Week #1363 Quarterly Sample, Effluent	03/05/24	47,498,347	4.35	8.34	948	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.0
Normal O&M Week #1376 Quarterly Sample, Effluent	06/04/24	48,074,061	4.39	8.48	744	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.2
Normal O&M Week #1389 Quarterly Sample, Effluent	09/03/24	48,074,061	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA
Normal O&M Week #1403 Quarterly Sample, Effluent	12/13/24	48,147,685	0.56	7.81	633	75	< 1.0	< 1.0	<1.0	< 1.0	< 1.0	2.0
Minimum Value:					633	<10	< 1.0	<1.0	< 1.0	< 1.0	< 1.0	2.0
Maximum Value:					948	75	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.2
Number of Samples :					3	3	3	3	3	3	3	3
Number of Detections/Number of Analyses:					3/3	2/3	0/3	0/3	0/3	0/3	0/3	3/3

Notes:

1. Laboratory analysis performed by TestAmerica Laboratories, Inc..
2. Per the request of Mr. Joshua Cook, (NYSDEC), chloroethane and 1,4 dioxane results are included in this summary table.
3. System was in seasonal shutdown from July 1, 2024 - November 1, 2024 and then through December 13, 2024 for repairs.

E = Estimate value - results exceeded calibration range

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

B = Compound was found in the blank and sample.

Appendix D

2024 South Branch of Ley Creek Outfall OF-02 Sample

Appendix D
South Branch of Ley Creek Outfall OF-02 Sample
2024 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

PARAMETER	NYSDEC Effluent Discharge Limitation	OF-02 4/9/2024 Result
1,1-Dichloroethene	--	<1.0
1,1-Dichloroethane	30	8.8
1,2-Dichloroethane	--	<1.0
1,1,1-Trichloroethane	--	<1.0
Trichloroethene	10	<1.0
c-1,2-Dichloroethene	30	<1.0
Chloroform	--	<1.0
Bromodichloromethane	--	<1.0

Notes:
1. NYSDEC Effluent Discharge Limitation is provided for comparison.
2. All concentrations are presented in ug/l.
3. Sample analyzed by Method 8260.
4. Laboratory analysis provided by TestAmerica Laboratories, Inc.

Appendix E

Groundwater Monitoring Well Data Summary

Appendix E
Groundwater Monitoring Well Data Summary
2024 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

PARAMETER	NYSDEC Groundwater (GA) Standard (6 NYCRR 703)	MW-1S Sample Date 3/3/2024 Result	MW-2S Sample Date 3/2/2024 Result	MW-8S Sample Date 3/2/2024 Result	MW-10 Sample Date 3/3/2024 Result	MW-11R Sample Date 3/3/2024 Result	MW-12 Sample Date 3/3/2024 Result	MW-16AR Sample Date 3/2/2024 Result	MW-17A Sample Date 3/3/2024 Result	MW-18A Sample Date 3/3/2024 Result	MW-19S Sample Date 3/2/2024 Result
1,1,1-Trichloroethane	5	< 80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloro-1,2,2-trifluoroethane	5	< 80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	5	370	5.4	< 1	21	21	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	0.6	< 80	< 1	< 1	< 1	< 1	< 1	1.4	< 1	< 1	< 1
1,1-Dichloroethene	5	< 80	< 1	< 1	< 1	1.3	< 1	< 1	< 1	< 1	< 1
2-Butanone	None	<800	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	None	< 800	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chloroethane	5	4000	3.4	< 1	< 1	24	< 1	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	5	< 80	5.8	< 1	7.2	110	< 1	2.1	< 1	< 1	< 1
Ethylbenzene	5	< 80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene Chloride	5	< 80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	5	< 80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	5	< 80	< 1	< 1	< 1	1.3	< 1	< 1	< 1	< 1	< 1
Trichloroethene	5	< 80	< 1	< 1	0.96 J	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2	< 80	21	< 1	< 1	74	< 1	< 1	< 1	< 1	< 1
Xylenes (total)	5	< 160	< 2	< 2	<1	< 2	< 2	< 2	< 2	< 2	< 2

Notes:
1. Samples analyzed by EPA Method 8260.
2. Concentrations are presented in ug/l.
3. Laboratory analysis performed by Eurofins TestAmerica.
4. MW-16A replaced with MW-16AR on February 27, 2017.
5. Exceeds NYSDEC Class GA groundwater standards
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*+ - LCS and/or LCSD is outside acceptance limits, high biased.

Appendix F

Court Street Building Slab Inspection Report

MEMO

Project name	**2024 Annual Building Slab Inspection Summary – Former GE Court Street Building Site**
Project no.	**1940106233**
Client	**Lockheed Martin Corporation**
Memo no.	**1**
Version	**0.1**
To	**Jill Fonte, Lockheed Martin**
From	**Scott Scheidelman**
Copy to	**Robert Tyson – BS&K** **R. Stan Phillips – Lockheed Martin** **Matthew Traister – Ramboll**
Prepared by	**Michael Mellen – Ramboll**
Checked by	**Matthew Traister – Ramboll**
Approved by	**Matthew Traister – Ramboll**

Date December 4, 2024

Ramboll
333 West Washington Street
Syracuse, NY 13202
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This Technical Memorandum (TM) presents a summary of the 2024 annual building slab inspection conducted at the former GE Court Street Building 5 Site (Site) on November 18, 2024. The purpose of the inspection was to identify slab breaches and building modifications in accordance with recommendations presented in the March 12, 2009 technical memorandum by O'Brien & Gere Engineers, Inc (OBG). Note that Ramboll Americas Engineering Solutions, Inc. (Ramboll) is formerly known as OBG, pre 2019). This TM is an update to the following:

Date / Description of Subslab Inspection	Date of Ramboll Technical Memorandum
November 2010 Baseline slab inspection	February 1, 2011
2011 slab inspection	December 8, 2011
2012 slab inspection	December 13, 2012
2013 slab inspection	December 19, 2013
2014 slab inspection	December 19, 2014
2015 slab inspection	January 8, 2016
2016 slab inspection	December 20, 2016
2017 slab inspection	December 11, 2017
2018 slab inspection	December 19, 2018
2019 slab inspection	December 3, 2019
2020 slab inspection	January 4, 2021
2021 slab inspection	January 3, 2022
2022 slab inspection	January 11, 2023
2023 slab inspection	January 18, 2024

The 2024 inspection, documented by this TM, evaluated the potential slab breaches identified in previous inspections and inspected the slab for potential new breaches that may have occurred since the last inspection. Potential slab breaches were evaluated with respect to their ability to facilitate the vapor intrusion (VI) pathway. This TM provides the details of the evaluations and provides recommendations for next steps.

1 Background

The Site consists of approximately 10 acres in an industrial zoned setting located in the Town of Dewitt at the intersection of Deere Road and Route 298. There is one on-Site building, Building 5, which is currently owned by B&B Family Limited Partnership. The primary occupant is Premier Hardwood Products (PHP). PHP's operations consist primarily of cutting, molding, and planing of lumber. An additional tenant, Specialty Products & Insulation Co. (SPI), is located in the northwest portion of the building. SPI is a distributor of HVAC system products such as metal ducting, piping, and insulation. SPI has constructed an enclosed office space located within the warehouse area of Building 5. The building layout is shown on **Figure 1**.

In response to a request by the New York State Department of Environmental Conservation (NYSDEC) in August 2006, Lockheed Martin Corporation (Lockheed Martin) conducted sampling at the Site to assess the potential for vapor intrusion. Lockheed Martin retained Ramboll to conduct the vapor intrusion sampling, which was performed in February 2007 for the 2006-2007 heating season. The results of the sampling were summarized in a TM in May 2007, in which further monitoring for trichloroethene (TCE), tetrachloroethene (PCE) and 1,1,1-trichloroethane (1,1,1-TCA) was recommended. Further monitoring was conducted in November 2007 for the 2007-2008 heating season, the results of which were reported by Ramboll in a TM in January 2008. Sub-slab vapor concentrations were found to be lower at one sample location and lower or the same (depending upon compound) at the other three sampling locations (comparison of November 2007 and February 2007 sample results). Therefore, additional sampling was recommended at the other three sampling locations.

Additional sampling was conducted in December 2008 for the 2008-2009 heating season and results were summarized in a TM in March 2009. Based on the sample results, and in conformance with the two New York State Department of Health (NYSDOH) soil vapor / indoor air matrices, no further action was necessary. However, Ramboll recommended that annual inspections be conducted to identify slab breaches and building modifications that could increase the potential for sub-slab vapors to intrude. NYSDEC approved the annual inspection approach in a December 9, 2009 letter from Javier Perez of NYSDEC to Myron Parkolap of Lockheed Martin. This TM presents the results of the fourteenth annual inspection.

2 Building Survey

Ramboll confirmed that the building survey information (e.g., building foundation, utilities, slab conditions and penetrations) collected during the previous annual inspection had not changed. The following information is provided as an overview.

Building 5's concrete floor (slab) is approximately 3 feet above grade. Except for some surficial cracks in the slab's surface, it is in excellent condition. Most of the building is a large open area without partitioning walls. There are three constructed office areas within the main building, and an additional office area that is an addition to the main building. The office spaces each contain their own natural gas-fired furnace and hot water tank. SPI operates loading docks and doors along the northwest end of the building for loading and unloading of product. **Figure 1** presents a floor plan.

The warehouse is heated by four natural gas-fired forced air units located within the indoor space. The warehouse is not air conditioned. A fire protection pump is located in the northeast corner of the building.

PHP operates a wood dust/chip collection system located along the north wall. The blower units take air from inside the building via hoods located over process equipment, route it through a filter/collection system, and return the air back inside the building. This system does not materially affect the building's indoor air pressure.

Along the south wall is a partition that separates an office area and compressor room from the rest of the warehouse area. The climate control for the compressor room is maintained by manual operation of ductwork dampeners that are adjusted seasonally. In the winter months, make-up air to the compressor is pulled from the building's interior and then discharged back inside the building; therefore, the indoor air pressure is unchanged. In the summer months, make-up air is drawn from inside the building and then exhausted outside; under these conditions, the indoor air pressure within the building becomes negative.

In 2011, PHP constructed an office/break room area, slightly west of the center of the building. The location of the office/break room is shown on **Figure 1**. Similar to the other office spaces, this office/break room area has its own HVAC system.

3 Slab Inspection

The 2024 slab inspection was conducted on November 18, 2024. Accessible areas of the building's slab were inspected for slab cracks, holes, and other potential breaches through the slab (herein referred to as slab areas). Locations and measurements of the identified slab areas were recorded on checklists and each slab area was catalogued with a corresponding letter; this information can be found in **Attachment 1**. Photographs of accessible slab areas are documented in **Attachment 2**. The location of each identified slab area is identified on a floor plan, **Figure 1**. The 2024 slab inspection used findings observed during the previous inspections to aid in identifying whether changes have occurred over the past year (*e.g.,* the 2023 slab inspection).

As reported in previous annual inspections, the slab remains in excellent condition, meaning that it provides a competent (sealed) cover over the sub-slab material (*e.g.,* gravel, soil) below. Narrow surface cracks exist throughout the slab; however, they do not appear to penetrate through the slab to the sub-slab material. Due to the quantity observed, these narrow surface cracks were not catalogued as part of this inspection. Wider and deeper cracks were catalogued so that their condition could be evaluated over time as potential pathways for vapor intrusion. Note that in 2012, Mr. Mike Tradeau of PHP indicated that PHP applied an epoxy sealant to help protect the slab in some higher truck traffic areas; some of these areas where the epoxy sealant was applied were observed during this inspection. As noted below, additional epoxy sealant was applied by PHP between the 2013 and 2014 inspections.

There were several areas where the slab could not be observed due to stored product and/or process equipment, as shown on **Figure 1**. The dimensions on the field forms for the inaccessible areas are those found in the latest inspection when the area was accessible. The depths of accessible slab areas were established by digging with a utensil into the area to work away loose concrete until refusal was

met. Therefore, the depths reported in the field forms are the maximum depth encountered and typically do not indicate the depth of the area on average or in appearance. These depths and technique will be used in future inspections to gauge the deterioration or stability of each slab area.

There is one identified slab area that is not necessarily a potential pathway to the sub-soil. Slab area D is a currently active floor drain connected to storm sewer lines. Although this identified area penetrates through the slab, it is not expected to provide a vapor pathway through the slab, so it is documented in this report for future reference only.

Slab areas L and M can no longer be accessed due to the permanent installation of process equipment (machinery) used to cut, mold, and/or plane lumber; therefore, slab areas L and M are no longer tracked. Slab area S (three 2-foot square holes saw-cut into the slab for the installation of footings for the new office/break room area) has been sealed by PHP (as a result of the completed construction) and has not been considered a slab area since late 2011. Greater access between slab areas V and K during the 2013 slab inspection concluded that the two slab areas are connected; therefore, slab area V is no longer tracked as a separate slab area, slab area V is considered part of slab area K.

PHP began installation of a new process line in the northeast portion of the building in September 2017. As part of this installation (to accommodate a conveyer belt system), approximately 60 feet of trenching was saw-cut into the concrete. After the concrete was removed, approximately two to four feet of soil was excavated. The trenches were back-filled with stone and were sealed with concrete. Process equipment was then installed at grade and the conveyers were installed in the sealed trenches below grade. On behalf of Lockheed Martin, Ramboll monitored for dust and volatile organic compounds while sub-slab soils were exposed, and no exceedances were observed during construction. Given that the trenches are sealed with concrete, they are not expected to provide a vapor pathway through the slab. The trenches are documented in this report for future reference only.

4 Findings and Summary

There were no new slab areas identified during this inspection. There was one slab area (N) whose width had increased approximately ½" between the 2021 and 2022 inspections; however, the area does not appear to have increased in size during 2023 or 2024 and does not penetrate through the slab. It is worth noting that PHP continues to address some of the wider areas and applies either epoxy or concrete, as needed. Due to process operating equipment and placement of pallets of lumber, slab areas D, G, L, M, P, T, and Z were not accessible during this inspection. Slab area U was partially covered by process operating equipment and was not fully accessible during the 2024 inspection. However, observations of the exposed portion of the slab area are summarized in **Attachment 1**.

There were no slab areas identified in which a penetration extended through the entire slab; thus, such penetrations do not represent a potential soil vapor pathway. Some of these slabs are up to 4 inches deep. The deeper slab areas, identified during this or previous inspections as slab areas J, K, N, P, Q, T and Z, should be observed carefully during subsequent inspections as their integrity may become compromised over time.

Some of the slab areas were catalogued during the initial inspection as concrete patches or surface deterioration adjacent to concrete patches. These include slab areas I (concrete patch of a hole), M

(deterioration next to a concrete patch), N (edge of large square patch), O (deterioration around a hole patch), and P (concrete patch of a hole or a hole that was not drilled through the entire slab).

Two slab areas (W and Y) are located along the interface of the concrete slab and inlayed ceramic tile. The ceramic tile has been installed such that the tile is flush with the adjacent concrete slab and tiles along the edge of the inlay have become broken or are missing. In some cases, the voids left behind by broken or missing tiles were up to six inches wide and two inches deep. On their own accord, PHP applied an epoxy sealant to portions of these areas between the 2013 and 2014 slab inspections.

A single location, located within a high traffic aisle, immediately adjacent to slab area Z was identified, during the 2023 slab inspection, as an area where the concrete has “depressed”. Due to the high traffic nature of this area, the damage had resulted in three approximately 8” x 18” depressions with a maximum observed depth of 1.5”. Following completion of the 2023 slab inspection, this area was patched with epoxy and appeared in excellent condition during the 2024 inspection.

Along the edges of the concrete patch in slab area U, deterioration of some of the concrete was observed with deterioration depths up to 2-inches. Following discussion with the property manager, and to minimize potential for further damage, the area is anticipated to be patched with either epoxy or concrete during 2025. This area currently does not represent a potential soil vapor pathway.

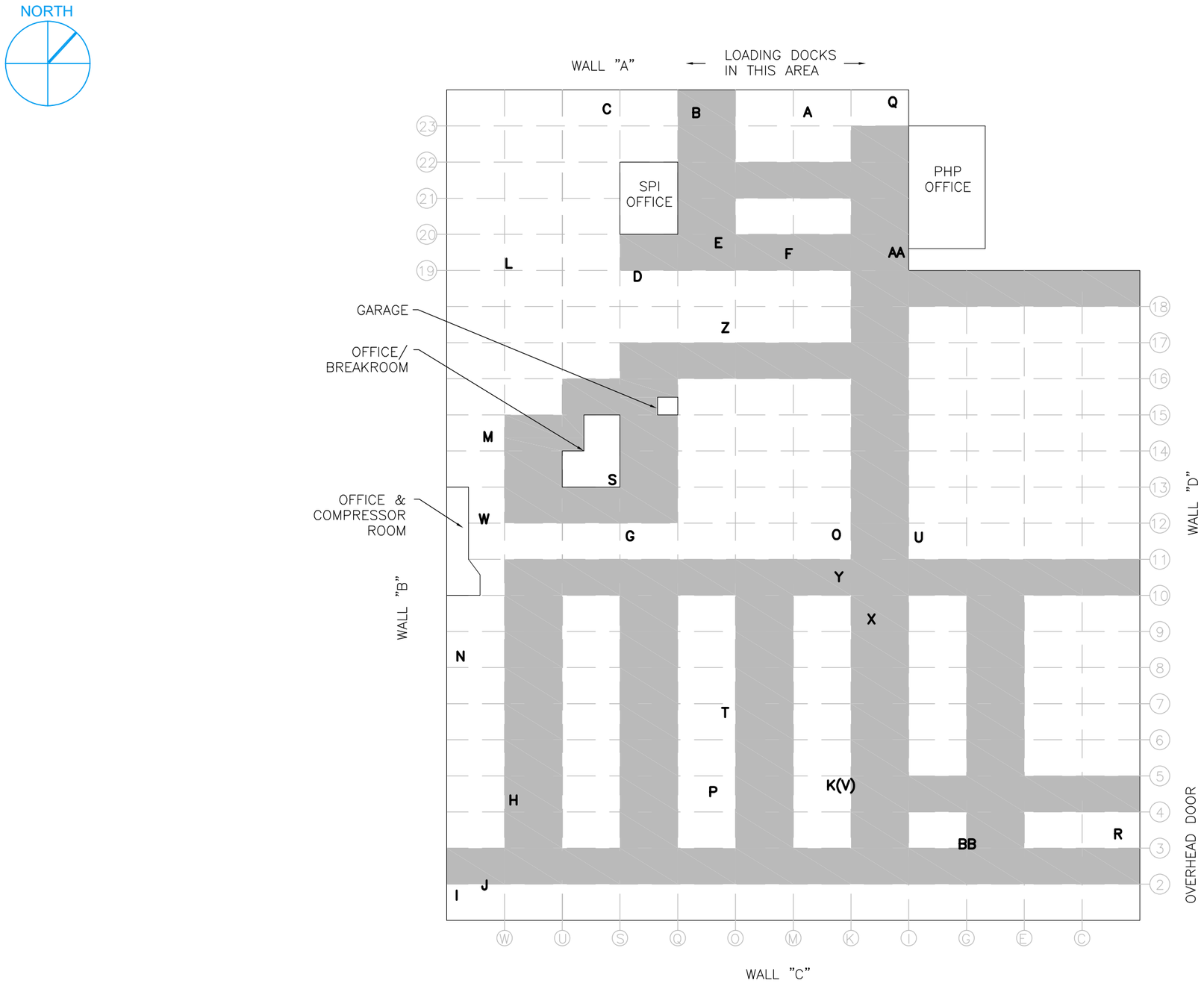
In summary, we did not find slab areas that penetrate the slab to the sub-surface below and do not believe that the potential for vapor intrusion has increased since the December 2008 sampling event. With the exception of the area identified above, we did not recommend to the building owner that additional sealing was necessary at this time. The next annual inspection is due in November 2025.

Attachments: Figure 1 – Building 5 Layout and Slab Area Identification
Attachment 1 – Field Data Forms
Attachment 2 – Photo Log

Figure 1

Building 5 Layout and Slab Area Identification

PROJECT: XXXX.XXXXX DATED: 12/16/2021 8:24 AM DESIGNER: ERIC.ALONGI \\Server\services\Ambient Monitoring\Projects\Ramboll\Vapor Intrusion\Lockheed Martin\Court Street\Court St_slab inspection-2022.dwg



NOT TO SCALE

BUILDING 5 LAYOUT AND SLAB AREA IDENTIFICATION

FIGURE 01

Site #7-34-070

Former GE Court Street 5 Site
6439 Deere Road
Dewitt, New York

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

RAMBOLL

Attachment 1

Field Data Forms

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/18/24

Structure ID #: # 7-34-070 **Team:** MDM

Slab Area+ ID: A

Length: Varys - Large Spider cracks **Width:** up to 2-in **Depth:** up to 1-in

Distance from D *** wall in feet:** ~ 100'

Distance from A *** wall in feet:** ~ 20'

- Area partially covered w/ misc. materials and equipment

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

- Larger cracks filled w/ epoxy.

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: B

Length: Varys. Large Spider cracks **Width:** up to 3-in **Depth:** up to 1-in

Distance from D *** wall in feet:** ~ 140'

Distance from A *** wall in feet:** ~ 20'

- Area partially covered with pallets
- Larger cracks filled w/ epoxy

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: C

Length: ~ 90' **Width:** up to 1 1/2" **Depth:** up to 1-in

Distance from D *** wall in feet:** ~ 160

Distance from A *** wall in feet:** ~ 20

- No apparent change since last visit.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/18/24

Structure ID #: # 7-34-070 **Team:** MDM

Slab Area⁺ ID: D

Length: ~ 8' Ø hole **Width:** — **Depth:** unknown

Distance from toward office wall to wall A *** wall in feet:** ~ 27' - Not accessible due to material storage

Distance from D *** wall in feet:** ~ 185'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA (unknown)

Should it be sealed? ☐ Yes ☐ No (unknown) Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area⁺ ID: E

Length: ~ 33' x 12' Concrete patch **Width:** up to 3/4" around patch **Depth:** up to 1"

Distance from A *** wall in feet:** ~102' - No apparent change since last visit

Distance from D *** wall in feet:** ~44'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area⁺ ID: F

Length: ~40' **Width:** up to 2 1/2" **Depth:** up to 3/4"

Distance from A *** wall in feet:** ~17' - Area partially covered with hardwood flooring

Distance from D *** wall in feet:** ~50'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA - No apparent change since last visit.

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

⁺Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6429 Deer Rd **Date of Visit:** 11/18/24

Structure ID #: #7-34-070 **Team:** MDM

Slab Area[+] ID: G

Length: ~40' **Width:** up to 1/4" **Depth:** up to 1"

Distance from C *** wall in feet:** ~200'

Distance from B *** wall in feet:** ~200' unknown

- Not accessible due to process equipment placement.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: H

Length: ~2' Sq. patch **Width:** up to 1/2" **Depth:** up to 1/2"

Distance from C *** wall in feet:** ~78'

Distance from B *** wall in feet:** ~50'

- No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: I

Length: ~4' Ø Circle **Width:** — **Depth:** up to 1/2"

Distance from C *** wall in feet:** ~40'

Distance from B *** wall in feet:** ~30'

- Hole is sealed w/ concrete
- No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/18/24

Structure ID #: #7-34-070 **Team:** MJM

Slab Area[+] ID: J

Length: length of building **Width:** up to 1 1/2" **Depth:** up to 2"

Distance from C *** wall in feet:** ~33'

Distance from NA *** wall in feet:** length of building

- No apparent change since last visit.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: K(V)

Length: ~50'x25' T-Shaped sketch **Width:** up to 2 1/4" **Depth:** up to 2"

Distance from D *** wall in feet:** ~20'

Distance from C *** wall in feet:** ~100'

- portion of slab area inaccessible due to stored lumber

- No apparent change since last visit.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: L

Length: ~48' **Width:** up to 3/4" **Depth:** up to 1"

Distance from A *** wall in feet:** ~125'

Distance from B *** wall in feet:** ~4'

- Area no longer accessible due to stored equipment and racking

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? unknown ☐ Yes ☐ No ☐ NA

Should it be sealed? unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/18/24

Structure ID #: #7-34-070 **Team:** MDM

Slab Area+ ID: M

Length: ~4" ø hole **Width:** – **Depth:** up to 2"

Distance from A *** wall in feet:** ~250

Distance from B *** wall in feet:** ~28'

- No longer accessible due to process equipment

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA (unknown)

Should it be sealed? ☐ Yes ☐ No (unknown) Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: N

Length: ~8' **Width:** up to 1 1/2" **Depth:** up to 4 1/2"

Distance from C *** wall in feet:** ~156'

Distance from B *** wall in feet:** ~8'

- No apparent change since last inspection

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: O

Length: 7 - 6" holes **Width:** – **Depth:** ~1"

Distance from B *** wall in feet:** ~280'

Distance from C *** wall in feet:** ~250'

- All holes visible during visit
- Concrete/epoxy seals good condition.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd **Date of Visit:** 11/18/24

Structure ID #: #7-34-070 **Team:** MDM

Slab Area+ ID: P

Length: ~6" Hole **Width:** – **Depth:** ~2"

Distance from C *** wall in feet:** ~94'

Distance from B *** wall in feet:** ~72'

- Former Sub-Slab utility penetration
- Not accessible due to stored pallets of lumber

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA Unknown

Should it be sealed? ☐ Yes ☐ No Unknown Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: Q

Length: ~9' **Width:** **Depth:** up to 3 1/4"

Distance from A *** wall in feet:** 0

Distance from D *** wall in feet:** ~3'

- No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: R

Length: ~20' **Width:** up to 2" **Depth:** up to 2"

Distance from D *** wall in feet:** ~24'

Distance from C *** wall in feet:** ~65'

- No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/18/24

Structure ID #: # 7-34-070 **Team:** MDM

Slab Area+ ID: S

Length: – **Width:** – **Depth:** –

Distance from B *** wall in feet:** ~100'

Distance from A *** wall in feet:** ~150'

- Area no longer accessible due to office space.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? unknown ☐ Yes ☐ No ☐ NA

Should it be sealed? unknown ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

- Area was sealed during construction.

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: T

Length: ~6" Ø hole **Width:** – **Depth:** ~4"

Distance from B *** wall in feet:** ~104'

Distance from A *** wall in feet:** ~84'

- Former equipment mounts

- Not accessible due to stored lumber.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? unknown ☐ Yes ☐ No ☐ NA

Should it be sealed? unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: U

Length: ~20' x 14' Concrete patch **Width:** up to 3" **Depth:** up to 1"

Distance from B *** wall in feet:** ~79'

Distance from C *** wall in feet:** ~130'

- Permanent equipment is over this patch

- Small depression formed on edge closest to well D. <1" deep.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deer Rd. **Date of Visit:** 11/18/24

Structure ID #: # 7-34-070 **Team:** MDM

Slab Area+ ID: V

Length: _____ **Width:** _____ **Depth:** _____

Distance from _____ *** wall in feet:** _____

Distance from _____ *** wall in feet:** _____

See slab area K

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

Slab Area+ ID: W

Length: ~4' **Width:** ~4 1/2" **Depth:** ~ 1 1/2"

Distance from office wall toward B *** wall in feet:** ~17'

Distance from C *** wall in feet:** ~225'

- No apparent change since last visit

- Epoxy in good condition.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: X

Length: ~2' Square **Width:** up to 1 1/4" **Depth:** up to 1/2"

Distance from D *** wall in feet:** ~220'

Distance from C *** wall in feet:** ~175'

- Previously sealed w/ epoxy. - in good condition

- No apparent changes since last visit.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deer Rd. **Date of Visit:** 11/18/24

Structure ID #: #7-34-070 **Team:** MDM

Slab Area+ ID: Y

Length: ~30' **Width:** up to 3' **Depth:** up to 1 1/2"

Distance from C *** wall in feet:** ~230'

Distance from D *** wall in feet:** ~230'

- portions have been sealed w/ concrete/epoxy.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

- No apparent changes since last visit.

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: Z

Length: ~3' Square **Width:** up to 2 1/2" **Depth:** up to 3"

Distance from A *** wall in feet:** ~200'

Distance from D *** wall in feet:** ~240'

- Not accessible due to stored pallets of hardwood flooring

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? unknown ☐ Yes ☐ No ☐ NA

Should it be sealed? unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: AA

Length: ~30' **Width:** up to 1 1/2" **Depth:** up to 1 1/4"

Near overhead door next to PHP office

Distance from ____ *** wall in feet:** ____

Distance from ____ *** wall in feet:** ____

- No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/18/24

Structure ID #: #7-34-070 **Team:** MDM

Slab Area+ ID: BB

Length: 30" Sq. Sump pit **Width:** ~ 1/8" around edge **Depth:** ~ 3/4"

Distance from D *** wall in feet:** ~ 120'

Distance from C *** wall in feet:** ~50'

- Sump is sealed on sides and bottom
- Sump was dry at time of visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area+ ID: _____

Length: _____ **Width:** _____ **Depth:** _____

Distance from _____ *** wall in feet:** _____

Distance from _____ *** wall in feet:** _____

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

Slab Area+ ID: _____

Length: _____ **Width:** _____ **Depth:** _____

Distance from _____ *** wall in feet:** _____

Distance from _____ *** wall in feet:** _____

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

+Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Attachment 2

Photo Log

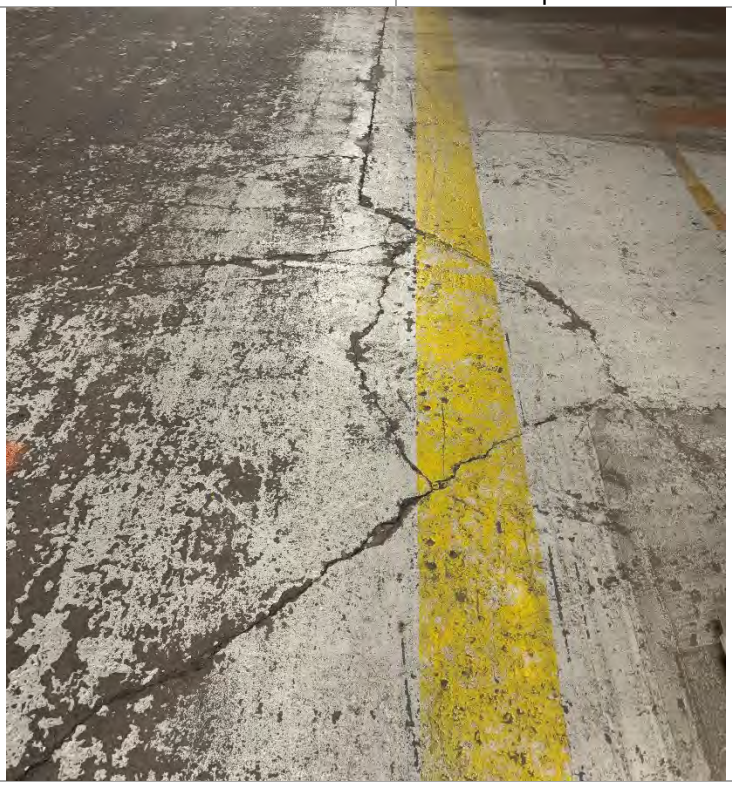
SLAB INSPECTION – PHOTOLOG

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 1	**DATE:** 11/18/2024		
DESCRIPTION Slab Area A			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 2	**DATE:** 11/18/2024		
DESCRIPTION Slab Area B			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 3	**DATE:** 11/18/2024		
DESCRIPTION Slab Area C			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 4	**DATE:** 11/18/2024		
DESCRIPTION Slab Area E			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 5	**DATE:** 11/18/2024		
DESCRIPTION Slab Area F			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 6	**DATE:** 11/18/2024		
DESCRIPTION Slab Area H			

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
Lockheed Martin	6439 Deere Rd.	1087962 | 1940106231

PHOTO NO.	DATE:
7	11/18/2024

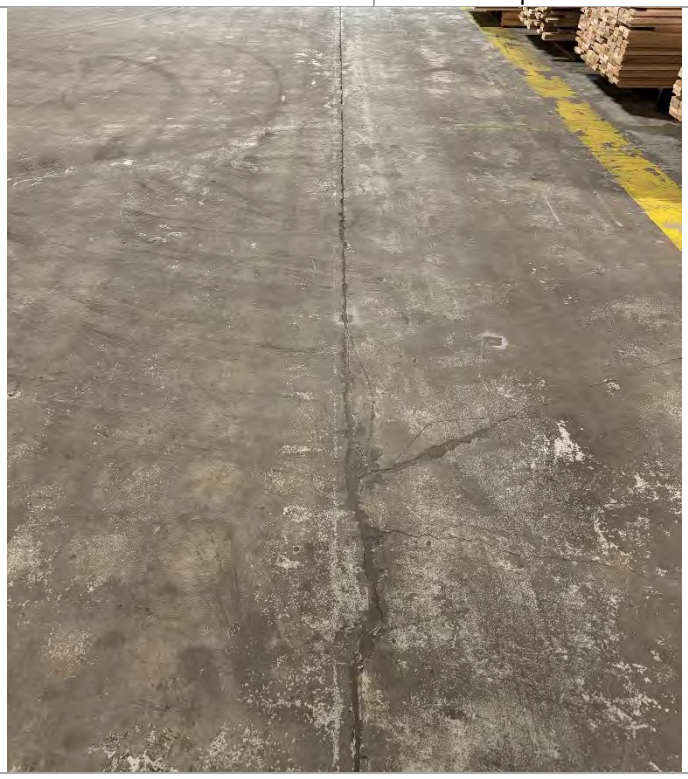
DESCRIPTION
Slab Area I



CLIENT NAME:	SITE LOCATION:	PROJECT NO.
Lockheed Martin	6439 Deere Rd.	1087962 | 1940106231

PHOTO NO.	DATE:
8	11/18/2024

DESCRIPTION
Slab Area J



CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 9	**DATE:** 11/18/2024		
DESCRIPTION Slab Area K(V)			

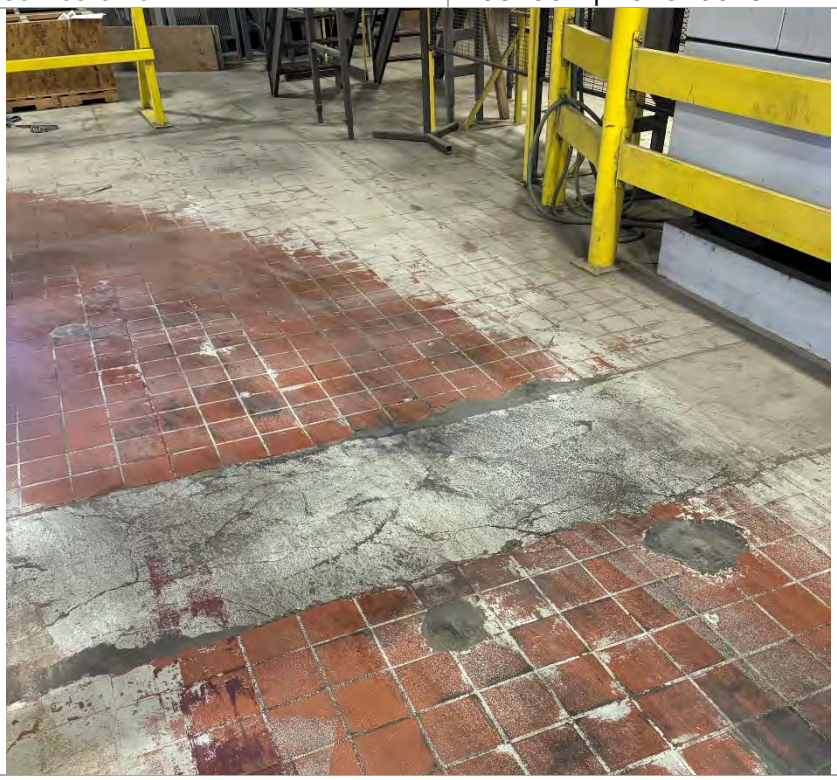
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 10	**DATE:** 11/18/2024		
DESCRIPTION Slab Area N			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 11	**DATE:** 11/18/2024		
DESCRIPTION Slab Area O			

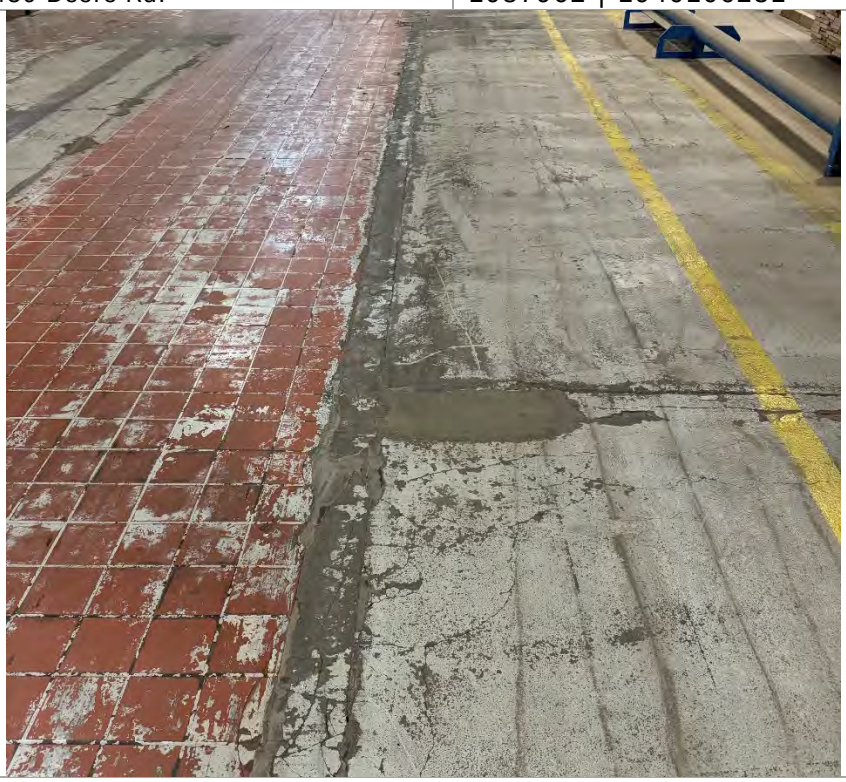
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 12	**DATE:** 11/18/2024		
DESCRIPTION Slab Area Q			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 13	**DATE:** 11/18/2024		
DESCRIPTION Slab Area R			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 14	**DATE:** 11/18/2024		
DESCRIPTION Slab Area U			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 15	**DATE:** 11/18/2024		
DESCRIPTION Slab Area W			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 16	**DATE:** 11/18/2024		
DESCRIPTION Slab Area X			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 17	**DATE:** 11/18/2024		
DESCRIPTION Slab Area Y			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 18	**DATE:** 11/18/2024		
DESCRIPTION Slab Area AA			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 19	**DATE:** 11/18/2024		
DESCRIPTION Slab Area BB			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 | 1940106231
PHOTO NO. 20	**DATE:** 11/18/2024		
DESCRIPTION High traffic aisle adjacent to slab area Z. Area has been patched since 2023 inspection.			

Appendix G

O&M Inspection Forms

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke | **Date** 1-5-24 | **Time** 9:10 AM

Weather Data

Temp. (F): 28° Relative Humidity (%) 75% Barometric Pressure (in Hg) 30.28"

Cleanout Risers

0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

0.27 Feet of Water (CO-S)

DTW CO-N 10.10 DTW CO-S 10.28

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper Tank & Diffusers

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank

N/A Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

30386 @ 9:20 Hrs.

Phone Line Function (Y or N)

Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

____ Clear of debris X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

1-5-24

System Pressure

Location	Pressure (psi)
High Flow Influent	6.0
Low Flow Influent	5.6
Blower Discharge	2.2
Blower Discharge Differential	0.3
Air Stripper Tank	0.2 / 18" wc
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	67°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.42
Low Flow Influent	4.54

Location	Flow (cfm)
Blower (PLC)	132
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29793669
Low Flow Influent	17310194

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Bag Filters Changed (Y or N) N/A

Air Stripper Cleaned (Y or N) N - Inspected

Comments/Other Work Performed

9" Redux - Plus one new DRVM

Personal Signature Matt Kowalczyk

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke | **Date** 2-6-24 | **Time** 11:45 AM

Weather Data
Temp. (F): 36° Relative Humidity (%) 55% Barometric Pressure (in Hg) 30.25

Cleanout Risers
0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit
0.25 Feet of Water (CO-S)
DTW CO-N 10.10 DTW CO-S 10.30
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump ____ Inches of Sediment X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Catch Basin CB-20
____ clear of debris & sed. X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Outfall OF-01A ____ clear of debris & sed. X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Air Stripper Tank & Diffusers
____ Inches of Sediment X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Transfer Tank NA Inches of Sediment ____ Good Condition ____ Corrected During Visit
Work Performed or Needed: NA.

Electric Meter Reading
35918 @ 13:20 Hrs.

Phone Line Function (Y or N)
Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet ____ Clear of debris X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

2-6-24

System Pressure

Location	Pressure (psi)
High Flow Influent	5.9
Low Flow Influent	5.5
Blower Discharge	1.9
Blower Discharge Differential	0.2
Air Stripper Tank	0.2 , 20"
Filter Differential	N/A

System Temperatures

Location	Temperature (F)
Blower Discharge	80°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	14.42
Low Flow Influent	4.24
Location	**Flow (cfm)**
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29924962
Low Flow Influent	17437379

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Bag Filters Changed (Y or N) N/A

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

CHANGED PUMP TO NEW REDUX DRUM.

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koenecke | **Date** 3-5-24 | **Time** 7:00 AM

Weather Data

Temp. (F): 50° Relative Humidity (%) 77% Barometric Pressure (In Hg) 30.14

Cleanout Risers

2.90 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

2.65 Feet of Water (CO-S)

CO-N DTW CO-N 7.40 DTW CO-S 7.90

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump ____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ALARMED 630 3-4-24 High Level

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A ____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper Tank & ~~Diffusers~~

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank ____ Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: NA

Electric Meter Reading

40484 @ 10:05 Hrs.

Phone Line Function (Y or N)

Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet ____ Clear of debris ____ Good Condition X Corrected During Visit

Work Performed or Needed: CLEANED

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

3-5-24

System Pressure

Location	Pressure (psi)
High Flow Influent	6.1
Low Flow Influent	5.2
Blower Discharge	2.0
Blower Discharge Differential	0.3
Air Stripper Tank	0.4, 21"
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	86°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	16.21
Low Flow Influent	4.48
Location	Flow (cfm)
Blower (PLC)	144
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	29946622
Low Flow Influent	17551725

Influent Sample Collected (Y or N) Y pH (S.U.) Temp. 9:00 Time (hrs.)

Effluent Sample Collected (Y or N) Y pH (S.U.) Temp. 8:50 Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

ON ARRIVAL SYSTEM off FOR LOW AIR FLOW, CLEANED FILTER AND FLOW SENSOR, RESTARTED, 30" REDVX Left, QUARTERLY INF/EFF SAMPLES TAKEN

Personal Signature Matt Kemble

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION AND TREATMENT SYSTEM
SUPPLEMENTAL O&M EVENT FORM

INSPECTOR: MARTIN KOERNECKE

DATE: 3-5-24

ACTIVITY:

- [X] E
- [ ] RESPONSE TO SYSTEM SHUTDOWN
- [ ] STRIPPER CLEANING
- [ ] OTHER

PROVIDE A DESCRIPTION OF THE CAUSE OF THE SHUTDOWN, CORRECTIVE ACTIONS TAKEN, AND/OR OTHER INFORMATION NECESSARY TO UNDERSTAND THE PURPOSE OF THE VISIT.

6:30 PM ON 3-4-24 ALARM FOR HIGH SUMP PIT LEVEL
SYSTEM SHUT DOWN ON LOW AIR FLOW
7:00 AM ON 3-5-24
CLEANED AIR FILTER AND FLOW SENSOR AND RESTARTED

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION AND TREATMENT SYSTEM
SUPPLEMENTAL O&M EVENT FORM

INSPECTOR: MARTIN KOERNECKE

DATE: 3-29-24

ACTIVITY:

X	RESPONSE TO SYSTEM SHUTDOWN
	STRIPPER CLEANING
	OTHER

PROVIDE A DESCRIPTION OF THE CAUSE OF THE SHUTDOWN, CORRECTIVE ACTIONS TAKEN, AND/OR OTHER INFORMATION NECESSARY TO UNDERSTAND THE PURPOSE OF THE VISIT.

3-28-24 @ 11:53 PM ALARM CALL OUT FOR HIGH WET WELL SUMP AND LOW AIR FLOW
CHECK SITE @ 7:00 AM 3-29-24 FOUND BLOWER STARTER RELAY TRIP
RESET RELAY AND PUT SYSTEM IN HAND MODE TILL WET WELL LEVEL LOWERS TO RESET FLOAT

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN KOENNECKE | **Date** 4-9-24 | **Time** 9:45 AM

Weather Data

Temp. (F): 58° Relative Humidity (%) 58% Barometric Pressure (In Hg) 30.04"

Cleanout Risers

0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

0.25 Feet of Water (CO-S)

CO-N DTW CO-N 10.10 DTW CO-S 10.30

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper Tank ~~& Diffusers~~

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank

NA Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: NA

Electric Meter Reading

03615 @ 9:50 Hrs. Looks Like NEW METER WAS INSTALLED

Phone Line Function (Y or N)

X Autodialer ____ Modem X Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

____ Clear of debris ____ Good Condition X Corrected During Visit

Work Performed or Needed: REPLACED AIR FILTER

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

4-9-24

System Pressure

Location	Pressure (psi)
High Flow Influent	6.4
Low Flow Influent	5.8
Blower Discharge	1.8
Blower Discharge Differential	0.2
Air Stripper Tank	0.3 / 20" wc
Filter Differential	N/A

System Temperatures

Location	Temperature (F)
Blower Discharge	93°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.08
Low Flow Influent	4.11
Location	Flow (cfm)
Blower (PLC)	110
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30109678
Low Flow Influent	17682448

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Bag Filters Changed (Y or N) N/A

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

Q2 DRY weather sample collected

CHANGED AIR Filter

ELECTRIC meter Look Like it was Replaced with New one

REDUX - 380 - 22¼" Left

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke | **Date** 5-3-24 | **Time** 8:20 AM

Weather Data

Temp. (F): 56° Relative Humidity (%) 76% Barometric Pressure (in Hg) 30.11"

Cleanout Risers

0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

0.25 Feet of Water (CO-S)

DTW CO-N 10.10 DTW CO-S 10.30

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper ~~Tank & Diffusers~~

____ Inches of Sediment ____ Good Condition X Corrected During Visit

Work Performed or Needed: CLEANED AIR STRIPPER

Transfer Tank

NA Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

07781 @ 8:30 Hrs.

Phone Line Function (Y or N)

Y Autodialer ____ Modem X Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

____ Clear of debris Y Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

5-3-24

System Pressure

Location	Pressure (psi)
High Flow Influent	5.8
Low Flow Influent	6.2
Blower Discharge	3.6
Blower Discharge Differential	0.3 / 25"
Air Stripper Tank	0.0
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	105

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.20
Low Flow Influent	4.86
Location	Flow (cfm)
Blower (FLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30150718
Low Flow Influent	17793129

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) Y

Comments/Other Work Performed

CLEANED AIR STRIPPER, 17" REDUX REMAINING
FLUSHED LOW FLOW LINE IN BUILDING

Personal Signature Victor Fowler

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koenneckp | **Date** 6-4-24 | **Time** 10:30 AM

Weather Data
Temp. (F): 78° Relative Humidity (%) 64% Barometric Pressure (in Hg) 29.99"

Cleanout Risers
0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit
0.25 Feet of Water (CO-S)
CO-N DTW CO-N 10.10 DTW CO-S 10.30
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump ____ Inches of Sediment X Good Condition ____ Corrected During Visit
Work Performed or Needed:

Catch Basin CB-20
____ clear of debris & sed. X Good Condition ____ Corrected During Visit
Work Performed or Needed:

Outfall OF-01A ____ clear of debris & sed. X Good Condition ____ Corrected During Visit
Work Performed or Needed:

Air Stripper Tank & ~~Blowers~~
____ Inches of Sediment X Good Condition ____ Corrected During Visit
Work Performed or Needed:

Transfer Tank NA Inches of Sediment ____ Good Condition ____ Corrected During Visit
Work Performed or Needed:

Electric Meter Reading
09237 @ 10.40 Hrs.

Phone Line Function (Y or N)
Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet ____ Clear of debris Y Good Condition ____ Corrected During Visit
Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

6-4-24

System Pressure

Location	Pressure (psi)
High Flow Influent	5.6
Low Flow Influent	5.1
Blower Discharge	2.7
Blower Discharge Differential	0.2 / 18"wc
Air Stripper Tank	0.0
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	103°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.00
Low Flow Influent	4.12

Location	Flow (cfm)
Blower (PLC)	102
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30152339
Low Flow Influent	17921722

Influent Sample Collected (Y or N) Y
Effluent Sample Collected (Y or N) Y — pH (S.U.) Temp. 11:25 Time (hrs.)
Bag Filters Changed (Y or N) NA — pH (S.U.) Temp. 11:15 Time (hrs.)
Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

11.5" REDUX Left
; QUARTERLY INF/EFF SAMPLES TAKEN

Personal Signature Mitch Kemler

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke | **Date** 7-3-24 | **Time** 7:20 AM

Weather Data

Temp. (F): 68° Relative Humidity (%) 72% Barometric Pressure (in Hg) 30.10

Cleanout Risers

0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

0.25 Feet of Water (CO-S)

CO-N DTW CO-N 10.10 TOC Elevation 10.30 DTW CO-S 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper Tank & Diffusers

____ Inches of Sediment Y Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank

NA Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

09876 @ 7:25 Hrs.

Phone Line Function (Y or N)

Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

____ Clear of debris X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

7-3-24

System Pressure

Location	Pressure (psi)
High Flow Influent	5.9
Low Flow Influent	5.2
Blower Discharge	2.8
Blower Discharge Differential	0.3
Air Stripper Tank	0.2 / 20"w.c.
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	93

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.82
Low Flow Influent	4.35
Location	Flow (cfm)
Blower (PLC)	128
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30152339
Low Flow Influent	1797296 2

Influent Sample Collected (Y or N) N — pH (S.U.) — Temp. — Time (hrs.)

Effluent Sample Collected (Y or N) N — pH (S.U.) — Temp. — Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

8.5" Redux Plus. 1 New Drum

Replaced Fire Extinguishers with newly Inspected units

Personal Signature Mark Kamke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTin Koennecke | **Date** 12-13-24 | **Time** 8:00 AM

Weather Data

Temp. (F): 19° Relative Humidity (%) 67% Barometric Pressure (in Hg) 30.64

Cleanout Risers

7.02 Feet of Water (CO-N) X Good Condition _____ Corrected During Visit

6.66 Feet of Water (CO-S)

DTW CO-N 3.28 DTW CO-S 3.95

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

_____ Inches of Sediment X Good Condition _____ Corrected During Visit

Work Performed or Needed: _____

Catch Basin CB-20

_____ clear of debris & sed. X Good Condition _____ Corrected During Visit

Work Performed or Needed: _____

Outfall OF-01A

_____ clear of debris & sed. X Good Condition _____ Corrected During Visit

Work Performed or Needed: _____

Air Stripper Tank & Diffusers

_____ Inches of Sediment X Good Condition _____ Corrected During Visit

Work Performed or Needed: _____

Transfer Tank

NA Inches of Sediment _____ Good Condition _____ Corrected During Visit

Work Performed or Needed: _____

Electric Meter Reading

14085 @ 10:30 Hrs.

Phone Line Function (Y or N)

Y Autodialer _____ Modem _____ Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

_____ Clear of debris Y Good Condition _____ Corrected During Visit

Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

12-13-24

System Pressure

Location	Pressure (psi)
High Flow Influent	7.62
Low Flow Influent	5.91
Blower Discharge	0.95
Blower Discharge Differential	0.20
Air Stripper Tank	22 "WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	62°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	17.30
Low Flow Influent	5.57
Location	Flow (cfm)
Blower (PLC)	172 SCFM
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30152720
Low Flow Influent	17994965

Influent Sample Collected (Y or N) Y pH (S.U.) Temp. 9:15 Time (hrs.)

Effluent Sample Collected (Y or N) Y pH (S.U.) Temp. 9:30 Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

System Restarted with new programmer
Influent/Effluent samples collected
7.5" Redux Plus one new drum
New sensaphone installed

Personal Signature Mark Komke

Appendix H

Year 4 Phytoremediation Pilot Test Report

Intended for
Lockheed Martin Corporation

Document type
Phytoremediation Report

Date
January 2025

Year 5 Phytoremediation Pilot Test Report

Former GE Court Street Building 5 Site

RAMBOLL Bright ideas. Sustainable change.

Year 5 Phytoremediation Pilot Test Report
Former GE Court Street Building 5 Site

Project name	**Former GE Court Street Building 5 Site**
Project no.	**1940106233**
Recipient	**Lockheed Martin Corporation**
Document type	**Report**
Date	**January 16, 2025**

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1. Introduction

1.1 General

Ramboll Americas Engineering Solutions, Inc. (Ramboll, previously O'Brien & Gere Engineers, Inc. [OBG]) prepared this *Year 5 Phytoremediation Pilot Test Repor*t (PTR) on behalf of Lockheed Martin Corporation (Lockheed Martin) to summarize the operation, maintenance and monitoring (OM&M) activities performed in 2024 for the phytoremediation system installed at the Former GE Court Street Building 5 Site (Site) (Site No.734070) located at 6439 Deere Road in the Town of Dewitt, Onondaga County, New York (**Figure 1**). Construction of the phytoremediation system was completed in March and May 2020 and is summarized in the *Phytoremediation Pilot Test Construction Completion Report* (CCR) (Ramboll, 2021a), and the as-built system is shown in **Figure 2**. The phytoremediation pilot test system is being implemented in accordance with the *Phytoremediation System Pilot Test Work Plan* (PTWP) (Ramboll, 2020) that was approved by the New York State Department of Environmental Conservation (NYSDEC) on April 1, 2020.

As presented in the PTWP, the overall goal of the phytoremediation pilot test is to identify whether phytoremediation can be used to enhance the existing remedy and therefore reduce the timeframe over which the groundwater collection trench needs to be operated. As described in the PTWP, there are several specific objectives related to this goal, as follows:

- Assess the ability of phytoremediation to reduce the concentrations of chlorinated volatile organic compounds (CVOCs) and 1,4-dioxane in the influent to the treatment system
- Assess the ability of phytoremediation to reduce the flow of groundwater to the collection trench
- Assess the ability of phytoremediation to accelerate the mitigation of CVOC and 1,4-dioxane impacted groundwater between the access road on the back/west side of the building and the collection trench
- Evaluate if phytoremediation can be used to improve the environmental sustainability of the remedy

To achieve the overall goal and specific objectives, a full-scale pilot test was proposed in the PTWP to augment the existing remedy by planting a stand of hybrid poplars (retaining some of the existing large trees) that, when mature, would have the ability to "consume" water during the growing season. The PTWP also included continued monitoring of monthly trench flows, supplemental monitoring of treatment system influent concentrations, an expanded annual groundwater monitoring event, and supplemental water-level measurements in select monitoring wells. In accordance with the approved PTWP, the performance of the phytoremediation pilot test is being reported on an annual basis; this document represents the fifth report and covers the period from January through December 2024.

1.2 Site History

The Site is located at 6439 Deere Road in the Town of Dewitt, New York, as shown on **Figure 1**. The Site is currently owned by the B&B Family Limited Partnership, which manufactures hardwood flooring (including cutting, molding, and planing lumber). The Site is on NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites and is designated as a Class 4 site. This designation is used for sites that have implemented the selected remedy but still require long-term OM&M.

Based on review of available historical documents, prior activities at the Site involved former operation of nine 250-gallon solvent underground storage tanks (USTs) in the 1950s. These tanks were reportedly located on the west side of Building 5 (approximate location presented on **Figure 2**). The USTs were reportedly taken out of service in 1960 and removed from the ground in 1986 (Wehran-New York Inc. [Wehran], 1992). Historical activities also involved dispensing paint solvents from 55-gallon drums on an outdoor concrete pad (Wehran, 1992), which was located on the west side of the building (approximate location presented on **Figure 2**).

In April and May 1992, an interim subsurface investigation (Wehran, 1992) and interim remedial measure (IRM) was implemented by Wehran that included removal of soil impacted by CVOCs from the UST and solvent drum dispensing pad areas (Wehran, 1993). In 1992, 1993 and 1997, an interim remedial measure (IRM) was completed for storm sewer rehabilitation, including replacing/relocating catch basins, repairing select clay tile piping and removal of select clay tile piping (NYSDEC, 1999). In January 1998, another IRM was implemented that involved the installation of a groundwater collection and treatment system (GCTS) (Ramboll, 2021a). The groundwater is collected using an 830-feet-long trench and is treated using air stripping before discharged to the on-site storm sewer. Operation of the GCTS began in February 1998 and has continued to the present (Ramboll, 2021a) (**Figure 2**).

1.3 Groundwater Remedy

NYSDEC issued a Record of Decision (ROD) for the Site in March 1999. The selected remedy included continued OM&M of the GCTS and groundwater monitoring. The monitoring component includes the sampling and analysis of groundwater from designated monitoring wells and storm water outfalls and the quarterly sampling and analysis of treatment system influent and effluent samples.

The groundwater collection trench is approximately 830 feet long, with a collection sump at the northwest end. Based on variations in the ground surface elevation, the depth of the collection trench ranges from 8 to 14 feet below grade. Pumps are located within the collection sump to transfer groundwater to the treatment building. The groundwater is discharged into a low-profile air stripper designed to remove CVOCs. The treated water flows by gravity from the air stripper to a catch basin (CB-2) and ultimately through storm sewer piping to Sanders Creek (outfall OF-01A) in accordance with the substantive requirements (i.e., effluent limitations and monitoring requirements) established by NYSDEC. Features of the groundwater remedy are presented in **Figure 2**.

The average monthly flow rate of the GCTS from January 2014 to April 2020 (before installation of the phytoremediation system) varied from 2.9 to 5.4 gallons per minute (gpm), with an average annual flow rate of 3.4 gpm. **Figure 3** shows the average monthly flow rate over the annual 12-month cycle based on data from January 2014 to April 2020 (before installation of the phytoremediation system). It is expected that the phytoremediation system will impact the average annual and average monthly GCTS flow rates as the hybrid poplars become established.

As discussed in the PTWP, the estimated annual mass of CVOCs removed by the GCTS decreased an order of magnitude over the two decades prior to implementation of the phytoremediation pilot test. For example, the estimated mass removed was approximately 4.0 pounds in 1998 but

was only 0.24 pounds in 2019 (the year before installation of the phytoremediation system), a reduction of approximately 94%. By decreasing the flow of impacted groundwater into the collection trench, the phytoremediation system is expected to also cause a reduction in the estimated annual mass of CVOCs removed by the GCTS.

2. Phytoremediation System Construction

Construction of the phytoremediation system began during the week of March 9, 2020, with marking the existing trees that were to be retained.[1] The brush and other trees were then cleared and mulched on-site, leaving 19 existing trees (one willow, nine cottonwoods, seven boxelders and two quacking aspen). Two hundred boreholes were advanced on an approximate 12-foot spacing to 3.5 feet below grade in preparation for planting 6-foot-long hybrid poplar poles (OP-367). The poles were inoculated overnight with endophytic bacteria culture strains PDN3 (*Enterobacter sp.*), PD1 (*P. putida*) and hormone rooting powder. The poles were then planted and boreholes backfilled with a MYKO Start® 60 fertilizer pack followed by a 50:50 mix of Sunshine Mix #4 and native soil. The remaining inoculant was utilized to inoculate the exposed roots of the 19 retained trees. Construction of the phytoremediation system was completed on May 13, 2020. Further details are included in the CCR (Ramboll, 2021a), which is Appendix I of the *2020 Annual Operations and Maintenance Report* (Ramboll, 2021b).

[1] The design of the phytoremediation system included retaining ten large phreatophytes (one willow and nine cottonwoods). NYSDEC requested that some additional large trees be retained during its review and approval of the PTWP.

3. Stand Inspections and Associated Actions

Inspections of the hybrid poplar stand were completed every two months during the growing season as outlined in Section 4.4.1 in the PTWP. During Year 5, the stand inspections were completed on May 16, July 11 and September 10, 2024, and are documented in the inspection reports that are provided in **Appendix A**. The inspection reports include observations, tree measurements and photographs documenting the tree stand development.

3.1 Tree Growth and Survival Rate

Growth of the hybrid poplars was noted during each of the three inspections. Survival was 91.5% during the final Year 1 inspection (November 9, 2020), decreased to 70% during the final Year 2 inspection (November 9, 2021), and decreased to 61% further to 58% during the final Year 4 inspection (September 12, 2023). During Year 5, the survival decreased to 52% by the final inspection (September 10, 2024), with the loss of fifteen additional trees. **Figure 4** shows the status of the phytoremediation system during the final Year 5 inspection, with 104 surviving poplars (101 healthy and 3 stressed). The canopy of the larger retained trees is also shown on **Figure 4**, and most of the poplars that have died are below the canopy. The majority of the dead trees (82%, or 79 of the 96 dead trees) are located under the canopy of the large retained trees; thus, as discussed in the inspection reports and prior PTRs, the stress and die-off is largely believed to be due to water competition and shading from the retained trees. The weather conditions in Year 1 (elevated spring heat, shortly after planting) and the tree guards (which protected the trees from deer damage, but restricted air movement and increased humidity) also contributed to some tree stress and death.

3.2 Tree Watering

In general, the 2024 growing season can be characterized as being similar to average temperatures with drier than normal conditions (i.e., the 30-year average) in July and September, and wetter than normal conditions in August (**Figure 5**). Manual watering was not performed during the 2024 growing season.

3.3 Biological Stresses

Two general biological stresses were observed in 2024. There were minor observations of *Marssonina* leaf spot (a common foliage disease of cottonwoods caused from a fungus) during the 2024 inspections. In addition, aggressive growth of native vine (e.g., virginia creeper, wild grape, poison ivy), common reed and mugwort was noted. Similar to previous years, vines were observed crowding trees and threatened to overtake some of the hybrid poplars. Common reed growth was also present threatened to overtake some of the trees (see Section 4.1 below for routine vegetation management).

3.4 Tree Guard Replacement

During the final Year 2 inspection (September 21, 2021) and year-end pruning, the tree guards were removed, and the trees were wrapped to protect the trees from deer rubbing. Tree wrap replacement was not required during in Year 5. Damaged tree wraps were removed but not replaced due to the reduced risk of damage from deer grazing and rubbing now that the hybrid poplars are taller.

4. Routine Operation and Maintenance Activities

4.1 Management of Undesirable Vegetative Growth

As a result of the vine and common reed growth observed during the first Year 1 inspection, and in accordance with the approved PTWP, Ramboll requested approval from NYSDEC to apply herbicides. Approval was granted during a July 26, 2020 telephone call to apply herbicides in compliance with regulations and any necessary permit requirements. No permits were required and Ramboll selected a licensed pesticide applicator for the effort.

RoundUP® was applied by Brightview Landscapes LLC (Brightview) of Jamesville, New York (Bureau of Pesticides Management Registration #17582) twice during Year 1 (August 11 and 12, 2020 and September 18, 2020) and once during Year 2 (August 3, 2021) to control vines and common reed growth within the poplar stand.

No pesticide application was performed during Year 3 or Year 4. Similarly, pesticide was also not applied in Year 5. The growth of vines and common reeds were successfully managed by mowing, which was performed in July 2024.

4.2 Pruning

Consistent with the PTWP, the hybrid poplars were pruned at the end of Year 1 and Year 2 (following leaf fall). This pruning was performed by Ramboll and completed consistent with the *Poplar and Willow Tree Care Guide* (Intrinsyx, 2020). Consistent with the PTWP, pruning was not conducted at the end of Year 4 or Year 5.

4.3 Fertilization

Consistent with the PTWP, the timing of any additional fertilization will be established based on the findings of the routine inspections and leaf nutrient analyses. In accordance with the PTWP, if additional fertilization is warranted, it will be performed in accordance with the manufacturer's recommendations and using methods provided to NYSDEC in advance. No additional fertilization was performed in Year 1 through Year 5 (2020 through 2024). However, based on the observations during the Year 5 inspections, fertilization of the hybrid poplar stand is recommended in 2025.

4.4 Contingent Tree Replacement

The PTWP includes a contingency for tree replacement. Since the majority of the dead trees are located under the canopy of the large retained trees (one willow, nine cottonwoods, seven boxelders and two quacking aspen), replacement of dead hybrid poplars has not been performed.

5. Collection Trench and Groundwater Monitoring

Routine monitoring activities at the Site include (a) monthly flow totalizer readings (from which volumes and rates can be calculated), (b) quarterly sampling of the treatment system influent and effluent for laboratory analyses, (c) annual water level measurements and (d) annual groundwater sampling for laboratory analyses. The PTWP includes supplemental monitoring that would be performed to augment the routine monitoring and facilitate evaluation of the phytoremediation pilot test.

5.1 Seasonal Shutdown of the Collection Trench

As envisioned in the PTWP, growth of the hybrid poplar stand was expected to allow seasonal operation of the GCTS (i.e., during the winter and spring months) while relying on evapotranspiration by the large retained trees and the hybrid poplars to "consume" groundwater during the growing season. On February 6, 2024, Ramboll submitted a petition on behalf of Lockheed Martin that requested approval from NYSDEC to transition to seasonal operation of the GCTS for a two-year period (i.e., 2024 and 2025). Ramboll proposed to operate the GCTS from January through June each year, and to shut down the system from July through December. NYSDEC requested additional information to support the seasonal operation request, which was provided to NYSDEC in a July 9, 2024 letter. As requested by NYSDEC, this letter revised the petition to (a) a single four-month shutdown period, (b) include the sampling of two monitoring wells (MW-17A and MW-18A) before restart of the GCTS at the end of the shutdown period, and (c) include sampling of the collection trench water (i.e., influent to the air stripper) when operation of the GCTS resumes. NYSDEC subsequently approved the four-month shutdown on July 18, 2024.

As approved by NYSDEC, the GCTS was shut down on July 19, 2024. During the shutdown period, the routine GCTS activities (e.g., trench flow measurements and influent/effluent sampling) could not be completed. Operation of the GCTS was attempted on November 1, 2024, but the GCTS failed to start. Troubleshooting identified a faulty programmable logic controller (PLC). A new PLC was ordered, received, installed and programmed. Operation of the GCTS resumed on December 13, 2024 (i.e., the shutdown period was actually from July 19 through December 13, 2024).

5.2 Volume Rate of Groundwater Flow in the Collection Trench

Monthly flow totalizer readings are collected as part of the routine OM&M activities. **Table 1** presents the gallons of groundwater pumped and the resulting average flow rates between the monthly measurement events from January 2024 through December 2024. **Figure 3** presents the average monthly flow rate of the GCTS over the 12-month cycle based on the data for 2014 through 2019 in comparison to the data for 2020, 2021, 2022, 2023 and 2024. The average monthly flow rate of the GCTS from January 2014 to April 2020 (before installation of the phytoremediation system) varied from 2.9 to 5.4 gpm, with an average annual flow rate of 3.4 gpm. Except for the NYSDEC-approved seasonal shutdown of GCTS from July 19 to December 13, 2024 (see Section 5.1 above), the monthly post-planting flow rates varied from 0.62 gpm in November 2020 to 7.58 gpm in February 2022.

As shown in **Figure 3**, the 2024 average monthly flow rate in the GCTS for April, May and June were significantly less than the monthly means from 2014 through 2019 (before planting the

phytoremediation system in May 2020). The NYSDEC-approved seasonal shutdown began on July 19, 2024, so the average monthly flow rate in the GCTS in July represents a partial month; in addition, there was reduced flow in August, September, October and November 2024. As shown in **Figure 3**, the flow in December 2024 was unusually high due to restart of the GCTS and drawdown of the water level in the collection trench.

5.3 Treatment System Influent and Effluent Data

The routine OM&M of the GCTS includes quarterly sampling of the treatment system influent and effluent in March, June, September and December. The influent and effluent are analyzed for volatile organic compounds (VOCs), total dissolved solids (TDS), pH, and zinc and the results are presented in the *2024 Annual Operations and Maintenance Report* (Ramboll, 2025). At the request of NYSDEC, the effluent is also analyzed for 1,4-dioxane on a quarterly basis.

As outlined in the PTWP, additional influent samples are being collected during the other eight months and analyzed for VOCs and 1,4-dioxane. In anticipation of the phytoremediation pilot test, this supplemental influent sampling began in October 2019 (the hybrid poplar stand was planted in May 2020) to collect additional baseline information.

Table 2 presents the monthly influent concentrations for select CVOCs,[2] the monthly influent 1,4-dioxane concentrations and quarterly effluent 1,4-dioxane concentrations from January through December 2024. However, as a result of the seasonal shutdown of the GCTS from July 19 through December 13, 2024, the influent/effluent sampling could not be performed in August, September, October and November 2024. The substantive requirements for the discharge from the treatment system to the storm sewer are also shown on **Table 2**. None of the CVOC concentrations in the treatment system influent (collection trench effluent) exceeded their associated discharge limits.

In accordance with NYSDEC's approval of the seasonal shutdown, an influent (collection trench effluent) sample was collected on December 13, 2024 upon restart of the GCTS. The results are summarized in **Table 2**. For completeness, **Appendix B** includes the analytical results for influent samples collected during the months when the GTCS was operating.

As discussed in the PTWP, the estimated annual mass of CVOCs removed by the GCTS decreased an order of magnitude over the two decades prior to implementation of the phytoremediation pilot test, from approximately 4.0 pounds in 1998 to only 0.24 pounds in 2019 (the year before installation of the phytoremediation system), a reduction of approximately 94%. The annual CVOC mass removals by the GCTS in 2020, 2021, 2022 and 2023 were approximately 0.19, 0.27, 0.25 and 0.13 pounds. Due to the approved seasonal shutdown, the GTCS was not operated from July 19 through December 13, 2024, but the mass removal in 2024 was approximately 0.11 pounds.

5.4 Groundwater Monitoring

The routine OM&M activities at the Site include the annual sampling of 10 monitoring wells (MW-1S, MW-2S, MW-8S, MW-10, MW-11R, MW-12, MW-16AR, MW-17A, MW-18A and MW-19S) for laboratory analysis of VOCs. These analytical results are presented in the *2024 Annual Operations and Maintenance Report* (Ramboll, 2025).

[2] The CVOCs shown on **Table 2** were the only VOCs detected in the influent samples collected during 2023.

In accordance with the PTWP, the annual groundwater monitoring events have been expanded during the phytoremediation pilot test to include nine additional monitoring wells for VOC analysis (MW-06S, MW-07S, MW-21, MW-22, MW-23, MW-24, PTMW-01, TMW-02, and TMW-20). In addition, seven monitoring wells (MW-06S, MW-07S, MW-09, MW-10, MW-11R, MW-22, and MW-23) are being sampled annually for 1,4-dioxane analysis. For completeness, the analytical results for the expanded groundwater monitoring performed in 2024 are presented in **Appendix B** and summarized in **Table 4**. Analytical results from the ten monitoring wells that are routinely sampled are presented in the *2024 Annual Operations and Maintenance Report* (Ramboll, 2025).

In accordance with NYSDEC approval of the seasonal shutdown of the GCTS (which was from July 19 through December 13, 2024), groundwater samples were collected from monitoring wells MW-17A and MW-18A on October 31, 2024 (the day before the intended restart of the GCTS on November 1, 2024). The analytical results are summarized in **Table 4** and the analytical results are presented in **Appendix B**.

Water level measurements are also collected annually as part of the routine OM&M activities. At the request of NYSDEC, monthly water levels are being measured during the phytoremediation pilot test in 17 monitoring wells and two clean-outs along the collection trench. The monthly water level measurements from January to December 2024 are presented in **Table 3**. Although not required by the PTWP, water level measurements are occasionally also collected from the three surface water staff gages (SG-3R, SG-5R and SG-7R) located along Saunders Creek; these data are also presented in **Table 3**.

6. Planned Year 6 Phytoremediation Pilot Test Activities

Routine OM&M activities for the phytoremediation pilot test will continue in 2025. These activities will include bimonthly tree stand inspections during the growing season, augmented influent sampling for laboratory analysis, monthly water level measurements in select monitoring wells, and augmented groundwater sampling for laboratory analysis. Another mowing event is also likely to be performed, and supplemental fertilization of the hybrid poplars is recommended. Contingent activities may include tree pruning, pesticide application, manual watering, and leaf analyses.

The data collected to date demonstrate that the concentrations of CVOCs in the treatment system influent (collection trench effluent) are reliably below the substantive requirements established by NYSDEC for discharge to the storm sewer. The hybrid poplar stand continues to mature (the maximum diameter and height of the hybrid poplars are now 8.5 inches and 32.5 feet, respectively). Although 96 of the 200 planted trees have died, most of the die-off occurred under the canopy of the large retained trees due to competition for water and sun. The 19 retained trees (including 10 phreatophytes, one willow and nine cottonwoods) are serving the same purpose as the hybrid poplars in these portions of the pilot test area.

Although the restart of the GCTS was relatively recent (i.e., on December 13, 2024), it does not appear that the seasonal shutdown of the system had any negative effect(s). Based on review of the data collected thus far during the phytoremediation pilot test, Lockheed Martin requests that NYSDEC approve a five-month seasonal shutdown this year, from July 1 through November 30, 2025. This is similar to the actual seasonal shutdown last year (which was from July 19 through December 13, 2024) and is consistent with the two-year seasonal shutdown petition that Ramboll submitted to NYSDEC on February 6, 2024. Consistent with NYSDEC's approval on July 18, 2024 of the seasonal shutdown last year, Lockheed Martin will (a) sample monitoring wells MW-17A and MW-18A for analyses of VOCs and 1,4-dioxane before restart of the GCTS at the end of the 2025 shutdown period and (b) sample the collection trench water (*i.e.,* influent to the air stripper) when operation of the GCTS resumes.

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TABLES

Table 1

Year 5 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

Groundwater Collection and Treatment System Flow Rates

Totalizer Reading (gallons)	Total Pumped (gallons)	Date Recorded	Number of Days	Average Monthly Flow Rate (gpm)	Monthly Rainfall/Snowfall (inches)[1]	Representative Month
47,086,738	176,136	1/2/2024	28	3.8	5.14/4.8	December 2023
47,334,414	247,676	2/2/2024	31	5.7	4.20/17.6	January 2024
47,498,347	163,933	3/5/2024	32	3.7	1.39/17.7	February 2024
47,733,299	234,952	4/2/2024	28	5.1	3.47/14.6	March 2024
47,973,499	240,200	5/9/2024	37	5.1	3.67/0.6	April 2024
48,073,681	100,182	6/4/2024	26	2.0	3.40/--	May 2024
48,136,426	62,745	7/12/2024	38	1.2	3.69/--	June 2024
48,146,740	10,314	8/12/2024	7	1.0	2.24/--	July 2024[2]
Not Operational	Not Operational	Not Operational	Not Operational	Not Operational	7.62/--	August 2024
Not Operational	Not Operational	Not Operational	Not Operational	Not Operational	2.40/--	September 2024
Not Operational	Not Operational	Not Operational	Not Operational	Not Operational	1.97/--	October 2024
Not Operational	Not Operational	Not Operational	Not Operational	Not Operational	4.55/0.2	November 2024
48,307,286	160,546	1/3/2025	21	5.3	3.22/20.8	December 2024[3]

Notes:

1 - Data source: NOAA National Weather Service, Syracuse Hancock International Airport (KSYR).

2 - Groundwater treatment system was shut down on July 19, 2024, seven days after previous totalizer reading.

3 - Groundwater treatment system operations resumed on December 13, 2024, 21 days before last totalizer reading.

-- = No precipitation in this form

gpm = gallons per minute

NYSDEC authorized groundwater treatment system shutdown from July 19, 2024 to November 1, 2024. System retart delayed until December 13, 2024 due to failure of the PLC and subsequent replacement and reprogramming.

Table 2

Year 5 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

CVOC and 1,4-Dioxane Data for Collection Trench

	CVOC Data for Influent						1,4-Dioxane	
Sample Date	Total CVOCs*	Trichloroethene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Vinyl Chloride	Chloroethane	Concentration	Sampling Location
01/02/24	14.1	<1.0	2.9	7.6	3.6	<1.0	4.6	influent
02/20/24	12.9	<1.0	2.9	7.3	2.7	<1.0	4.6	influent
03/05/24	7.8	<1.0	1.8	3.8	2.2	<1.0	3.0	effluent
04/02/24	16.4	<1.0	3.3	8.2	4.9	<1.0	6	influent
05/09/24	14.8	<1.0	2.8	7.1	4.9	<1.0	4.7	influent
06/04/24	15.3	<1.0	2.8	7.8	4.7	<1.0	6.2	effluent
07/12/24	6.2	<1.0	2	4.2	<1.0	<1.0	4.9	influent
August 2024	NA	NA	NA	NA	NA	NA	NA	NA
September 2024	NA	NA	NA	NA	NA	NA	NA	NA
October 2024	NA	NA	NA	NA	NA	NA	NA	NA
November 2024	NA	NA	NA	NA	NA	NA	NA	NA
12/13/24	4.3	<1.0	0.7	2.3	1.3	<1.0	2	effluent
Effluent Limitations:	NA	10	30	30	50	NA	NA	

Notes:

* Non-fluorinated chlorinated voltilate organic compounds.

B - Compound was found in the blank and sample.

Concentrations in micrograms per liter (µg/L).

J - Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

NA - not applicable

NYSDEC authorized groundwater treatment system shutdown from July 19, 2024 to November 1, 2024. System retart delayed until December 13, 2024 due to failure of the PLC and subsequent replacement and reprogramming.

Table 3

Year 5 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

Monthly Groundwater Level Data

Well ID	Measuring Point Elevation	1/2/2024 DTW (ft bmp)	1/2/2024 Elevation	2/2/2024 DTW (ft bmp)	2/2/2024 Elevation	3/7/2024 DTW (ft bmp)	3/7/2024 Elevation	4/2/2024 DTW (ft bmp)	4/2/2024 Elevation	5/9/2024 DTW (ft bmp)	5/9/2024 Elevation	6/4/2024 DTW (ft bmp)	6/4/2024 Elevation	7/12/2024 DTW (ft bmp)	7/12/2024 Elevation	8/12/2024 DTW (ft bmp)	8/12/2024 Elevation	9/9/2024 DTW (ft bmp)	9/9/2024 Elevation	10/8/2024 DTW (ft bmp)	10/8/2024 Elevation	11/19/2024 DTW (ft bmp)	11/19/2024 Elevation	12/13/2024 DTW (ft bmp)	12/13/2024 Elevation
MW-01S	381.20	0.66	380.54	0.53	380.67	0.19	381.01	1.10	380.10	0.73	380.47	2.09	379.11	1.59	379.61	0.93	380.27	1.35	379.85	2.30	378.90	1.97	379.23	0.46	380.74
MW-02S	381.83	2.18	379.65	2.09	379.74	1.35	380.48	3.15	378.68	2.25	379.58	5.33	376.50	5.13	376.70	4.30	377.53	4.31	377.52	5.40	376.43	4.16	377.67	1.44	380.39
MW-06S	385.81	4.45	381.36	3.92	381.89	3.09	382.72	5.64	380.17	5.67	380.14	9.11	376.70	10.34	375.47	10.72	375.09	9.41	376.40	9.40	376.41	8.49	377.32	4.22	381.59
MW-07S	384.45	4.84	379.61	4.60	379.85	3.54	380.91	6.20	378.25	5.50	378.95	8.88	375.57	10.04	374.41	9.80	374.65	8.60	375.85	9.02	375.43	7.21	377.24	4.01	380.44
MW-09	385.11	7.24	377.87	6.78	378.33	5.18	379.93	8.26	376.85	7.75	377.36	10.37	374.74	11.45	373.66	11.26	373.85	9.63	375.48	10.16	374.95	8.09	377.02	5.21	379.90
MW-10	386.11	10.29	375.82	7.98	378.13	6.61	379.50	9.73	376.38	9.75	376.36	12.46	373.65	Dry		Dry		12.32	373.79	12.37	373.74	9.65	376.46	6.95	379.16
MW-11R	385.71	5.93	379.78	5.47	380.24	4.61	381.10	7.22	378.49	6.95	378.76	Dry		11.16	374.55	11.01	374.70	9.87	375.84	10.01	375.70	8.76	376.95	4.70	381.01
MW-12	384.99	7.79	377.20	7.27	377.72	6.77	378.22	8.33	376.66	8.22	376.77	9.35	375.64	11.18	373.81	11.64	373.35	8.85	376.14	9.19	375.80	8.05	376.94	5.43	379.56
MW-17A	384.11	9.25	374.86	8.42	375.69	6.86	377.25	9.13	374.98	9.25	374.86	10.55	373.56	11.53	372.58	10.84	373.27	9.83	374.28	9.95	374.16	8.44	375.67	5.33	378.78
MW-17B	383.41	7.00	376.41	6.75	376.66	6.15	377.26	6.95	376.46	7.06	376.35	8.38	375.03	9.49	373.92	9.13	374.28	8.18	375.23	8.64	374.77	7.26	376.15	5.14	378.27
MW-18A	385.18	9.54	375.64	9.74	375.44	6.60	378.58	10.45	374.73	8.86	376.32	10.86	374.32	11.06	374.12	10.21	374.97	9.68	375.50	9.96	375.22	8.98	376.20	6.00	379.18
MW-18B	384.04	8.38	375.66	8.58	375.46	6.62	377.42	9.25	374.79	8.29	375.75	9.76	374.28	9.67	374.37	8.79	375.25	8.21	375.83	8.63	375.41	7.79	376.25	5.67	378.37
MW-21	383.55	2.98	380.57	2.84	380.71	2.26	381.29	3.94	379.61	3.41	380.14	6.37	377.18	5.80	377.75	5.21	378.34	5.35	378.20	6.72	376.83	5.76	377.79	2.65	380.90
MW-22	381.15	0.45	380.70	0.36	380.79	Artesian		0.88	380.27	0.53	380.62	2.26	378.89	1.93	379.22	0.75	380.40	1.45	379.70	2.51	378.64	2.12	379.03	0.39	380.76
MW-23	384.83	4.04	380.79	3.86	380.97	3.08	381.75	5.48	379.35	4.99	379.84	8.62	376.21	9.23	375.60	8.77	376.06	8.08	376.75	8.92	375.91	7.64	377.19	3.70	381.13
MW-24	385.05	5.35	379.70	3.69	381.36	2.83	382.22	6.00	379.05	6.39	378.66	8.78	376.27	10.49	374.56	10.80	374.25	10.04	375.01	10.48	374.57	9.30	375.75	6.99	378.06
MW-20	380.82	0.37	380.45	0.25	380.57	Artesian		0.63	380.19	0.30	380.52	1.60	379.22	0.79	380.03	0.45	380.37	0.73	380.09	1.98	378.84	1.65	379.17	0.14	380.68
CO-N	382.59	9.90	372.69	9.95	372.64	9.75	372.84	9.95	372.64	9.81	372.78	9.95	372.64	9.97	372.62	7.39	375.20	6.46	376.13	6.64	375.95	5.21	377.38	3.28	379.31
CO-S	383.40	10.18	373.22	10.16	373.24	9.99	373.41	10.16	373.24	10.24	373.16	10.23	373.17	10.72	372.68	8.13	375.27	5.67	377.73	7.39	376.01	5.98	377.42	3.95	379.45
SG-3R	377.04	4.46	372.58	4.42	372.62	3.95	373.09	4.59	372.45	4.50	372.54	4.65	372.39	4.50	372.54	3.98	373.06	4.58	372.46	4.62	372.42	4.80	372.24	4.43	372.61
SG-5R	383.96	9.15	374.81	9.15	374.81	8.70	375.26	9.25	374.71	9.25	374.71	9.58	374.38	9.55	374.41	9.15	374.81	9.59	374.37	9.68	374.28	9.55	374.41	9.30	374.66
SG-7R	379.81	6.31	373.50	Dry		5.37	374.44	Dry		Dry		Dry		Dry		Dry		Dry		Dry		Dry		5.86	373.95

Notes:

DTW = depth to water

ft bmp = feet below measuring point

NA = not applicable

NC = not collected

NYSDEC authorized groundwater treatment system shutdown from July 19, 2024 to November 1, 2024. System retart delayed until December 13, 2024 due to failure of the PLC and subsequent replacement and reprogramming.

Table 4

Year 5 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

Expanded Groundwater Sampling Results

														Pre-Startup[2]	
	Location ID:	**MW-06S**	**MW-07S**	**MW-9**	**MW-10**	**MW-11R**	**MW-21**	**MW-22**	**MW-23**	**MW-24**	**PTMW-01**	**TMW-02**	**TMW-20**	**MW-17A**	**MW-18A**
	Sample Date:	**3/7/2024**	**3/7/2024**	**3/7/2024**	**3/7/2024**	**3/7/2024**	**3/7/2024**	**3/7/2024**	**3/7/2024**	**3/7/2024**	**3/7/2024**	**3/7/2024**	**3/7/2024**	**10/31/2024**	**10/31/2024**
ANALYTE	**TOGS[1]**														
1,4-Dioxane by USEPA Method 8270D SIM															
1,4 Dioxane	0.35	**29**	**14**	**1.1**	**7.6**	**3.2**	NA	**1700**	**24**	NA	NA	NA	NA	0.75	ND
VOCs by USEPA Method 8260C															
1,1,1-Trichloroethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	**65**	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	**82**	**3.8**	NA	NA	NA	**3800**	**9100**	**8.6**	0.97 J	**3000**	**950**	**18000**	ND	ND
1,1-Dichloroethene	5	2.3	ND	NA	NA	NA	ND	ND	.1.6 J	ND	ND	**11 J**	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.0006	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	1.8 J	ND	NA	NA	NA	**91 J**	ND	0.97 J	ND	ND	**8.8 J**	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	**530**	0.41 J	NA	NA	NA	**800**	**7600**	**20 *-**	1.3 *-	**6300 *-**	**190**	**4500 *-**	ND	ND
Chloroform	7	ND	ND	NA	NA	NA	**ND**	ND	ND	0.49 J	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	**29**	**37**	NA	NA	NA	**8100**	ND	**340**	ND	ND	**1400**	ND	ND	ND
cis-1,3-Dichloropropene	0.4	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	NA	NA	NA	**170**	ND	ND	ND	ND	**33**	ND	ND	ND
Isopropylbenzene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	NA	NA	NA	**190**	ND	ND	ND	ND	**67**	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	1.0 J	ND	NA	NA	NA	ND	ND	3.4 J	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	**19**	**72**	NA	NA	NA	**4300**	ND	**150**	ND	ND	**1200**	ND	ND	ND
Xylenes, Total	5	ND	ND	NA	NA	NA	**200 J**	ND	ND	ND	ND	**62**	ND	ND	ND

Notes:

All units in micrograms per liter (µg/L).

[1] New York State Department of Environmental Conservation, Technical and Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.

[2] NYSDEC authorized groundwater treatment system shutdown from July 19, 2024 to November 1, 2024. System retart delayed until December 13, 2024 due to failure of the PLC and subsequent replacement and reprogramming.

Bold = Indicates result exceeds criteria

E = Result exceeded calibration range

J = Estimated value above the laboratory's detection limit but below the laboratory's reporting limit

*= - LCS and/or LCSD is outside acceptance limits, low biased.

*+ = LCS and/or LCSD is outside acceptance limits, high biased.

ND = Not detected above the laboratory's detection limit

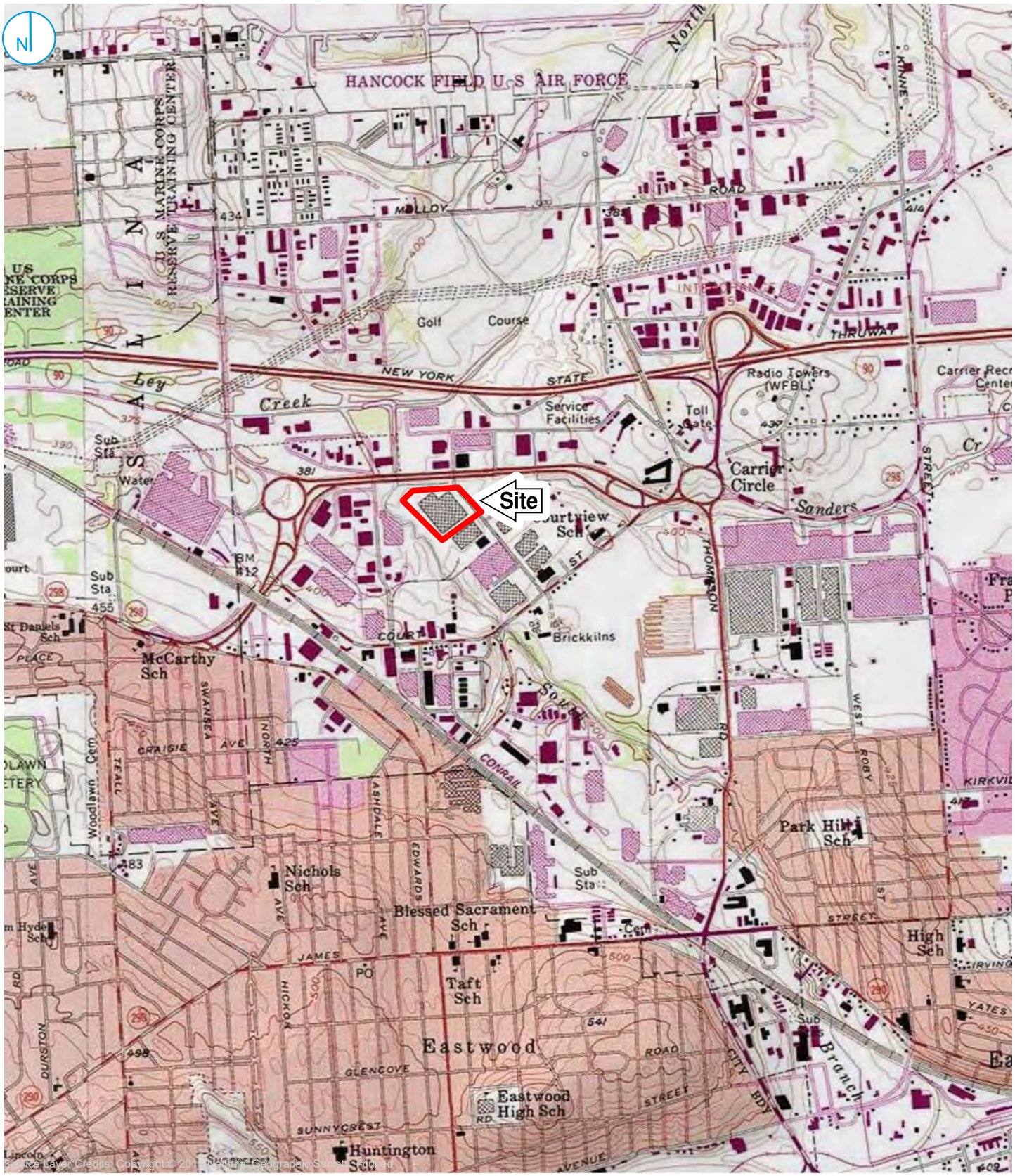
NC = No criteria

NA = Not analyzed

FIGURES

I:\Lockheed-Mar-Fs.5851\74232.Lockheed-Court\Docs\DWG\MXD\Phyto\Site_Location.mxd

PROJECT: 5851.74232 | DATED: 2/7/2020 | DESIGNER: NEWTONJM



Service Layer Credits: Copyright © 2013 National Geographic Society, i-cubed



KEY MAP

Map Scale: 1:1:24,000;
Map Center: 76°6'4"W 43°5'1"N

0 1,000 2,000 Feet

SITE LOCATION

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

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I:\Lockheed-Mar-Fs.585\174292.Lockheed-CourtDost\DWG\MXD\Phyto

PROJECT: 585.174292 | DATED: 1/12/2021 | DESIGNER: MONETANT



- NEW POPLAR
- REMOVED TREE LOCATIONS
- REMAINING TREE LOCATIONS
- MONITORING WELL
- GROUNDWATER COLLECTION TRENCH

HISTORICAL CHEMICAL STORAGE LOCATIONS

- FORMER UST LOCATION
- FORMER SOLVENT PAD

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES AS-BUILT 5/13/2020

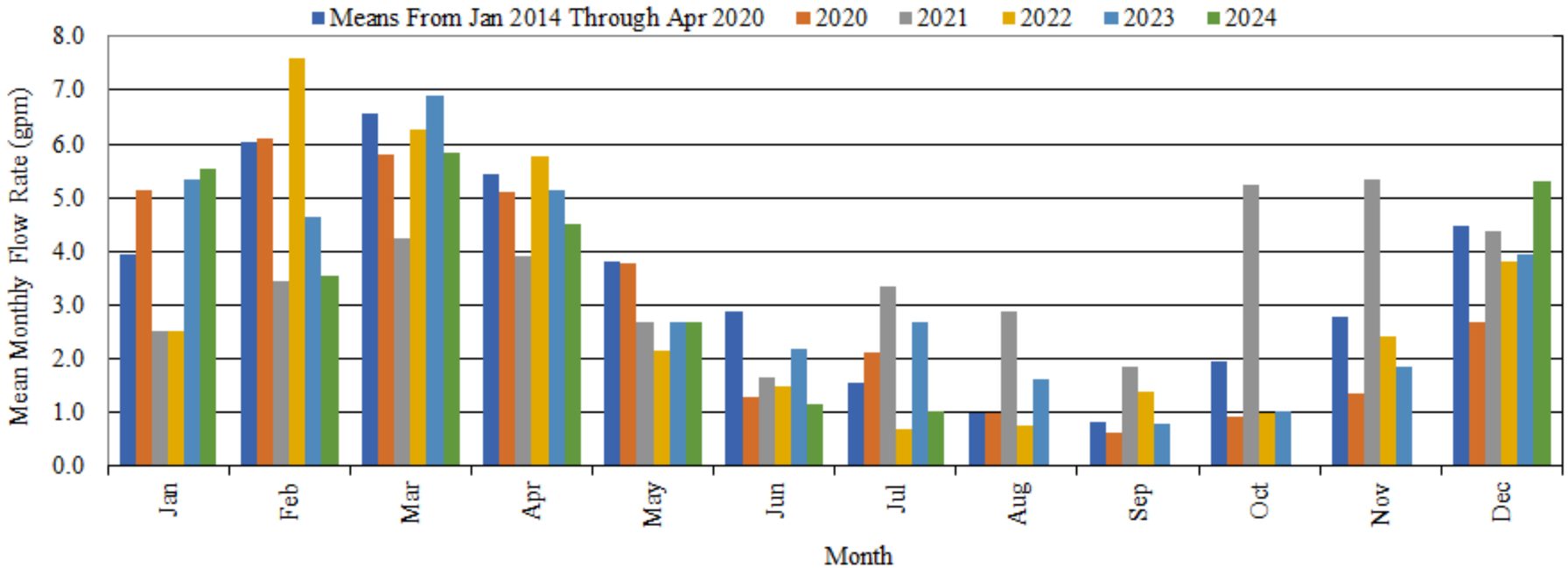
LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 02

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

A RAMBOLL COMPANY

I:\Lockheed-Mar-Fs.585\174232.Lockheed-Court\Docs\DWG\MXD\Phyto



Note: No collection trench flow in August through November 2024 due to approved shutdown. Much higher than normal collection trench flow in December 2024 due to resumption of pumping and associated drawdown in the collection trench.

Service Layer Credits:

MEAN MONTHLY FLOW RATES IN GROUNDWATER COLLECTION TRENCH

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5
TOWN OF DEWIT, NEW YORK

FIGURE 3

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

A RAMBOLL COMPANY

RAMBOLL

Service Layer Credits:

\\syracuseenv\projects\Lockheed-Main-Fs_6851\STDS\GIS\COURT STREET BLDG 5\PRO



- STRESSED TREE
- HEALTHY POPLAR
- DEAD POPLAR
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)
- RIVER

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
9/10/2024

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

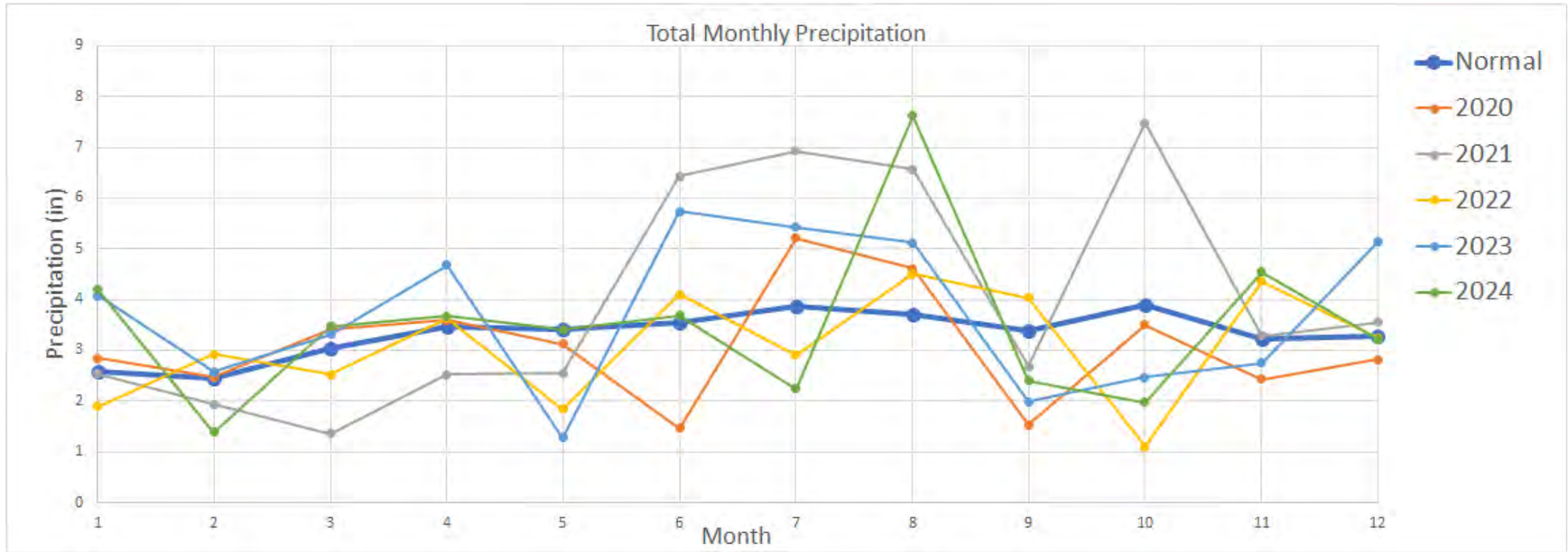
FIGURE 4

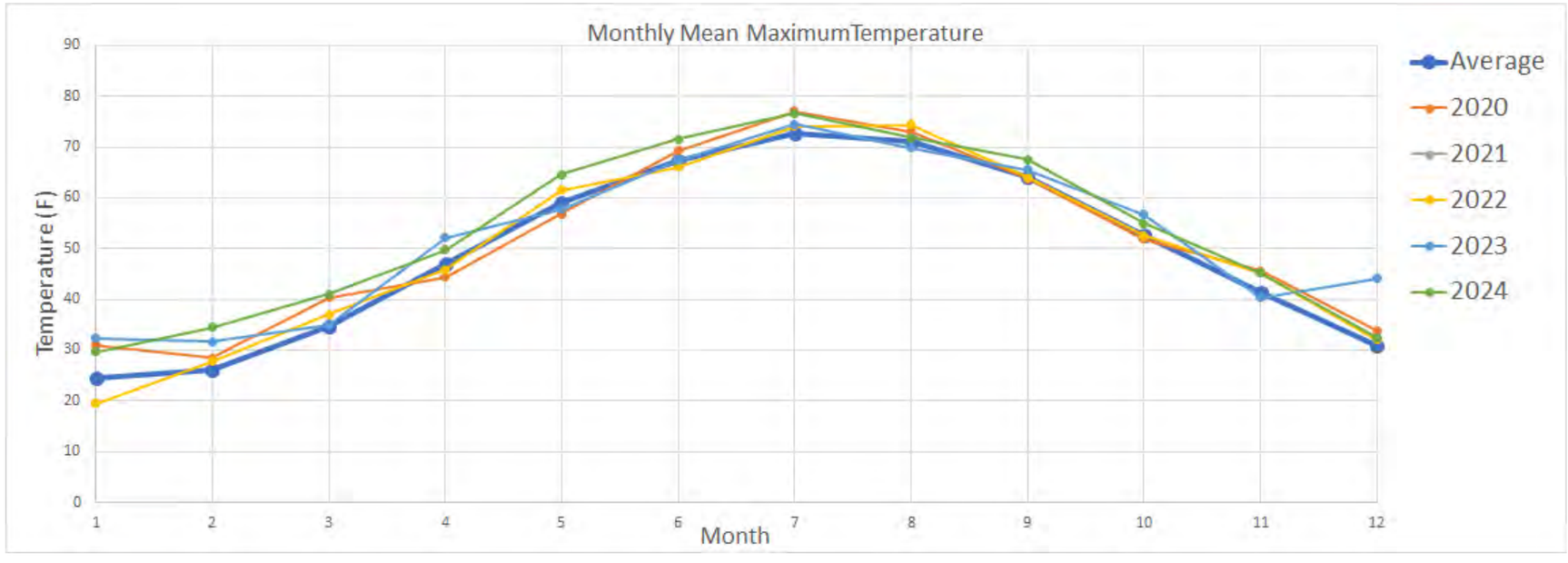
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PROJECT: 6851.74232 | DATED: 8/12/2024 | DESIGNER: NEWTONJM

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Data Source: https://www.weather.gov/wrh/climate?wfo=bgm

PROJECT: 5851.74232 | DATED: 1/12/2022 | DESIGNER: NEWTONJM

MEAN MONTHLY MAXIMUM TEMPURATURE AND MONTHLY TOTAL PRECIPITATION

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5
TOWN OF DEWIT, NEW YORK

FIGURE 5

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

APPENDICES

APPENDIX A

YEAR 5 INSPECTION REPORTS

RAMBOLL

ENVIRONMENT
& HEALTH

PHYTOREMEDIATION PILOT TEST
YEAR 5 INSPECTION REPORT 1

Project name	**FORMER GE COURT STREET BUILDING 5 PHYTOREMEDIATION PILOT TEST**
Project no.	**5851/74232**
Recipient	**Jill Fonte, Lockheed Martin Corporation**
Date	**June 26, 2024**
Prepared by	**Christopher C. Nack**
CC:	**Anthony Eallonardo** **Paul Hare** **Scott Scheidelman** **Scott Tucker**

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2. Weather and Site Watering **3**

3. Inspection Summary **3**

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Table 2 – Tree Data (embedded in text)
Table 3 – Phytoremediation Pilot Test Year 5 Inspection 1

Attachments

Attachment 1 – Site Plan
Attachment 2 – Photo Log

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1. Introduction

This report presents the summary of activities and results related to the first Year 5 inspection conducted on May 16, 2024 at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, New York. A total of 200 hybrid poplars were planted at the site between May 11 and 13, 2020 as part of the Phytoremediation Pilot Test approved by the New York State Department of Environmental Conservation (NYSDEC). To evaluate the health of the trees and guide maintenance activities, an inspection is performed on a bimonthly basis during the growing season and includes the evaluation of 20 randomly selected trees; trees that were previously identified as dead were not included in the evaluation. In addition to tree height and diameter at breast height (DBH), the trees are inspected for the following:

- Wilting leaves
- Yellowing leaves (chlorosis)
- Blackened leaves (necrosis)
- Leaf defoliation
- Leaf loss
- Trunk damage
- Branch damage
- Bore holes
- Pathogens

These conditions are associated with common stresses (e.g., excessive heat and diseases) and are used to indicate overall tree health.

Each tree in the stand was assigned a grid number which is provided in **Figure 1** included in **Attachment 1**. These grid numbers were used to randomly select trees for the first Year 5 inspection from the list of living trees during the third/final Year 4 inspection. Photos are provided in **Attachment 2** for the 20 trees that were randomly selected for this inspection.

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2. Weather and Site Watering

Early spring 2024 conditions prior to the first Year 5 inspection on May 16, 2024 can be generally characterized as being cooler in terms of temperature, with precipitation being similar to historic conditions (see **Table 1** below).

Table 1. Average monthly mean high temperatures (°F) and total monthly precipitation (inches) for the 2024 growing season and the approximate additional watering (inches) that was performed. Historic data is provided for comparison.

Month	Mean High Temp. (°F)		Precipitation (Inches)		Watering (Inches)	Total Water (inches)
	Historic	2024	Historic	2024		
March	42.4	41.0	3.04	3.47	0	**3.47**
April	56.4	49.6	3.48	3.67	0	**3.67**
May	69.2	64.6	3.42	3.40	0	**3.40**
June	77.3	--	3.56	--	--	**--**
July	81.7	--	3.86	--	--	**--**
August	80.3	--	3.70	--	--	**--**
September	73.1	--	3.38	--	--	**--**

Historic data source: https://www.weather.gov/wrh/climate?wfo=bgm

3. Inspection Summary

Inspection of the trees on May 16, 2024 identified a total of 97 trees (49%) dead and two trees (1.0%) in poor condition, as shown in Figure 1 in **Attachment 1**. As discussed below, a total of 13 additional trees died (G05, I05, H06, H10, M07, TT16, TT19, V17, V20, AA22, BB21, BB22, and BB25) when compared to the third/final Year 4 inspection on September 12, 2023.

During the May 16, 2024 inspection there was no evidence of bore holes. Minor *Marssonina* leaf spot, a common foliage disease of Cottonwoods caused from a fungus, was not present at the time of the inspection. Some minor trunk damage was also observed, which was associated with previous rubbing on the tree guards, previous deer damage over the 2021 and 2022 winters, or where branches have broken off. One tree, P10, took significant storm damage causing the tree to break halfway up the trunk; the top of the tree was fully removed in September 2023 and the remainder of the tree continues to be in good condition.

Similar to prior inspections, with a lack of signs of observed major disease or pest damage, it is believed that previous tree die-off and stress is related to the competition with the large retained trees (including water competition and shading due to proximity to large retained phreatophytic trees [one Black Willow and nine Cottonwoods]). **Figure 1** in **Attachment 1** shows the extent of the canopy from the retained trees based on observations made on August 9, 2021. This figure shows that 81 of the 97 dead trees (84%) including 10 of the 13 additional dead trees since the third Year 4 inspection, are under the canopy of the retained trees.

Mean tree height during the first Year 5 inspection was approximately 23.9 feet (287 inches), ranging from 10 to 34 feet (120 to 410 inches), and mean DBH was 4.6 inches (ranging from 2.0 to 7.5 inches), as shown in **Table 2** below. These statistics are based on measurements for the 20 trees selected randomly for the third Year 4 inspection (see **Table 3**).

Table 2. Tree height and DBH summary for the final Year 1 inspection, final Year 2 inspection, final Year 3 inspection, final Year 4 inspection and the first Year 5 inspection. These statistics are based on measurements for the 20 trees that were randomly selected during each inspection. Therefore, the same trees were not likely measured during each event.

	Planted Stake	Year 1 Final		Year 2 Final		Year 3 Final		Year 4 Final		Year 5 Inspection 1	
	Height (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)
Mean	41.1	109.1	0.5	203	1.4	208	1.7	280	4.0	287	4.6
Max	47	169	1.3	292	2.8	361	3.75	396	8.0	420	7.5
Min	35.5	76	0.3	92	0.4	112	0.75	132	2.0	120	2.0

At the time of the first Year 5 inspection, vines were not a major concern at the site. Although Wild Grape, Virginia Creeper, and Poison Ivy were observed, no vines were observed on the planted trees during this inspection. In addition to these three vines, Common Reed and Mugwort have been identified as species of concern during the May 16, 2024 inspection.

Table 3

Lockheed Martin Corporation
Former GE Court Street
Town of Dewitt, NY

Phytoremediaion Pilot Test
Year 5, Inspection 1
Inspection Date: May 16, 2024

Tree ID:	A02	E02	F02	G04	H12	I11	J12	K14	L15	M06	M14	N14	O09	O15	P16	Q13	V18	DD26	EE24	EE26
Wilting Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Yellowing Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Blackening Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Defoliation:	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Loss:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Trunk Damage:	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Branch Damage:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bore Holes:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Pathogen:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Photograph:	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached
Diameter Breast Height (inches):	3.0	4.5	6.5	2.5	6.0	3.0	5.5	6.5	7.5	2.5	5.0	5.5	5.5	6.0	5.0	6.0	2.0	2.5	3.5	3.5
Height (inches):	204	288	384	180	360	180	348	312	420	144	360	360	324	384	336	324	120	168	264	276
Height (feet):	17.0	24.0	32.0	15.0	30.0	15.0	29.0	26.0	35.0	12.0	30.0	30.0	27.0	32.0	28.0	27.0	10.0	14.0	22.0	23.0

Notes:
- See attached photographic log for pictures of trees.

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ATTACHMENT 1
SITE PLAN

\\syracuseenv\projects\Lockheed-Mart-Fs_6851\STDS\GIS\COURT STREET BLDG 5\PRO

- STRESSED TREE
- HEALTHY NEW POPLAR
- DEAD NEW POPLARS
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)
- RIVER

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
5/16/2024

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 6851.74232 | DATED: 6/3/2024 | DESIGNER: NEWTONJM

Service Layer Credits: World Imagery, New York State, Maxar, Microsoft

0 100 200 Feet

ATTACHMENT 2
PHOTO LOG

The following photos document the hybrid poplar stand at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, NY during the inspection on 05/16/2024 (Year 5, Inspection 1). The photos shown were selected to be representative of the conditions observed during the inspection.



Description: 05/16/2024 - Tree stand facing Northwest.



Description: 05/16/2024 - General view of the site from the South side looking North.

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Description: 05/16/2024 - General view of the site from the East side looking West.



Description: 05/16/2024 - Tree A02.



Description: 05/26/2024 - Tree DD26.

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Description: 05/16/2024 - Tree E02.



Description: 05/16/2024 - Tree EE24.



Description: 05/16/2024 - Tree EE26.



Description: 05/16/2024 - Tree F02.

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Description: 05/16/2024 - Tree G04.



Description: 05/16/2024 - Tree H12.



Description: 05/16/2024 - Tree I11.



Description: 05/16/2024 - Tree J12.

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Description: 05/16/2024 - Tree K14.



Description: 05/16/2024 - Tree L15.



Description: 05/16/2024 - Tree M06.



Description: 05/16/2024 - Tree M14.

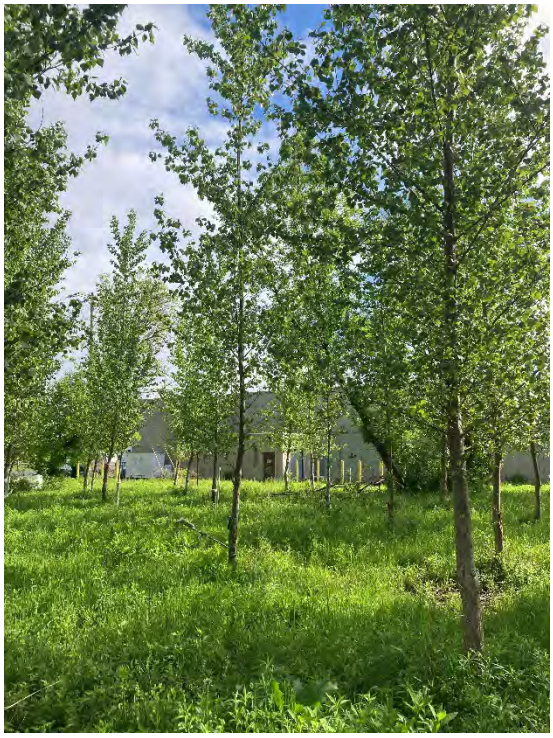
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Description: 05/16/2024 - Tree N14.



Description: 05/16/2024 - Tree O09.



Description: 05/16/2024 - Tree O15.



Description: 05/16/2024 - Tree P16.

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Description: 05/16/2024 - Tree Q13.



Description: 05/16/2024 - Tree V18.

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RAMBOLL

ENVIRONMENT
& HEALTH

PHYTOREMEDIATION PILOT TEST
YEAR 5 INSPECTION REPORT 2

Project name	**FORMER GE COURT STREET BUILDING 5 PHYTOREMEDIATION PILOT TEST**
Project no.	**5851/74232**
Recipient	**Jill Fonte, Lockheed Martin Corporation**
Date	**August 21, 2024**
Prepared by	**Christopher C. Nack**
CC:	**Anthony Eallonardo** **Paul Hare** **Scott Scheidelman** **Scott Tucker**

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Table 3 – Phytoremediation Pilot Test Year 5 Inspection 2

Attachments

Attachment 1 – Site Plan
Attachment 2 – Photo Log

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1. Introduction

This report presents the summary of activities and results related to the second Year 5 inspection conducted on July 11, 2024 at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, New York. A total of 200 hybrid poplars were planted at the site between May 11 and 13, 2020 as part of the Phytoremediation Pilot Test approved by the New York State Department of Environmental Conservation (NYSDEC). To evaluate the health of the trees and guide maintenance activities, an inspection is performed on a bimonthly basis during the growing season and includes the evaluation of 20 randomly selected trees; trees that were previously identified as dead were not included in the random selection of trees for the evaluation. In addition to tree height and diameter at breast height (DBH), the trees are inspected for the following:

- Wilting leaves
- Yellowing leaves (chlorosis)
- Blackened leaves (necrosis)
- Leaf defoliation
- Leaf loss
- Trunk damage
- Branch damage
- Bore holes
- Pathogens

These conditions are associated with common stresses (e.g., excessive heat and diseases) and are used to indicate overall tree health.

Each tree in the stand was assigned a grid number which is provided in **Figure 1** included in **Attachment 1**. These grid numbers were used to randomly select trees for the second Year 5 inspection from the list of living trees during the first Year 5 inspection. Photos are provided in **Attachment 2** for the 20 trees that were randomly selected for this inspection.

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2. Weather and Site Watering

Early spring 2024 conditions prior to the first Year 5 inspection on May 16, 2024 can be generally characterized as being cooler in terms of temperature, with precipitation being similar to historic conditions (see **Table 1** below). Temperatures in June and July 2024 (prior to the second Year 5 inspection on July 11, 2024) were generally higher, while precipitation remained similar to historic conditions.

Table 1. Average monthly mean high temperatures (°F) and total monthly precipitation (inches) for the 2024 growing season and the approximate additional watering (inches) that was performed. Historic data is provided for comparison.

Month	Mean High Temp. (°F)		Precipitation (Inches)		Watering (Inches)	Total Water (inches)
	Historic	2024	Historic	2024		
March	42.4	41.0	3.04	3.47	0	3.47
April	56.4	49.6	3.48	3.67	0	3.67
May	69.2	64.6	3.42	3.40	0	3.40
June	77.3	82.0	3.56	3.53	0	3.53
July	81.7	87.1	3.86	2.24	0	2.24
August	80.3	--	3.70	--	--	--
September	73.1	--	3.38	--	--	--

Historic data source: https://www.weather.gov/wrh/climate?wfo=bgm

3. Inspection Summary

Inspection of the trees on July 11, 2024 identified a total of 96 trees (48%) dead and three trees (1.0%) in poor condition, as shown in Figure 1 in **Attachment 1**. As discussed below, a total of two additional trees (H05 and BB26) died when compared to the first Year 5 inspection on May 16, 2024.

During the July 11, 2024 inspection there was no evidence of bore holes. Minor *Marssonina* leaf spot, a common foliage disease of cottonwoods caused from a fungus, was present at the time of the inspection and was evident on the majority of trees inspected.

Similar to prior inspections, with a lack of signs of observed major disease or pest damage, it is believed that previous tree die-off and stress is related to the competition with the large retained trees (including water competition and shading due to the large retained phreatophytic trees [one black willow and nine cottonwoods]). **Figure 1** in **Attachment 1** shows the extent of the canopy from the retained trees based on observations made on August 9, 2021. This figure shows that 83 of the 96 dead trees (86%), including both of the additional dead trees since the first Year 5 inspection, are under the canopy of the retained trees.

Mean tree height during the second Year 5 inspection was approximately 30 feet (359 inches), ranging from 15 to 38 feet (180 to 456 inches), and mean DBH was 5.5 inches (ranging from 2.0 to 8.0 inches),

as shown in **Table 2** below. These statistics are based on measurements for the 20 trees selected randomly for the first Year 5 inspection (see **Table 3**).

Table 2. Tree height and DBH summary for the final Year 1 inspection, final Year 2 inspection, final Year 3 inspection, final Year 4 inspection and the second Year 5 inspection. These statistics are based on measurements for the 20 trees that were randomly selected during each inspection. Therefore, the same trees were not likely measured during each event.

	Planted Stake	Year 1 Final		Year 2 Final		Year 3 Final		Year 4 Final		Year 5 Inspection 2	
	Height (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)
Mean	41.1	109.1	0.5	203	1.4	208	1.7	280	4.0	359	5.5
Max	47	169	1.3	292	2.8	361	3.75	396	8.0	456	8.0
Min	35.5	76	0.3	92	0.4	112	0.75	132	2.0	180	2.0

At the time of the second Year 5 inspection, vines were not a major concern at the site. Although wild grape (*Vitis vinifera*), Virginia creeper (*Parthenocissus quinquefolia*), and poison ivy (*Toxicodendron radicans*) were observed, no vines were observed on the planted trees during this inspection. In addition to these three vines, two species of concern common reed (*Phragmites australis*) and mugwort (*Artemisia vulgaris*) as well as wingstem (*Verbesina alternifolia*) and milk thistle (*Silybum marianum*) were observed to be crowding smaller trees during the July 11, 2024 inspection. Mowing of the site, fertilization of hybrid poplars and the placement of vegetation mats around the hybrid poplars are recommended to reduce impacts from understory vegetation.

Lockheed Martin Corporation
Former GE Court Street
Town of Dewitt, NY

Phytoremediaion Pilot Test
Year 5, Inspection 2
Inspection Date: July 11, 2024

Tree ID:	A03	E01	G02	G04	H11	I13	J12	K13	L15	M10	M12	N08	O10	O14	P11	P13	R11	DD26	FF26	GG26
Wilting Leaves:	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellowing Leaves:	Y	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Blackening Leaves:	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Leaf Defoliation:	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Leaf Loss:	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Trunk Damage:	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Branch Damage:	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bore Holes:	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Pathogen:	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Photograph:	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached
Diameter Breast Height (inches):	2.0	7.0	7.0	3.0	5.0	8.0	7.0	6.5	6.5	3.5	7.0	3.0	5.0	5.0	6.0	4.5	7.0	3.0	8.0	6.0
Height (inches):	181	438	408	218	288	456	408	444	456	324	420	240	372	384	396	312	408	180	432	408
Height (feet):	15.0	36.5	34.0	18.2	24.0	38.0	34.0	37.0	38.0	27.0	35.0	20.0	31.0	32.0	33.0	26.0	34.0	15.0	36.0	34.0

Notes:
- See attached photographic log for pictures of trees.

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ATTACHMENT 1
SITE PLAN

\\ramsaserv\projects\Lockheed-Martin-Fs_6851\STDS\GIS\COURT STREET BLDG 5\PRO

- STRESSED TREE
- HEALTHY POPLAR
- DEAD POPLAR
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)
- RIVER

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
7/11/2024

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

Service Layer Credits: World Imagery, New York State, Maxar, Microsoft

PROJECT: 6851.74232 | DATED: 8/12/2024 | DESIGNER: NEWTONJM

ATTACHMENT 2
PHOTO LOG

The following photos document the hybrid poplar stand at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, NY during the inspection on 07/11/2024 (Year 5, Inspection 2). The photos shown were selected to be representative of the conditions observed during the inspection.



Description: 7/11/2024 - Tree stand facing Northwest.



Description: 07/11/2024 - General view of the site from the South side looking North.

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Description: 07/11/2024 - General view of the site from the East side looking West.



Description: 7/11/20247/11/2024 - Tree A03.



Description: 07/11/2024 - Tree E01.

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Description: 7/11/20247/11/2024 - Tree G02.



Description: 07/11/2024 - Tree G04.



Description: 07/11/2024 - Tree H11.

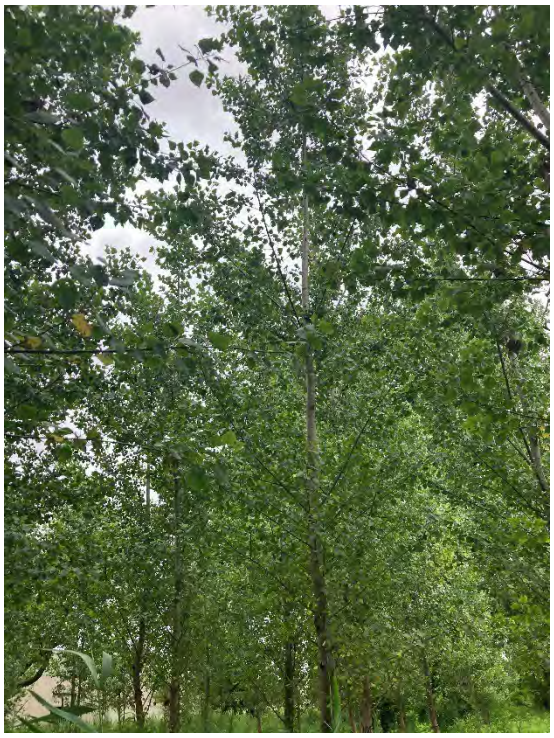


Description: 07/11/2024 - Tree I13.

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Description: 7/11/20247/11/2024 - Tree J12.



Description: 07/11/2024 - Tree K13.



Description: 7/11/20247/11/2024 - Tree L15.



Description: 05/16/2024 - Tree M10.

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Description: 7/11/20247/11/2024 - Tree M12.



Description: 07/11/2024 - Tree N08.



Description: 7/11/20247/11/2024 - Tree O10.



Description: 07/11/2024 - Tree O14.

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Description: 7/11/20247/11/2024 - Tree P11.



Description: 07/11/2024 - Tree P13.



Description: 7/11/20247/11/2024 - Tree R11.



Description: 07/11/2024 - Tree DD26.

Confidential



Description: 07/11/2024 - Tree FF26.



Description: 07/11/2024 - Tree GG26.

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ENVIRONMENT
& HEALTH

PHYTOREMEDIATION PILOT TEST
YEAR 5 INSPECTION REPORT 3

Project name	**FORMER GE COURT STREET BUILDING 5 PHYTOREMEDIATION PILOT TEST**
Project no.	**5851/74232**
Recipient	**Jill Fonte, Lockheed Martin Corporation**
Date	**October 14, 2024**
Prepared by	**Christopher C. Nack**
CC:	**Anthony Eallonardo**
	Paul Hare
	Scott Scheidelman
	Scott Tucker

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3. Inspection Summary **3**

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Table 1 – Weather and Site Watering Data (embedded in text)
Table 2 – Tree Data (embedded in text)
Table 3 – Phytoremediation Pilot Test Year 5 Inspection 3

Attachments

Attachment 1 – Site Plan
Attachment 2 – Photo Log

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1. Introduction

This report presents the summary of activities and results related to the third/final Year 5 inspection conducted on September 10, 2024 at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, New York. A total of 200 hybrid poplars were planted at the site on May 11, 12 and 13, 2020 as part of the Phytoremediation Pilot Test approved by the New York State Department of Environmental Conservation (NYSDEC). To evaluate the health of the trees and guide maintenance activities, an inspection is performed on a bimonthly basis during the growing season and includes the evaluation of 20 randomly selected trees; trees that were previously identified as dead were not included in the random selection of trees for the evaluation. In addition to tree height and diameter at breast height (DBH), the trees are inspected for the following:

- Wilting leaves
- Yellowing leaves (chlorosis)
- Blackened leaves (necrosis)
- Leaf defoliation
- Leaf loss
- Trunk damage
- Branch damage
- Bore holes
- Pathogens

These conditions are associated with common stresses (e.g., excessive heat and diseases) and are used to indicate overall tree health.

Each tree in the stand was assigned a grid number which is provided in **Figure 1** included in **Attachment 1**. These grid numbers were used to randomly select trees for the third/final Year 5 inspection from the list of living trees during the second Year 5 inspection. Photos are provided in **Attachment 2** for the 20 trees that were randomly selected for this inspection.

2. Weather and Site Watering

Early spring 2024 conditions prior to the first Year 5 inspection on May 16, 2024 can be generally characterized as being cooler in terms of temperature, with precipitation being similar to historic conditions (see **Table 1** below). Temperatures in June and July 2024 (prior to the second Year 5 inspection on July 11, 2024) were generally higher, while precipitation remained similar to historic conditions. Temperatures in August and September 2024 were slightly higher than historic conditions, while precipitation was significantly higher than August historic conditions and much lower than September historic conditions.

Table 1. Average monthly mean high temperatures (°F) and total monthly precipitation (inches) for the 2024 growing season and the approximate additional watering (inches) that was performed. Historic data is provided for comparison.

Month	Mean High Temp. (°F)		Precipitation (Inches)		Watering (Inches)	Total Water (inches)
	Historic	2024	Historic	2024		
March	42.4	41.0	3.04	3.47	0	3.47
April	56.4	49.6	3.48	3.67	0	3.67
May	69.2	64.6	3.42	3.40	0	3.40
June	77.3	82.0	3.56	3.53	0	3.53
July	81.7	87.1	3.86	2.24	0	2.24
August	80.3	81.0	3.70	7.62	0	7.62
September	73.1	78.1	3.38	2.40	0	2.40

Historic data source: https://www.weather.gov/wrh/climate?wfo=bgm

3. Inspection Summary

Inspection of the trees on September 10, 2024 identified a total of 96 trees (48%) dead and three trees (1.0%) in poor condition, as shown in Figure 1 in **Attachment 1**. No additional trees died when compared to the second Year 5 inspection on July 11, 2024.

During the September 10, 2024 inspection there was no evidence of bore holes. Minor *Marssonina* leaf spot, a common foliage disease of cottonwoods caused from a fungus, was present at the time of the inspection and was evident on trees inspected.

Similar to prior inspections, with a lack of signs of observed major disease or pest damage, it is believed that previous tree die-off and stress is related to the competition with the large retained trees (including water competition and shading due to the large retained phreatophytic trees [one black willow and nine cottonwoods]). **Figure 1** in **Attachment 1** shows the extent of the canopy from the retained trees based on observations made on August 9, 2021. This figure shows that 79 of the 96 dead trees (82%) are under the canopy of the retained trees.

Mean tree height during the third/final Year 5 inspection was approximately 32.6 feet (391.2 inches), ranging from 11 to 39 feet (132 to 468 inches), and mean DBH was 5.7 inches (ranging from 1.5 to 8.5

inches), as shown in **Table 2** below. These statistics are based on measurements for the 20 trees selected randomly for the third/final Year 5 inspection (see **Table 3**).

Table 2. Tree height and DBH summary for the final Year 1 inspection, final Year 2 inspection, final Year 3 inspection, final Year 4 inspection and the final Year 5 inspection. These statistics are based on measurements for the 20 trees that were randomly selected during each inspection. Therefore, the same trees were not likely measured during each event.

	Planted Stake	Year 1 Final		Year 2 Final		Year 3 Final		Year 4 Final		Year 5 Final	
	Height (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)
Mean	41.1	109.1	0.5	203	1.4	208	1.7	280	4.0	391.2	5.7
Max	47	169	1.3	292	2.8	361	3.75	396	8.0	468	8.5
Min	35.5	76	0.3	92	0.4	112	0.75	132	2.0	132	1.5

During the second Year 5 inspection on July 11, 2024, two species of concern (common reed [*Phragmites australis*] and mugwort [*Artemisia vulgaris*]), wingstem (*Verbesina alternifolia*) and milk thistle (*Silybum marianum*) were observed to be crowding smaller trees in addition to the three vines (wild grape [*Vitis vinifera*], Virginia creeper [*Parthenocissus quinquefolia*], and poison ivy [*Toxicodendron radicans*]). Mowing of the site was completed in late July 2024 to reduce vegetation crowding and prevent the growth of competing woody species.

Based on the observations during the Year 5 inspections, fertilization of hybrid poplars and the placement of vegetation mats around the hybrid poplars are recommended to reduce impacts from understory vegetation.

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Table 3

Lockheed Martin Corporation
Former GE Court Street
Town of Dewitt, NY

Phytoremediaion Pilot Test
Year 5, Inspection 3
Inspection Date: September 10, 2024

Tree ID:	B06	E02	H12	I11	H11	J12	J13	K14	L11	L14	M10	M14	N16	O11	P17	Q14	S12	S13	EE26	FF25
Wilting Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Yellowing Leaves[1]:	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Blackening Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Defoliation:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Loss:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Trunk Damage:	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Branch Damage:	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bore Holes:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Pathogen[2]:	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Photograph:	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached
Diameter Breast Height (inches):	1.5	5.5	6.5	2.5	4.5	5.5	8.0	6.5	6.5	6.5	5.0	5.0	7.5	5.5	7.5	6.0	5.0	7.0	4.0	8.5
Height (inches):	132	384	456	168	372	396	468	384	420	444	396	408	432	420	456	444	384	456	348	456
Height (feet):	11	32	38	14	31	33	39	32	35	37	33	34	36	35	38	37	32	38	29	38

Notes:
1 - Yellowing leaves are commonly found on Northern cottonwood during late summer and early fall.
2 - Minor *Marssonina* leaf spot, a common foliage disease of cottonwoods caused from a fungus.

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ATTACHMENT 1
SITE PLAN

\\syracuseenv\projects\Lockheed-Main-Fs-6851\STDS\GIS\COURT STREET BLDG 5\PRO

- STRESSED TREE
- HEALTHY POPLAR
- DEAD POPLAR
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)
- RIVER

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
9/10/2024

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

Service Layer Credits: World Imagery, New York State, Maxar, Microsoft

0 100 200 Feet

PROJECT: 6851.74232 | DATED: 8/12/2024 | DESIGNER: NEWTONJM

ATTACHMENT 2
PHOTO LOG

The following photos document the hybrid poplar stand at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, NY during the inspection on 09/10/2024 (Year 5, Inspection 3). The photos shown were selected to be representative of the conditions observed during the inspection.



Description: 9/10/2024 - Tree stand facing Northwest standing near the treatment building.



Description: 09/10/2024 - General view of the site from the South side looking North.

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Description: 09/10/2024 - General view of the site from the East side looking West.



Description: 09/10/2024 - Tree B06.



Description: 09/10/2024 - Tree E02.

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Description: 09/10/2024- Tree H11.



Description: 09/10/2024 - Tree H12.



Description: 09/10/2024 - Tree I11.



Description: 09/10/2024 - Tree J12.

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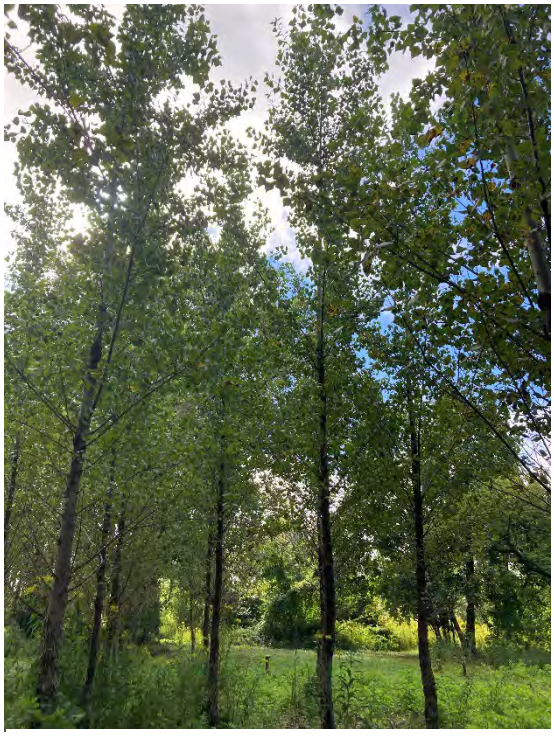
Description: 09/10/2024 - Tree J13.



Description: 09/10/2024 - Tree K14.



Description: 09/10/2024 - Tree L11.



Description: 09/10/2024 - Tree L14.

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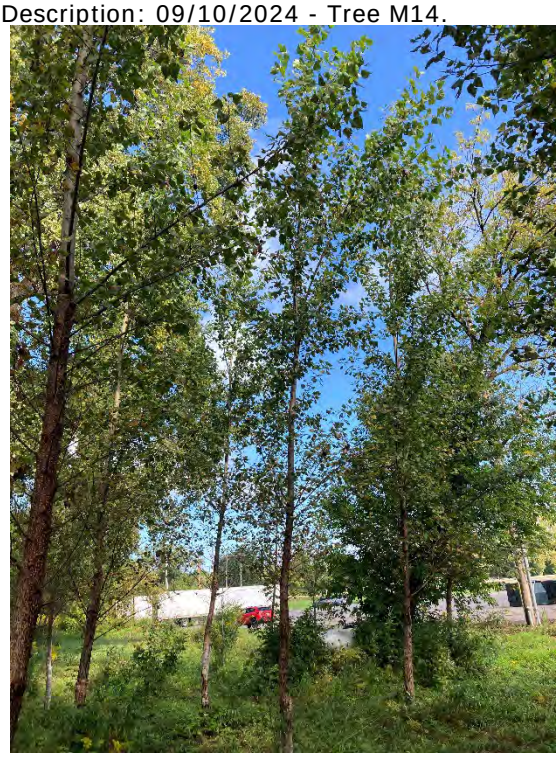
Description: 09/10/2024 - Tree M10.



Description: 09/10/2024 - Tree M14.



Description: 09/10/2024 - Tree N16.



Description: 09/10/2024 - Tree O11.

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Description: 09/10/2024 - Tree P17.



Description: 09/10/2024 - Tree PQ14.



Description: 09/10/2024 - Tree S12.



Description: 09/10/2024 - Tree S13.

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Description: 09/10/2024 - Tree EE26.



Description: 09/10/2024 - Tree FF25.

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APPENDIX B
LABORATORY ANALYTICAL REPORTS

EXPANDED GROUNDWATER SAMPLING

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll Americas Engineering Solutions
333 West Washington Street
Syracuse, New York 13202

Generated 3/19/2024 10:01:44 AM

JOB DESCRIPTION

Phytoremediation Court Street Building 5

JOB NUMBER

480-217677-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

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Definitions/Glossary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
E	Result exceeded calibration range.
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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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

Job ID: 480-217677-1 Eurofins Buffalo

Job Narrative
480-217677-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt
The samples were received on 3/9/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-21-030724 (480-217677-2). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-22-030724 (480-217677-3). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: TMW-02-030724 (480-217677-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-703350 recovered above the upper control limit for Isopropylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TMW-02-030724 (480-217677-1).

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: TMW-20-030724 (480-217677-4), PTMW-01-030724 (480-217677-5), MW-23-030824 (480-217677-9) and MW-06S-030824 (480-217677-11). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-703451 recovered outside acceptance criteria, low biased, for Trichlorofluoromethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-703451 recovered above the upper control limit for 1,1,2,2-Tetrachloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TMW-20-030724 (480-217677-4), PTMW-01-030724 (480-217677-5), MW-23-030824 (480-217677-9), MW-06S-030824 (480-217677-11), MW-24-030824 (480-217677-12) and TB-02-030824 (480-217677-13).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-703451 recovered outside control limits for the following analytes: 1,1,2,2-Tetrachloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for analytical batch 480-703451 recovered outside control limits for the following analyte(s): Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-23-030824 (480-217677-9) and MW-06S-030824 (480-217677-11). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-703570 recovered outside acceptance criteria, low biased, for Methylene Chloride. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Job ID: 480-217677-1 (Continued) Eurofins Buffalo

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-703570 recovered outside control limits for the following analytes: trans-1,3-Dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-703570 recovered outside control limits for the following analytes: Isopropylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-07S-030824 (480-217677-8). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270D_SIM_MS_ID: The breakdown of 4,4'-DDT in the tuning evaluation exceeded 20%. Breakdown is not a criteria of the method but rather an internal check performed by the laboratory to evaluate the peak shape of 1,4-Dioxane and 1,4-Dioxane-d8. No adverse performance was observed and QC recoveries were in control. The data have been reported. (DFTPP 480-703874/2)

Method 8270D_SIM_MS_ID: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-22-030724 (480-217677-3), (480-217677-A-3-A MS) and (480-217677-A-3-B MSD). Elevated reporting limits (RLs) are provided.

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

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: TMW-02-030724 — Lab Sample ID: 480-217677-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	65		20	16	ug/L	20		8260C	Total/NA
1,1-Dichloroethane	950		20	7.6	ug/L	20		8260C	Total/NA
1,1-Dichloroethene	11	J	20	5.8	ug/L	20		8260C	Total/NA
1,2-Dichloroethane	8.8	J	20	4.2	ug/L	20		8260C	Total/NA
Chloroethane	190		20	6.4	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	1400		20	16	ug/L	20		8260C	Total/NA
Ethylbenzene	33		20	15	ug/L	20		8260C	Total/NA
Toluene	67		20	10	ug/L	20		8260C	Total/NA
Vinyl chloride	1200		20	18	ug/L	20		8260C	Total/NA
Xylenes, Total	62		40	13	ug/L	20		8260C	Total/NA

Client Sample ID: MW-21-030724 — Lab Sample ID: 480-217677-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3800		130	48	ug/L	125		8260C	Total/NA
1,2-Dichloroethane	91	J	130	26	ug/L	125		8260C	Total/NA
Chloroethane	800		130	40	ug/L	125		8260C	Total/NA
cis-1,2-Dichloroethene	8100		130	100	ug/L	125		8260C	Total/NA
Ethylbenzene	170		130	93	ug/L	125		8260C	Total/NA
Toluene	190		130	64	ug/L	125		8260C	Total/NA
Vinyl chloride	4300		130	110	ug/L	125		8260C	Total/NA
Xylenes, Total	200	J	250	83	ug/L	125		8260C	Total/NA

Client Sample ID: MW-22-030724 — Lab Sample ID: 480-217677-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	9100		1000	380	ug/L	1000		8260C	Total/NA
Chloroethane	7600		1000	320	ug/L	1000		8260C	Total/NA
1,4-Dioxane	1700		40	20	ug/L	200		8270D SIM ID	Total/NA

Client Sample ID: TMW-20-030724 — Lab Sample ID: 480-217677-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	18000		500	190	ug/L	500		8260C	Total/NA
Chloroethane	4500	*-	500	160	ug/L	500		8260C	Total/NA

Client Sample ID: PTMW-01-030724 — Lab Sample ID: 480-217677-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3000		200	76	ug/L	200		8260C	Total/NA
Chloroethane	6300	*-	200	64	ug/L	200		8260C	Total/NA

Client Sample ID: MW-09-030824 — Lab Sample ID: 480-217677-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-10-030824 — Lab Sample ID: 480-217677-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.6		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-07S-030824 — Lab Sample ID: 480-217677-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.8		1.0	0.38	ug/L	1		8260C	Total/NA
Chloroethane	0.41	J	1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	37		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	120	E	1.0	0.90	ug/L	1		8260C	Total/NA
1,1-Dichloroethane - DL	3.5		2.0	0.76	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene - DL	31		2.0	1.6	ug/L	2		8260C	Total/NA
Vinyl chloride - DL	72		2.0	1.8	ug/L	2		8260C	Total/NA
1,4-Dioxane	14		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-23-030824 — Lab Sample ID: 480-217677-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	8.6		4.0	1.5	ug/L	4		8260C	Total/NA
1,1-Dichloroethene	1.6	J	4.0	1.2	ug/L	4		8260C	Total/NA
1,2-Dichloroethane	0.97	J	4.0	0.84	ug/L	4		8260C	Total/NA
Chloroethane	20	*-	4.0	1.3	ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene	470	E	4.0	3.2	ug/L	4		8260C	Total/NA
Trichloroethene	3.4	J	4.0	1.8	ug/L	4		8260C	Total/NA
Vinyl chloride	150		4.0	3.6	ug/L	4		8260C	Total/NA
1,1-Dichloroethane - DL	7.6	J	10	3.8	ug/L	10		8260C	Total/NA
Chloroethane - DL	20		10	3.2	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene - DL	340		10	8.1	ug/L	10		8260C	Total/NA
Vinyl chloride - DL	140		10	9.0	ug/L	10		8260C	Total/NA
1,4-Dioxane	24		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-11R-030824 — Lab Sample ID: 480-217677-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.2		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-06S-030824 — Lab Sample ID: 480-217677-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	82		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	2.3		2.0	0.58	ug/L	2		8260C	Total/NA
1,2-Dichloroethane	1.8	J	2.0	0.42	ug/L	2		8260C	Total/NA
Chloroethane	360	E *-	2.0	0.64	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	29		2.0	1.6	ug/L	2		8260C	Total/NA
Trichloroethene	1.0	J	2.0	0.92	ug/L	2		8260C	Total/NA
Vinyl chloride	19		2.0	1.8	ug/L	2		8260C	Total/NA
1,1-Dichloroethane - DL	87		8.0	3.0	ug/L	8		8260C	Total/NA
Chloroethane - DL	530		8.0	2.6	ug/L	8		8260C	Total/NA
cis-1,2-Dichloroethene - DL	33		8.0	6.5	ug/L	8		8260C	Total/NA
Vinyl chloride - DL	26		8.0	7.2	ug/L	8		8260C	Total/NA
1,4-Dioxane	29		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-24-030824 — Lab Sample ID: 480-217677-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.97	J	1.0	0.38	ug/L	1		8260C	Total/NA
Chloroethane	1.3	*-	1.0	0.32	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: TB-02-030824
Lab Sample ID: 480-217677-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.49	J	1.0	0.34	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: TMW-02-030724
Lab Sample ID: 480-217677-1
Date Collected: 03/07/24 11:56
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**65**		20	16	ug/L			03/12/24 22:33	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			03/12/24 22:33	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			03/12/24 22:33	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			03/12/24 22:33	20
1,1-Dichloroethane	**950**		20	7.6	ug/L			03/12/24 22:33	20
1,1-Dichloroethene	**11**	**J**	20	5.8	ug/L			03/12/24 22:33	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			03/12/24 22:33	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			03/12/24 22:33	20
1,2-Dichlorobenzene	ND		20	16	ug/L			03/12/24 22:33	20
1,2-Dichloroethane	**8.8**	**J**	20	4.2	ug/L			03/12/24 22:33	20
1,2-Dichloropropane	ND		20	14	ug/L			03/12/24 22:33	20
1,3-Dichlorobenzene	ND		20	16	ug/L			03/12/24 22:33	20
1,4-Dichlorobenzene	ND		20	17	ug/L			03/12/24 22:33	20
2-Butanone (MEK)	ND		200	26	ug/L			03/12/24 22:33	20
2-Hexanone	ND		100	25	ug/L			03/12/24 22:33	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			03/12/24 22:33	20
Acetone	ND		200	60	ug/L			03/12/24 22:33	20
Benzene	ND		20	8.2	ug/L			03/12/24 22:33	20
Bromodichloromethane	ND		20	7.8	ug/L			03/12/24 22:33	20
Bromoform	ND		20	5.2	ug/L			03/12/24 22:33	20
Bromomethane	ND		20	14	ug/L			03/12/24 22:33	20
Carbon disulfide	ND		20	3.8	ug/L			03/12/24 22:33	20
Carbon tetrachloride	ND		20	5.4	ug/L			03/12/24 22:33	20
Chlorobenzene	ND		20	15	ug/L			03/12/24 22:33	20
Dibromochloromethane	ND		20	6.4	ug/L			03/12/24 22:33	20
Chloroethane	**190**		20	6.4	ug/L			03/12/24 22:33	20
Chloroform	ND		20	6.8	ug/L			03/12/24 22:33	20
Chloromethane	ND		20	7.0	ug/L			03/12/24 22:33	20
cis-1,2-Dichloroethene	**1400**		20	16	ug/L			03/12/24 22:33	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			03/12/24 22:33	20
Cyclohexane	ND		20	3.6	ug/L			03/12/24 22:33	20
Dichlorodifluoromethane	ND		20	14	ug/L			03/12/24 22:33	20
Ethylbenzene	**33**		20	15	ug/L			03/12/24 22:33	20
1,2-Dibromoethane	ND		20	15	ug/L			03/12/24 22:33	20
Isopropylbenzene	ND		20	16	ug/L			03/12/24 22:33	20
Methyl acetate	ND		50	26	ug/L			03/12/24 22:33	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			03/12/24 22:33	20
Methylcyclohexane	ND		20	3.2	ug/L			03/12/24 22:33	20
Methylene Chloride	ND		20	8.8	ug/L			03/12/24 22:33	20
Styrene	ND		20	15	ug/L			03/12/24 22:33	20
Tetrachloroethene	ND		20	7.2	ug/L			03/12/24 22:33	20
Toluene	**67**		20	10	ug/L			03/12/24 22:33	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			03/12/24 22:33	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			03/12/24 22:33	20
Trichloroethene	ND		20	9.2	ug/L			03/12/24 22:33	20
Trichlorofluoromethane	ND		20	18	ug/L			03/12/24 22:33	20
Vinyl chloride	**1200**		20	18	ug/L			03/12/24 22:33	20
Xylenes, Total	**62**		40	13	ug/L			03/12/24 22:33	20

Client Sample ID: TMW-02-030724
Lab Sample ID: 480-217677-1
Date Collected: 03/07/24 11:56
Matrix: Water
Date Received: 03/09/24 08:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*		*03/12/24 22:33*	*20*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*03/12/24 22:33*	*20*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*03/12/24 22:33*	*20*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*03/12/24 22:33*	*20*

Client Sample ID: MW-21-030724
Lab Sample ID: 480-217677-2
Date Collected: 03/07/24 12:30
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		130	100	ug/L			03/11/24 16:47	125
1,1,2,2-Tetrachloroethane	ND		130	26	ug/L			03/11/24 16:47	125
1,1,2-Trichloroethane	ND		130	29	ug/L			03/11/24 16:47	125
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		130	39	ug/L			03/11/24 16:47	125
1,1-Dichloroethane	**3800**		130	48	ug/L			03/11/24 16:47	125
1,1-Dichloroethene	ND		130	36	ug/L			03/11/24 16:47	125
1,2,4-Trichlorobenzene	ND		130	51	ug/L			03/11/24 16:47	125
1,2-Dibromo-3-Chloropropane	ND		130	49	ug/L			03/11/24 16:47	125
1,2-Dichlorobenzene	ND		130	99	ug/L			03/11/24 16:47	125
1,2-Dichloroethane	**91**	**J**	130	26	ug/L			03/11/24 16:47	125
1,2-Dichloropropane	ND		130	90	ug/L			03/11/24 16:47	125
1,3-Dichlorobenzene	ND		130	98	ug/L			03/11/24 16:47	125
1,4-Dichlorobenzene	ND		130	110	ug/L			03/11/24 16:47	125
2-Butanone (MEK)	ND		1300	170	ug/L			03/11/24 16:47	125
2-Hexanone	ND		630	160	ug/L			03/11/24 16:47	125
4-Methyl-2-pentanone (MIBK)	ND		630	260	ug/L			03/11/24 16:47	125
Acetone	ND		1300	380	ug/L			03/11/24 16:47	125
Benzene	ND		130	51	ug/L			03/11/24 16:47	125
Bromodichloromethane	ND		130	49	ug/L			03/11/24 16:47	125
Bromoform	ND		130	33	ug/L			03/11/24 16:47	125
Bromomethane	ND		130	86	ug/L			03/11/24 16:47	125
Carbon disulfide	ND		130	24	ug/L			03/11/24 16:47	125
Carbon tetrachloride	ND		130	34	ug/L			03/11/24 16:47	125
Chlorobenzene	ND		130	94	ug/L			03/11/24 16:47	125
Dibromochloromethane	ND		130	40	ug/L			03/11/24 16:47	125
Chloroethane	**800**		130	40	ug/L			03/11/24 16:47	125
Chloroform	ND		130	43	ug/L			03/11/24 16:47	125
Chloromethane	ND		130	44	ug/L			03/11/24 16:47	125
cis-1,2-Dichloroethene	**8100**		130	100	ug/L			03/11/24 16:47	125
cis-1,3-Dichloropropene	ND		130	45	ug/L			03/11/24 16:47	125
Cyclohexane	ND		130	23	ug/L			03/11/24 16:47	125
Dichlorodifluoromethane	ND		130	85	ug/L			03/11/24 16:47	125
Ethylbenzene	**170**		130	93	ug/L			03/11/24 16:47	125
1,2-Dibromoethane	ND		130	91	ug/L			03/11/24 16:47	125
Isopropylbenzene	ND		130	99	ug/L			03/11/24 16:47	125
Methyl acetate	ND		310	160	ug/L			03/11/24 16:47	125
Methyl tert-butyl ether	ND		130	20	ug/L			03/11/24 16:47	125
Methylcyclohexane	ND		130	20	ug/L			03/11/24 16:47	125
Methylene Chloride	ND		130	55	ug/L			03/11/24 16:47	125

Client Sample ID: MW-21-030724
Lab Sample ID: 480-217677-2
Date Collected: 03/07/24 12:30
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		130	91	ug/L			03/11/24 16:47	125
Tetrachloroethene	ND		130	45	ug/L			03/11/24 16:47	125
Toluene	**190**		130	64	ug/L			03/11/24 16:47	125
trans-1,2-Dichloroethene	ND		130	110	ug/L			03/11/24 16:47	125
trans-1,3-Dichloropropene	ND		130	46	ug/L			03/11/24 16:47	125
Trichloroethene	ND		130	58	ug/L			03/11/24 16:47	125
Trichlorofluoromethane	ND		130	110	ug/L			03/11/24 16:47	125
Vinyl chloride	**4300**		130	110	ug/L			03/11/24 16:47	125
Xylenes, Total	**200**	**J**	250	83	ug/L			03/11/24 16:47	125

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*80 - 120*		*03/11/24 16:47*	*125*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*		*03/11/24 16:47*	*125*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*03/11/24 16:47*	*125*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*03/11/24 16:47*	*125*

Client Sample ID: MW-22-030724
Lab Sample ID: 480-217677-3
Date Collected: 03/07/24 13:00
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1000	820	ug/L			03/11/24 17:11	1000
1,1,2,2-Tetrachloroethane	ND		1000	210	ug/L			03/11/24 17:11	1000
1,1,2-Trichloroethane	ND		1000	230	ug/L			03/11/24 17:11	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1000	310	ug/L			03/11/24 17:11	1000
1,1-Dichloroethane	**9100**		1000	380	ug/L			03/11/24 17:11	1000
1,1-Dichloroethene	ND		1000	290	ug/L			03/11/24 17:11	1000
1,2,4-Trichlorobenzene	ND		1000	410	ug/L			03/11/24 17:11	1000
1,2-Dibromo-3-Chloropropane	ND		1000	390	ug/L			03/11/24 17:11	1000
1,2-Dichlorobenzene	ND		1000	790	ug/L			03/11/24 17:11	1000
1,2-Dichloroethane	ND		1000	210	ug/L			03/11/24 17:11	1000
1,2-Dichloropropane	ND		1000	720	ug/L			03/11/24 17:11	1000
1,3-Dichlorobenzene	ND		1000	780	ug/L			03/11/24 17:11	1000
1,4-Dichlorobenzene	ND		1000	840	ug/L			03/11/24 17:11	1000
2-Butanone (MEK)	ND		10000	1300	ug/L			03/11/24 17:11	1000
2-Hexanone	ND		5000	1200	ug/L			03/11/24 17:11	1000
4-Methyl-2-pentanone (MIBK)	ND		5000	2100	ug/L			03/11/24 17:11	1000
Acetone	ND		10000	3000	ug/L			03/11/24 17:11	1000
Benzene	ND		1000	410	ug/L			03/11/24 17:11	1000
Bromodichloromethane	ND		1000	390	ug/L			03/11/24 17:11	1000
Bromoform	ND		1000	260	ug/L			03/11/24 17:11	1000
Bromomethane	ND		1000	690	ug/L			03/11/24 17:11	1000
Carbon disulfide	ND		1000	190	ug/L			03/11/24 17:11	1000
Carbon tetrachloride	ND		1000	270	ug/L			03/11/24 17:11	1000
Chlorobenzene	ND		1000	750	ug/L			03/11/24 17:11	1000
Dibromochloromethane	ND		1000	320	ug/L			03/11/24 17:11	1000
Chloroethane	**7600**		1000	320	ug/L			03/11/24 17:11	1000
Chloroform	ND		1000	340	ug/L			03/11/24 17:11	1000
Chloromethane	ND		1000	350	ug/L			03/11/24 17:11	1000

Client Sample ID: MW-22-030724
Lab Sample ID: 480-217677-3
Date Collected: 03/07/24 13:00
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1000	810	ug/L			03/11/24 17:11	1000
cis-1,3-Dichloropropene	ND		1000	360	ug/L			03/11/24 17:11	1000
Cyclohexane	ND		1000	180	ug/L			03/11/24 17:11	1000
Dichlorodifluoromethane	ND		1000	680	ug/L			03/11/24 17:11	1000
Ethylbenzene	ND		1000	740	ug/L			03/11/24 17:11	1000
1,2-Dibromoethane	ND		1000	730	ug/L			03/11/24 17:11	1000
Isopropylbenzene	ND		1000	790	ug/L			03/11/24 17:11	1000
Methyl acetate	ND		2500	1300	ug/L			03/11/24 17:11	1000
Methyl tert-butyl ether	ND		1000	160	ug/L			03/11/24 17:11	1000
Methylcyclohexane	ND		1000	160	ug/L			03/11/24 17:11	1000
Methylene Chloride	ND		1000	440	ug/L			03/11/24 17:11	1000
Styrene	ND		1000	730	ug/L			03/11/24 17:11	1000
Tetrachloroethene	ND		1000	360	ug/L			03/11/24 17:11	1000
Toluene	ND		1000	510	ug/L			03/11/24 17:11	1000
trans-1,2-Dichloroethene	ND		1000	900	ug/L			03/11/24 17:11	1000
trans-1,3-Dichloropropene	ND		1000	370	ug/L			03/11/24 17:11	1000
Trichloroethene	ND		1000	460	ug/L			03/11/24 17:11	1000
Trichlorofluoromethane	ND		1000	880	ug/L			03/11/24 17:11	1000
Vinyl chloride	ND		1000	900	ug/L			03/11/24 17:11	1000
Xylenes, Total	ND		2000	660	ug/L			03/11/24 17:11	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*80 - 120*		*03/11/24 17:11*	*1000*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*		*03/11/24 17:11*	*1000*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*03/11/24 17:11*	*1000*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*03/11/24 17:11*	*1000*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1700**		40	20	ug/L		03/13/24 13:47	03/15/24 12:18	200

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*15 - 110*	*03/13/24 13:47*	*03/15/24 12:18*	*200*

Client Sample ID: TMW-20-030724
Lab Sample ID: 480-217677-4
Date Collected: 03/07/24 13:40
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		500	410	ug/L			03/13/24 05:29	500
1,1,2,2-Tetrachloroethane	ND	*+	500	110	ug/L			03/13/24 05:29	500
1,1,2-Trichloroethane	ND		500	120	ug/L			03/13/24 05:29	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	160	ug/L			03/13/24 05:29	500
1,1-Dichloroethane	**18000**		500	190	ug/L			03/13/24 05:29	500
1,1-Dichloroethene	ND		500	150	ug/L			03/13/24 05:29	500
1,2,4-Trichlorobenzene	ND		500	210	ug/L			03/13/24 05:29	500
1,2-Dibromo-3-Chloropropane	ND		500	200	ug/L			03/13/24 05:29	500
1,2-Dichlorobenzene	ND		500	400	ug/L			03/13/24 05:29	500
1,2-Dichloroethane	ND		500	110	ug/L			03/13/24 05:29	500
1,2-Dichloropropane	ND		500	360	ug/L			03/13/24 05:29	500

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: TMW-20-030724
Lab Sample ID: 480-217677-4
Date Collected: 03/07/24 13:40
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		500	390	ug/L			03/13/24 05:29	500
1,4-Dichlorobenzene	ND		500	420	ug/L			03/13/24 05:29	500
2-Butanone (MEK)	ND		5000	660	ug/L			03/13/24 05:29	500
2-Hexanone	ND		2500	620	ug/L			03/13/24 05:29	500
4-Methyl-2-pentanone (MIBK)	ND		2500	1100	ug/L			03/13/24 05:29	500
Acetone	ND		5000	1500	ug/L			03/13/24 05:29	500
Benzene	ND		500	210	ug/L			03/13/24 05:29	500
Bromodichloromethane	ND		500	200	ug/L			03/13/24 05:29	500
Bromoform	ND		500	130	ug/L			03/13/24 05:29	500
Bromomethane	ND		500	350	ug/L			03/13/24 05:29	500
Carbon disulfide	ND		500	95	ug/L			03/13/24 05:29	500
Carbon tetrachloride	ND		500	140	ug/L			03/13/24 05:29	500
Chlorobenzene	ND		500	380	ug/L			03/13/24 05:29	500
Dibromochloromethane	ND		500	160	ug/L			03/13/24 05:29	500
Chloroethane	**4500**	*-	500	160	ug/L			03/13/24 05:29	500
Chloroform	ND		500	170	ug/L			03/13/24 05:29	500
Chloromethane	ND		500	180	ug/L			03/13/24 05:29	500
cis-1,2-Dichloroethene	ND		500	410	ug/L			03/13/24 05:29	500
cis-1,3-Dichloropropene	ND		500	180	ug/L			03/13/24 05:29	500
Cyclohexane	ND		500	90	ug/L			03/13/24 05:29	500
Dichlorodifluoromethane	ND		500	340	ug/L			03/13/24 05:29	500
Ethylbenzene	ND		500	370	ug/L			03/13/24 05:29	500
1,2-Dibromoethane	ND		500	370	ug/L			03/13/24 05:29	500
Isopropylbenzene	ND		500	400	ug/L			03/13/24 05:29	500
Methyl acetate	ND		1300	650	ug/L			03/13/24 05:29	500
Methyl tert-butyl ether	ND		500	80	ug/L			03/13/24 05:29	500
Methylcyclohexane	ND		500	80	ug/L			03/13/24 05:29	500
Methylene Chloride	ND		500	220	ug/L			03/13/24 05:29	500
Styrene	ND		500	370	ug/L			03/13/24 05:29	500
Tetrachloroethene	ND		500	180	ug/L			03/13/24 05:29	500
Toluene	ND		500	260	ug/L			03/13/24 05:29	500
trans-1,2-Dichloroethene	ND		500	450	ug/L			03/13/24 05:29	500
trans-1,3-Dichloropropene	ND		500	190	ug/L			03/13/24 05:29	500
Trichloroethene	ND		500	230	ug/L			03/13/24 05:29	500
Trichlorofluoromethane	ND		500	440	ug/L			03/13/24 05:29	500
Vinyl chloride	ND		500	450	ug/L			03/13/24 05:29	500
Xylenes, Total	ND		1000	330	ug/L			03/13/24 05:29	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/13/24 05:29*	*500*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*03/13/24 05:29*	*500*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*03/13/24 05:29*	*500*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*03/13/24 05:29*	*500*

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: PTMW-01-030724
Lab Sample ID: 480-217677-5
Date Collected: 03/07/24 14:50
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	160	ug/L			03/13/24 05:54	200
1,1,2,2-Tetrachloroethane	ND	*+	200	42	ug/L			03/13/24 05:54	200
1,1,2-Trichloroethane	ND		200	46	ug/L			03/13/24 05:54	200
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		200	62	ug/L			03/13/24 05:54	200
1,1-Dichloroethane	**3000**		200	76	ug/L			03/13/24 05:54	200
1,1-Dichloroethene	ND		200	58	ug/L			03/13/24 05:54	200
1,2,4-Trichlorobenzene	ND		200	82	ug/L			03/13/24 05:54	200
1,2-Dibromo-3-Chloropropane	ND		200	78	ug/L			03/13/24 05:54	200
1,2-Dichlorobenzene	ND		200	160	ug/L			03/13/24 05:54	200
1,2-Dichloroethane	ND		200	42	ug/L			03/13/24 05:54	200
1,2-Dichloropropane	ND		200	140	ug/L			03/13/24 05:54	200
1,3-Dichlorobenzene	ND		200	160	ug/L			03/13/24 05:54	200
1,4-Dichlorobenzene	ND		200	170	ug/L			03/13/24 05:54	200
2-Butanone (MEK)	ND		2000	260	ug/L			03/13/24 05:54	200
2-Hexanone	ND		1000	250	ug/L			03/13/24 05:54	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			03/13/24 05:54	200
Acetone	ND		2000	600	ug/L			03/13/24 05:54	200
Benzene	ND		200	82	ug/L			03/13/24 05:54	200
Bromodichloromethane	ND		200	78	ug/L			03/13/24 05:54	200
Bromoform	ND		200	52	ug/L			03/13/24 05:54	200
Bromomethane	ND		200	140	ug/L			03/13/24 05:54	200
Carbon disulfide	ND		200	38	ug/L			03/13/24 05:54	200
Carbon tetrachloride	ND		200	54	ug/L			03/13/24 05:54	200
Chlorobenzene	ND		200	150	ug/L			03/13/24 05:54	200
Dibromochloromethane	ND		200	64	ug/L			03/13/24 05:54	200
Chloroethane	**6300**	*-	200	64	ug/L			03/13/24 05:54	200
Chloroform	ND		200	68	ug/L			03/13/24 05:54	200
Chloromethane	ND		200	70	ug/L			03/13/24 05:54	200
cis-1,2-Dichloroethene	ND		200	160	ug/L			03/13/24 05:54	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			03/13/24 05:54	200
Cyclohexane	ND		200	36	ug/L			03/13/24 05:54	200
Dichlorodifluoromethane	ND		200	140	ug/L			03/13/24 05:54	200
Ethylbenzene	ND		200	150	ug/L			03/13/24 05:54	200
1,2-Dibromoethane	ND		200	150	ug/L			03/13/24 05:54	200
Isopropylbenzene	ND		200	160	ug/L			03/13/24 05:54	200
Methyl acetate	ND		500	260	ug/L			03/13/24 05:54	200
Methyl tert-butyl ether	ND		200	32	ug/L			03/13/24 05:54	200
Methylcyclohexane	ND		200	32	ug/L			03/13/24 05:54	200
Methylene Chloride	ND		200	88	ug/L			03/13/24 05:54	200
Styrene	ND		200	150	ug/L			03/13/24 05:54	200
Tetrachloroethene	ND		200	72	ug/L			03/13/24 05:54	200
Toluene	ND		200	100	ug/L			03/13/24 05:54	200
trans-1,2-Dichloroethene	ND		200	180	ug/L			03/13/24 05:54	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			03/13/24 05:54	200
Trichloroethene	ND		200	92	ug/L			03/13/24 05:54	200
Trichlorofluoromethane	ND		200	180	ug/L			03/13/24 05:54	200
Vinyl chloride	ND		200	180	ug/L			03/13/24 05:54	200
Xylenes, Total	ND		400	130	ug/L			03/13/24 05:54	200

Client Sample ID: PTMW-01-030724
Lab Sample ID: 480-217677-5
Date Collected: 03/07/24 14:50
Matrix: Water
Date Received: 03/09/24 08:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/13/24 05:54*	*200*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*03/13/24 05:54*	*200*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*03/13/24 05:54*	*200*
Dibromofluoromethane (Surr)	*84*		*75 - 123*		*03/13/24 05:54*	*200*

Client Sample ID: MW-09-030824
Lab Sample ID: 480-217677-6
Date Collected: 03/08/24 08:00
Matrix: Water
Date Received: 03/09/24 08:00

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**		0.20	0.10	ug/L		03/13/24 13:47	03/14/24 17:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*15 - 110*	*03/13/24 13:47*	*03/14/24 17:06*	*1*

Client Sample ID: MW-10-030824
Lab Sample ID: 480-217677-7
Date Collected: 03/08/24 08:30
Matrix: Water
Date Received: 03/09/24 08:00

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.6**		0.20	0.10	ug/L		03/13/24 13:47	03/14/24 17:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*15 - 110*	*03/13/24 13:47*	*03/14/24 17:27*	*1*

Client Sample ID: MW-07S-030824
Lab Sample ID: 480-217677-8
Date Collected: 03/08/24 09:30
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/13/24 15:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/13/24 15:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/13/24 15:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/13/24 15:48	1
1,1-Dichloroethane	**3.8**		1.0	0.38	ug/L			03/13/24 15:48	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/13/24 15:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/13/24 15:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/13/24 15:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/13/24 15:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/13/24 15:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/13/24 15:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/13/24 15:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/13/24 15:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/13/24 15:48	1
2-Hexanone	ND		5.0	1.2	ug/L			03/13/24 15:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/13/24 15:48	1
Acetone	ND		10	3.0	ug/L			03/13/24 15:48	1
Benzene	ND		1.0	0.41	ug/L			03/13/24 15:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/13/24 15:48	1
Bromoform	ND		1.0	0.26	ug/L			03/13/24 15:48	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-07S-030824
Lab Sample ID: 480-217677-8
Date Collected: 03/08/24 09:30
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			03/13/24 15:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/13/24 15:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/13/24 15:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/13/24 15:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/13/24 15:48	1
Chloroethane	**0.41**	**J**	1.0	0.32	ug/L			03/13/24 15:48	1
Chloroform	ND		1.0	0.34	ug/L			03/13/24 15:48	1
Chloromethane	ND		1.0	0.35	ug/L			03/13/24 15:48	1
cis-1,2-Dichloroethene	**37**		1.0	0.81	ug/L			03/13/24 15:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/13/24 15:48	1
Cyclohexane	ND		1.0	0.18	ug/L			03/13/24 15:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/13/24 15:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/13/24 15:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/13/24 15:48	1
Isopropylbenzene	ND	*+	1.0	0.79	ug/L			03/13/24 15:48	1
Methyl acetate	ND		2.5	1.3	ug/L			03/13/24 15:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/13/24 15:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/13/24 15:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/13/24 15:48	1
Styrene	ND		1.0	0.73	ug/L			03/13/24 15:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/13/24 15:48	1
Toluene	ND		1.0	0.51	ug/L			03/13/24 15:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/13/24 15:48	1
trans-1,3-Dichloropropene	ND	*+	1.0	0.37	ug/L			03/13/24 15:48	1
Trichloroethene	ND		1.0	0.46	ug/L			03/13/24 15:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/13/24 15:48	1
Vinyl chloride	**120**	**E**	1.0	0.90	ug/L			03/13/24 15:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/13/24 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*		*03/13/24 15:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*03/13/24 15:48*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*03/13/24 15:48*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*03/13/24 15:48*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			03/14/24 14:17	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			03/14/24 14:17	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			03/14/24 14:17	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			03/14/24 14:17	2
1,1-Dichloroethane	**3.5**		2.0	0.76	ug/L			03/14/24 14:17	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			03/14/24 14:17	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			03/14/24 14:17	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			03/14/24 14:17	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			03/14/24 14:17	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			03/14/24 14:17	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			03/14/24 14:17	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			03/14/24 14:17	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			03/14/24 14:17	2

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-07S-030824
Lab Sample ID: 480-217677-8
Date Collected: 03/08/24 09:30
Matrix: Water
Date Received: 03/09/24 08:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		20	2.6	ug/L			03/14/24 14:17	2
2-Hexanone	ND		10	2.5	ug/L			03/14/24 14:17	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			03/14/24 14:17	2
Acetone	ND		20	6.0	ug/L			03/14/24 14:17	2
Benzene	ND		2.0	0.82	ug/L			03/14/24 14:17	2
Bromodichloromethane	ND		2.0	0.78	ug/L			03/14/24 14:17	2
Bromoform	ND		2.0	0.52	ug/L			03/14/24 14:17	2
Bromomethane	ND		2.0	1.4	ug/L			03/14/24 14:17	2
Carbon disulfide	ND		2.0	0.38	ug/L			03/14/24 14:17	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			03/14/24 14:17	2
Chlorobenzene	ND		2.0	1.5	ug/L			03/14/24 14:17	2
Dibromochloromethane	ND		2.0	0.64	ug/L			03/14/24 14:17	2
Chloroethane	ND		2.0	0.64	ug/L			03/14/24 14:17	2
Chloroform	ND		2.0	0.68	ug/L			03/14/24 14:17	2
Chloromethane	ND		2.0	0.70	ug/L			03/14/24 14:17	2
cis-1,2-Dichloroethene	**31**		2.0	1.6	ug/L			03/14/24 14:17	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			03/14/24 14:17	2
Cyclohexane	ND		2.0	0.36	ug/L			03/14/24 14:17	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			03/14/24 14:17	2
Ethylbenzene	ND		2.0	1.5	ug/L			03/14/24 14:17	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			03/14/24 14:17	2
Isopropylbenzene	ND		2.0	1.6	ug/L			03/14/24 14:17	2
Methyl acetate	ND		5.0	2.6	ug/L			03/14/24 14:17	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			03/14/24 14:17	2
Methylcyclohexane	ND		2.0	0.32	ug/L			03/14/24 14:17	2
Methylene Chloride	ND		2.0	0.88	ug/L			03/14/24 14:17	2
Styrene	ND		2.0	1.5	ug/L			03/14/24 14:17	2
Tetrachloroethene	ND		2.0	0.72	ug/L			03/14/24 14:17	2
Toluene	ND		2.0	1.0	ug/L			03/14/24 14:17	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			03/14/24 14:17	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			03/14/24 14:17	2
Trichloroethene	ND		2.0	0.92	ug/L			03/14/24 14:17	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			03/14/24 14:17	2
Vinyl chloride	**72**		2.0	1.8	ug/L			03/14/24 14:17	2
Xylenes, Total	ND		4.0	1.3	ug/L			03/14/24 14:17	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/14/24 14:17*	*2*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*		*03/14/24 14:17*	*2*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*03/14/24 14:17*	*2*
Dibromofluoromethane (Surr)	*89*		*75 - 123*		*03/14/24 14:17*	*2*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**14**		0.20	0.10	ug/L		03/13/24 13:47	03/14/24 17:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*15 - 110*	*03/13/24 13:47*	*03/14/24 17:49*	*1*

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-23-030824
Lab Sample ID: 480-217677-9
Date Collected: 03/08/24 10:10
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			03/13/24 06:44	4
1,1,2,2-Tetrachloroethane	ND	*+	4.0	0.84	ug/L			03/13/24 06:44	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			03/13/24 06:44	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			03/13/24 06:44	4
1,1-Dichloroethane	**8.6**		4.0	1.5	ug/L			03/13/24 06:44	4
1,1-Dichloroethene	**1.6**	**J**	4.0	1.2	ug/L			03/13/24 06:44	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			03/13/24 06:44	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			03/13/24 06:44	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			03/13/24 06:44	4
1,2-Dichloroethane	**0.97**	**J**	4.0	0.84	ug/L			03/13/24 06:44	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			03/13/24 06:44	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			03/13/24 06:44	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			03/13/24 06:44	4
2-Butanone (MEK)	ND		40	5.3	ug/L			03/13/24 06:44	4
2-Hexanone	ND		20	5.0	ug/L			03/13/24 06:44	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			03/13/24 06:44	4
Acetone	ND		40	12	ug/L			03/13/24 06:44	4
Benzene	ND		4.0	1.6	ug/L			03/13/24 06:44	4
Bromodichloromethane	ND		4.0	1.6	ug/L			03/13/24 06:44	4
Bromoform	ND		4.0	1.0	ug/L			03/13/24 06:44	4
Bromomethane	ND		4.0	2.8	ug/L			03/13/24 06:44	4
Carbon disulfide	ND		4.0	0.76	ug/L			03/13/24 06:44	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			03/13/24 06:44	4
Chlorobenzene	ND		4.0	3.0	ug/L			03/13/24 06:44	4
Dibromochloromethane	ND		4.0	1.3	ug/L			03/13/24 06:44	4
Chloroethane	**20**	***-**	4.0	1.3	ug/L			03/13/24 06:44	4
Chloroform	ND		4.0	1.4	ug/L			03/13/24 06:44	4
Chloromethane	ND		4.0	1.4	ug/L			03/13/24 06:44	4
cis-1,2-Dichloroethene	**470**	**E**	4.0	3.2	ug/L			03/13/24 06:44	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			03/13/24 06:44	4
Cyclohexane	ND		4.0	0.72	ug/L			03/13/24 06:44	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			03/13/24 06:44	4
Ethylbenzene	ND		4.0	3.0	ug/L			03/13/24 06:44	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			03/13/24 06:44	4
Isopropylbenzene	ND		4.0	3.2	ug/L			03/13/24 06:44	4
Methyl acetate	ND		10	5.2	ug/L			03/13/24 06:44	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			03/13/24 06:44	4
Methylcyclohexane	ND		4.0	0.64	ug/L			03/13/24 06:44	4
Methylene Chloride	ND		4.0	1.8	ug/L			03/13/24 06:44	4
Styrene	ND		4.0	2.9	ug/L			03/13/24 06:44	4
Tetrachloroethene	ND		4.0	1.4	ug/L			03/13/24 06:44	4
Toluene	ND		4.0	2.0	ug/L			03/13/24 06:44	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			03/13/24 06:44	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			03/13/24 06:44	4
Trichloroethene	**3.4**	**J**	4.0	1.8	ug/L			03/13/24 06:44	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			03/13/24 06:44	4
Vinyl chloride	**150**		4.0	3.6	ug/L			03/13/24 06:44	4
Xylenes, Total	ND		8.0	2.6	ug/L			03/13/24 06:44	4

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-23-030824
Lab Sample ID: 480-217677-9
Date Collected: 03/08/24 10:10
Matrix: Water
Date Received: 03/09/24 08:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		03/13/24 06:44	4
1,2-Dichloroethane-d4 (Surr)	95		77 - 120		03/13/24 06:44	4
4-Bromofluorobenzene (Surr)	91		73 - 120		03/13/24 06:44	4
Dibromofluoromethane (Surr)	85		75 - 123		03/13/24 06:44	4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			03/13/24 16:11	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			03/13/24 16:11	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			03/13/24 16:11	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			03/13/24 16:11	10
1,1-Dichloroethane	**7.6**	**J**	10	3.8	ug/L			03/13/24 16:11	10
1,1-Dichloroethene	ND		10	2.9	ug/L			03/13/24 16:11	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			03/13/24 16:11	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			03/13/24 16:11	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			03/13/24 16:11	10
1,2-Dichloroethane	ND		10	2.1	ug/L			03/13/24 16:11	10
1,2-Dichloropropane	ND		10	7.2	ug/L			03/13/24 16:11	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			03/13/24 16:11	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			03/13/24 16:11	10
2-Butanone (MEK)	ND		100	13	ug/L			03/13/24 16:11	10
2-Hexanone	ND		50	12	ug/L			03/13/24 16:11	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			03/13/24 16:11	10
Acetone	ND		100	30	ug/L			03/13/24 16:11	10
Benzene	ND		10	4.1	ug/L			03/13/24 16:11	10
Bromodichloromethane	ND		10	3.9	ug/L			03/13/24 16:11	10
Bromoform	ND		10	2.6	ug/L			03/13/24 16:11	10
Bromomethane	ND		10	6.9	ug/L			03/13/24 16:11	10
Carbon disulfide	ND		10	1.9	ug/L			03/13/24 16:11	10
Carbon tetrachloride	ND		10	2.7	ug/L			03/13/24 16:11	10
Chlorobenzene	ND		10	7.5	ug/L			03/13/24 16:11	10
Dibromochloromethane	ND		10	3.2	ug/L			03/13/24 16:11	10
Chloroethane	**20**		10	3.2	ug/L			03/13/24 16:11	10
Chloroform	ND		10	3.4	ug/L			03/13/24 16:11	10
Chloromethane	ND		10	3.5	ug/L			03/13/24 16:11	10
cis-1,2-Dichloroethene	**340**		10	8.1	ug/L			03/13/24 16:11	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			03/13/24 16:11	10
Cyclohexane	ND		10	1.8	ug/L			03/13/24 16:11	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			03/13/24 16:11	10
Ethylbenzene	ND		10	7.4	ug/L			03/13/24 16:11	10
1,2-Dibromoethane	ND		10	7.3	ug/L			03/13/24 16:11	10
Isopropylbenzene	ND	*+	10	7.9	ug/L			03/13/24 16:11	10
Methyl acetate	ND		25	13	ug/L			03/13/24 16:11	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			03/13/24 16:11	10
Methylcyclohexane	ND		10	1.6	ug/L			03/13/24 16:11	10
Methylene Chloride	ND		10	4.4	ug/L			03/13/24 16:11	10
Styrene	ND		10	7.3	ug/L			03/13/24 16:11	10
Tetrachloroethene	ND		10	3.6	ug/L			03/13/24 16:11	10
Toluene	ND		10	5.1	ug/L			03/13/24 16:11	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			03/13/24 16:11	10

Client Sample ID: MW-23-030824
Lab Sample ID: 480-217677-9
Date Collected: 03/08/24 10:10
Matrix: Water
Date Received: 03/09/24 08:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND	*+	10	3.7	ug/L			03/13/24 16:11	10
Trichloroethene	ND		10	4.6	ug/L			03/13/24 16:11	10
Trichlorofluoromethane	ND		10	8.8	ug/L			03/13/24 16:11	10
Vinyl chloride	**140**		10	9.0	ug/L			03/13/24 16:11	10
Xylenes, Total	ND		20	6.6	ug/L			03/13/24 16:11	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/13/24 16:11*	*10*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*03/13/24 16:11*	*10*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*03/13/24 16:11*	*10*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*03/13/24 16:11*	*10*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**24**		0.20	0.10	ug/L		03/13/24 13:47	03/14/24 18:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*15 - 110*	*03/13/24 13:47*	*03/14/24 18:12*	*1*

Client Sample ID: MW-11R-030824
Lab Sample ID: 480-217677-10
Date Collected: 03/08/24 10:48
Matrix: Water
Date Received: 03/09/24 08:00

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.2**		0.20	0.10	ug/L		03/13/24 13:47	03/14/24 18:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*31*		*15 - 110*	*03/13/24 13:47*	*03/14/24 18:34*	*1*

Client Sample ID: MW-06S-030824
Lab Sample ID: 480-217677-11
Date Collected: 03/08/24 12:20
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			03/13/24 07:08	2
1,1,2,2-Tetrachloroethane	ND	*+	2.0	0.42	ug/L			03/13/24 07:08	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			03/13/24 07:08	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			03/13/24 07:08	2
1,1-Dichloroethane	**82**		2.0	0.76	ug/L			03/13/24 07:08	2
1,1-Dichloroethene	**2.3**		2.0	0.58	ug/L			03/13/24 07:08	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			03/13/24 07:08	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			03/13/24 07:08	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			03/13/24 07:08	2
1,2-Dichloroethane	**1.8**	**J**	2.0	0.42	ug/L			03/13/24 07:08	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			03/13/24 07:08	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			03/13/24 07:08	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			03/13/24 07:08	2
2-Butanone (MEK)	ND		20	2.6	ug/L			03/13/24 07:08	2
2-Hexanone	ND		10	2.5	ug/L			03/13/24 07:08	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			03/13/24 07:08	2

Client Sample ID: MW-06S-030824
Lab Sample ID: 480-217677-11
Date Collected: 03/08/24 12:20
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.0	ug/L			03/13/24 07:08	2
Benzene	ND		2.0	0.82	ug/L			03/13/24 07:08	2
Bromodichloromethane	ND		2.0	0.78	ug/L			03/13/24 07:08	2
Bromoform	ND		2.0	0.52	ug/L			03/13/24 07:08	2
Bromomethane	ND		2.0	1.4	ug/L			03/13/24 07:08	2
Carbon disulfide	ND		2.0	0.38	ug/L			03/13/24 07:08	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			03/13/24 07:08	2
Chlorobenzene	ND		2.0	1.5	ug/L			03/13/24 07:08	2
Dibromochloromethane	ND		2.0	0.64	ug/L			03/13/24 07:08	2
Chloroethane	**360**	**E *-**	2.0	0.64	ug/L			03/13/24 07:08	2
Chloroform	ND		2.0	0.68	ug/L			03/13/24 07:08	2
Chloromethane	ND		2.0	0.70	ug/L			03/13/24 07:08	2
cis-1,2-Dichloroethene	**29**		2.0	1.6	ug/L			03/13/24 07:08	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			03/13/24 07:08	2
Cyclohexane	ND		2.0	0.36	ug/L			03/13/24 07:08	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			03/13/24 07:08	2
Ethylbenzene	ND		2.0	1.5	ug/L			03/13/24 07:08	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			03/13/24 07:08	2
Isopropylbenzene	ND		2.0	1.6	ug/L			03/13/24 07:08	2
Methyl acetate	ND		5.0	2.6	ug/L			03/13/24 07:08	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			03/13/24 07:08	2
Methylcyclohexane	ND		2.0	0.32	ug/L			03/13/24 07:08	2
Methylene Chloride	ND		2.0	0.88	ug/L			03/13/24 07:08	2
Styrene	ND		2.0	1.5	ug/L			03/13/24 07:08	2
Tetrachloroethene	ND		2.0	0.72	ug/L			03/13/24 07:08	2
Toluene	ND		2.0	1.0	ug/L			03/13/24 07:08	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			03/13/24 07:08	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			03/13/24 07:08	2
Trichloroethene	**1.0**	**J**	2.0	0.92	ug/L			03/13/24 07:08	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			03/13/24 07:08	2
Vinyl chloride	**19**		2.0	1.8	ug/L			03/13/24 07:08	2
Xylenes, Total	ND		4.0	1.3	ug/L			03/13/24 07:08	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/13/24 07:08*	*2*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*03/13/24 07:08*	*2*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*03/13/24 07:08*	*2*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*03/13/24 07:08*	*2*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		8.0	6.6	ug/L			03/13/24 16:33	8
1,1,2,2-Tetrachloroethane	ND		8.0	1.7	ug/L			03/13/24 16:33	8
1,1,2-Trichloroethane	ND		8.0	1.8	ug/L			03/13/24 16:33	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5	ug/L			03/13/24 16:33	8
1,1-Dichloroethane	**87**		8.0	3.0	ug/L			03/13/24 16:33	8
1,1-Dichloroethene	ND		8.0	2.3	ug/L			03/13/24 16:33	8
1,2,4-Trichlorobenzene	ND		8.0	3.3	ug/L			03/13/24 16:33	8
1,2-Dibromo-3-Chloropropane	ND		8.0	3.1	ug/L			03/13/24 16:33	8
1,2-Dichlorobenzene	ND		8.0	6.3	ug/L			03/13/24 16:33	8

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-06S-030824
Lab Sample ID: 480-217677-11
Date Collected: 03/08/24 12:20
Matrix: Water
Date Received: 03/09/24 08:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		8.0	1.7	ug/L			03/13/24 16:33	8
1,2-Dichloropropane	ND		8.0	5.8	ug/L			03/13/24 16:33	8
1,3-Dichlorobenzene	ND		8.0	6.2	ug/L			03/13/24 16:33	8
1,4-Dichlorobenzene	ND		8.0	6.7	ug/L			03/13/24 16:33	8
2-Butanone (MEK)	ND		80	11	ug/L			03/13/24 16:33	8
2-Hexanone	ND		40	9.9	ug/L			03/13/24 16:33	8
4-Methyl-2-pentanone (MIBK)	ND		40	17	ug/L			03/13/24 16:33	8
Acetone	ND		80	24	ug/L			03/13/24 16:33	8
Benzene	ND		8.0	3.3	ug/L			03/13/24 16:33	8
Bromodichloromethane	ND		8.0	3.1	ug/L			03/13/24 16:33	8
Bromoform	ND		8.0	2.1	ug/L			03/13/24 16:33	8
Bromomethane	ND		8.0	5.5	ug/L			03/13/24 16:33	8
Carbon disulfide	ND		8.0	1.5	ug/L			03/13/24 16:33	8
Carbon tetrachloride	ND		8.0	2.2	ug/L			03/13/24 16:33	8
Chlorobenzene	ND		8.0	6.0	ug/L			03/13/24 16:33	8
Dibromochloromethane	ND		8.0	2.6	ug/L			03/13/24 16:33	8
Chloroethane	**530**		8.0	2.6	ug/L			03/13/24 16:33	8
Chloroform	ND		8.0	2.7	ug/L			03/13/24 16:33	8
Chloromethane	ND		8.0	2.8	ug/L			03/13/24 16:33	8
cis-1,2-Dichloroethene	**33**		8.0	6.5	ug/L			03/13/24 16:33	8
cis-1,3-Dichloropropene	ND		8.0	2.9	ug/L			03/13/24 16:33	8
Cyclohexane	ND		8.0	1.4	ug/L			03/13/24 16:33	8
Dichlorodifluoromethane	ND		8.0	5.4	ug/L			03/13/24 16:33	8
Ethylbenzene	ND		8.0	5.9	ug/L			03/13/24 16:33	8
1,2-Dibromoethane	ND		8.0	5.8	ug/L			03/13/24 16:33	8
Isopropylbenzene	ND	*+	8.0	6.3	ug/L			03/13/24 16:33	8
Methyl acetate	ND		20	10	ug/L			03/13/24 16:33	8
Methyl tert-butyl ether	ND		8.0	1.3	ug/L			03/13/24 16:33	8
Methylcyclohexane	ND		8.0	1.3	ug/L			03/13/24 16:33	8
Methylene Chloride	ND		8.0	3.5	ug/L			03/13/24 16:33	8
Styrene	ND		8.0	5.8	ug/L			03/13/24 16:33	8
Tetrachloroethene	ND		8.0	2.9	ug/L			03/13/24 16:33	8
Toluene	ND		8.0	4.1	ug/L			03/13/24 16:33	8
trans-1,2-Dichloroethene	ND		8.0	7.2	ug/L			03/13/24 16:33	8
trans-1,3-Dichloropropene	ND	*+	8.0	3.0	ug/L			03/13/24 16:33	8
Trichloroethene	ND		8.0	3.7	ug/L			03/13/24 16:33	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			03/13/24 16:33	8
Vinyl chloride	**26**		8.0	7.2	ug/L			03/13/24 16:33	8
Xylenes, Total	ND		16	5.3	ug/L			03/13/24 16:33	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/13/24 16:33*	*8*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*		*03/13/24 16:33*	*8*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*03/13/24 16:33*	*8*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*03/13/24 16:33*	*8*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**29**		0.20	0.10	ug/L		03/13/24 13:47	03/14/24 18:57	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-06S-030824
Lab Sample ID: 480-217677-11
Date Collected: 03/08/24 12:20
Matrix: Water
Date Received: 03/09/24 08:00

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	37		15 - 110	03/13/24 13:47	03/14/24 18:57	1

Client Sample ID: MW-24-030824
Lab Sample ID: 480-217677-12
Date Collected: 03/08/24 12:58
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/13/24 07:33	1
1,1,2,2-Tetrachloroethane	ND	*+	1.0	0.21	ug/L			03/13/24 07:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/13/24 07:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/13/24 07:33	1
1,1-Dichloroethane	**0.97**	**J**	1.0	0.38	ug/L			03/13/24 07:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/13/24 07:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/13/24 07:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/13/24 07:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/13/24 07:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/13/24 07:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/13/24 07:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/13/24 07:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/13/24 07:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/13/24 07:33	1
2-Hexanone	ND		5.0	1.2	ug/L			03/13/24 07:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/13/24 07:33	1
Acetone	ND		10	3.0	ug/L			03/13/24 07:33	1
Benzene	ND		1.0	0.41	ug/L			03/13/24 07:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/13/24 07:33	1
Bromoform	ND		1.0	0.26	ug/L			03/13/24 07:33	1
Bromomethane	ND		1.0	0.69	ug/L			03/13/24 07:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/13/24 07:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/13/24 07:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/13/24 07:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/13/24 07:33	1
Chloroethane	**1.3**	***-**	1.0	0.32	ug/L			03/13/24 07:33	1
Chloroform	ND		1.0	0.34	ug/L			03/13/24 07:33	1
Chloromethane	ND		1.0	0.35	ug/L			03/13/24 07:33	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/13/24 07:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/13/24 07:33	1
Cyclohexane	ND		1.0	0.18	ug/L			03/13/24 07:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/13/24 07:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/13/24 07:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/13/24 07:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/13/24 07:33	1
Methyl acetate	ND		2.5	1.3	ug/L			03/13/24 07:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/13/24 07:33	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/13/24 07:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/13/24 07:33	1
Styrene	ND		1.0	0.73	ug/L			03/13/24 07:33	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/13/24 07:33	1
Toluene	ND		1.0	0.51	ug/L			03/13/24 07:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/13/24 07:33	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-24-030824
Lab Sample ID: 480-217677-12
Date Collected: 03/08/24 12:58
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/13/24 07:33	1
Trichloroethene	ND		1.0	0.46	ug/L			03/13/24 07:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/13/24 07:33	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/13/24 07:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/13/24 07:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/13/24 07:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*03/13/24 07:33*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*03/13/24 07:33*	*1*
Dibromofluoromethane (Surr)	*85*		*75 - 123*		*03/13/24 07:33*	*1*

Client Sample ID: TB-02-030824
Lab Sample ID: 480-217677-13
Date Collected: 03/08/24 00:00
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/13/24 07:57	1
1,1,2,2-Tetrachloroethane	ND	*+	1.0	0.21	ug/L			03/13/24 07:57	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/13/24 07:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/13/24 07:57	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/13/24 07:57	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/13/24 07:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/13/24 07:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/13/24 07:57	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/13/24 07:57	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/13/24 07:57	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/13/24 07:57	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/13/24 07:57	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/13/24 07:57	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/13/24 07:57	1
2-Hexanone	ND		5.0	1.2	ug/L			03/13/24 07:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/13/24 07:57	1
Acetone	ND		10	3.0	ug/L			03/13/24 07:57	1
Benzene	ND		1.0	0.41	ug/L			03/13/24 07:57	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/13/24 07:57	1
Bromoform	ND		1.0	0.26	ug/L			03/13/24 07:57	1
Bromomethane	ND		1.0	0.69	ug/L			03/13/24 07:57	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/13/24 07:57	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/13/24 07:57	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/13/24 07:57	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/13/24 07:57	1
Chloroethane	ND	*-	1.0	0.32	ug/L			03/13/24 07:57	1
Chloroform	**0.49**	**J**	1.0	0.34	ug/L			03/13/24 07:57	1
Chloromethane	ND		1.0	0.35	ug/L			03/13/24 07:57	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/13/24 07:57	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/13/24 07:57	1
Cyclohexane	ND		1.0	0.18	ug/L			03/13/24 07:57	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/13/24 07:57	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: TB-02-030824
Lab Sample ID: 480-217677-13
Date Collected: 03/08/24 00:00
Matrix: Water
Date Received: 03/09/24 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.74	ug/L			03/13/24 07:57	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/13/24 07:57	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/13/24 07:57	1
Methyl acetate	ND		2.5	1.3	ug/L			03/13/24 07:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/13/24 07:57	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/13/24 07:57	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/13/24 07:57	1
Styrene	ND		1.0	0.73	ug/L			03/13/24 07:57	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/13/24 07:57	1
Toluene	ND		1.0	0.51	ug/L			03/13/24 07:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/13/24 07:57	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/13/24 07:57	1
Trichloroethene	ND		1.0	0.46	ug/L			03/13/24 07:57	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/13/24 07:57	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/13/24 07:57	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/13/24 07:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*03/13/24 07:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*03/13/24 07:57*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*03/13/24 07:57*	*1*
Dibromofluoromethane (Surr)	*85*		*75 - 123*		*03/13/24 07:57*	*1*

Surrogate Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-217677-1	TMW-02-030724	105	107	95	92
480-217677-2	MW-21-030724	109	109	107	107
480-217677-3	MW-22-030724	109	110	108	106
480-217677-4	TMW-20-030724	97	95	91	86
480-217677-5	PTMW-01-030724	99	96	91	84
480-217677-8	MW-07S-030824	105	101	99	98
480-217677-8 - DL	MW-07S-030824	98	90	89	89
480-217677-9	MW-23-030824	98	95	91	85
480-217677-9 - DL	MW-23-030824	102	99	99	100
480-217677-11	MW-06S-030824	98	95	91	86
480-217677-11 - DL	MW-06S-030824	103	91	101	92
480-217677-12	MW-24-030824	97	95	88	85
480-217677-13	TB-02-030824	96	96	89	85
LCS 480-703213/9	Lab Control Sample	110	108	109	109
LCS 480-703350/9	Lab Control Sample	114	114	101	100
LCS 480-703451/6	Lab Control Sample	101	96	92	91
LCS 480-703570/6	Lab Control Sample	103	91	97	89
LCS 480-703703/6	Lab Control Sample	102	91	98	89
LCSD 480-703213/37	Lab Control Sample Dup	106	108	102	109
LCSD 480-703451/35	Lab Control Sample Dup	97	91	89	88
MB 480-703213/11	Method Blank	109	107	109	104
MB 480-703350/11	Method Blank	114	111	102	95
MB 480-703451/8	Method Blank	100	96	93	86
MB 480-703570/8	Method Blank	94	87	91	88
MB 480-703703/8	Method Blank	104	91	97	92

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DXE (15-110)						
480-217677-3	MW-22-030724	35						
480-217677-3 MS	MW-22-030724	36						
480-217677-3 MSD	MW-22-030724	34						
480-217677-6	MW-09-030824	35						
480-217677-7	MW-10-030824	38						
480-217677-8	MW-07S-030824	37						
480-217677-9	MW-23-030824	38						
480-217677-10	MW-11R-030824	31						
480-217677-11	MW-06S-030824	37						
LCS 480-703614/2-A	Lab Control Sample	39						
MB 480-703614/1-A	Method Blank	35						

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-703213/11
Matrix: Water
Analysis Batch: 703213

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-Trichloroethane	ND		1.0	0.82	ug/L			03/11/24 15:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/11/24 15:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/11/24 15:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/11/24 15:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/11/24 15:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/11/24 15:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/11/24 15:30	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/11/24 15:30	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/11/24 15:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/11/24 15:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/11/24 15:30	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/11/24 15:30	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/11/24 15:30	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/11/24 15:30	1
2-Hexanone	ND		5.0	1.2	ug/L			03/11/24 15:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/11/24 15:30	1
Acetone	ND		10	3.0	ug/L			03/11/24 15:30	1
Benzene	ND		1.0	0.41	ug/L			03/11/24 15:30	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/11/24 15:30	1
Bromoform	ND		1.0	0.26	ug/L			03/11/24 15:30	1
Bromomethane	ND		1.0	0.69	ug/L			03/11/24 15:30	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/11/24 15:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/11/24 15:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/11/24 15:30	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/11/24 15:30	1
Chloroethane	ND		1.0	0.32	ug/L			03/11/24 15:30	1
Chloroform	ND		1.0	0.34	ug/L			03/11/24 15:30	1
Chloromethane	ND		1.0	0.35	ug/L			03/11/24 15:30	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/11/24 15:30	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/11/24 15:30	1
Cyclohexane	ND		1.0	0.18	ug/L			03/11/24 15:30	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/11/24 15:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/11/24 15:30	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/11/24 15:30	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/11/24 15:30	1
Methyl acetate	ND		2.5	1.3	ug/L			03/11/24 15:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/11/24 15:30	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/11/24 15:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/11/24 15:30	1
Styrene	ND		1.0	0.73	ug/L			03/11/24 15:30	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/11/24 15:30	1
Toluene	ND		1.0	0.51	ug/L			03/11/24 15:30	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/11/24 15:30	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/11/24 15:30	1
Trichloroethene	ND		1.0	0.46	ug/L			03/11/24 15:30	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/11/24 15:30	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/11/24 15:30	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/11/24 15:30	1

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

Lab Sample ID: MB 480-703213/11
Matrix: Water
Analysis Batch: 703213

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*109*		*80 - 120*		*03/11/24 15:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*03/11/24 15:30*	*1*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*		*03/11/24 15:30*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*03/11/24 15:30*	*1*

Lab Sample ID: LCS 480-703213/9
Matrix: Water
Analysis Batch: 703213

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-Trichloroethane	25.0	24.1		ug/L		96	73 - 126
1,1,2,2-Tetrachloroethane	25.0	27.2		ug/L		109	76 - 120
1,1,2-Trichloroethane	25.0	27.8		ug/L		111	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.6		ug/L		90	61 - 148
1,1-Dichloroethane	25.0	25.5		ug/L		102	77 - 120
1,1-Dichloroethene	25.0	23.5		ug/L		94	66 - 127
1,2,4-Trichlorobenzene	25.0	28.2		ug/L		113	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	26.2		ug/L		105	56 - 134
1,2-Dichlorobenzene	25.0	27.5		ug/L		110	80 - 124
1,2-Dichloroethane	25.0	26.0		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	26.9		ug/L		108	76 - 120
1,3-Dichlorobenzene	25.0	27.0		ug/L		108	77 - 120
1,4-Dichlorobenzene	25.0	26.6		ug/L		107	80 - 120
2-Butanone (MEK)	125	120		ug/L		96	57 - 140
2-Hexanone	125	124		ug/L		99	65 - 127
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		98	71 - 125
Acetone	125	118		ug/L		95	56 - 142
Benzene	25.0	25.2		ug/L		101	71 - 124
Bromodichloromethane	25.0	26.6		ug/L		107	80 - 122
Bromoform	25.0	28.8		ug/L		115	61 - 132
Bromomethane	25.0	27.0		ug/L		108	55 - 144
Carbon disulfide	25.0	21.9		ug/L		88	59 - 134
Carbon tetrachloride	25.0	24.0		ug/L		96	72 - 134
Chlorobenzene	25.0	26.6		ug/L		106	80 - 120
Dibromochloromethane	25.0	28.8		ug/L		115	75 - 125
Chloroethane	25.0	29.1		ug/L		116	69 - 136
Chloroform	25.0	24.7		ug/L		99	73 - 127
Chloromethane	25.0	25.6		ug/L		103	68 - 124
cis-1,2-Dichloroethene	25.0	26.1		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	27.9		ug/L		112	74 - 124
Cyclohexane	25.0	22.9		ug/L		91	59 - 135
Dichlorodifluoromethane	25.0	26.1		ug/L		104	59 - 135
Ethylbenzene	25.0	25.6		ug/L		102	77 - 123
1,2-Dibromoethane	25.0	27.9		ug/L		112	77 - 120
Isopropylbenzene	25.0	25.9		ug/L		104	77 - 122
Methyl acetate	50.0	49.6		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	25.4		ug/L		102	77 - 120
Methylcyclohexane	25.0	23.4		ug/L		94	68 - 134

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

Lab Sample ID: LCS 480-703213/9
Matrix: Water
Analysis Batch: 703213

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	26.0		ug/L		104	75 - 124
Styrene	25.0	26.9		ug/L		107	80 - 120
Tetrachloroethene	25.0	25.9		ug/L		103	74 - 122
Toluene	25.0	25.8		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	24.5		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	29.3		ug/L		117	80 - 120
Trichloroethene	25.0	25.3		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	28.6		ug/L		114	62 - 150
Vinyl chloride	25.0	28.0		ug/L		112	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*110*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*
Dibromofluoromethane (Surr)	*109*		*75 - 123*

Lab Sample ID: LCSD 480-703213/37
Matrix: Water
Analysis Batch: 703213

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
1,1,1-Trichloroethane	25.0	27.5		ug/L		110	73 - 126	13	15
1,1,2,2-Tetrachloroethane	25.0	27.3		ug/L		109	76 - 120	0	15
1,1,2-Trichloroethane	25.0	27.8		ug/L		111	76 - 122	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.1		ug/L		108	61 - 148	18	20
1,1-Dichloroethane	25.0	27.9		ug/L		112	77 - 120	9	20
1,1-Dichloroethene	25.0	27.4		ug/L		109	66 - 127	15	16
1,2,4-Trichlorobenzene	25.0	27.2		ug/L		109	79 - 122	4	20
1,2-Dibromo-3-Chloropropane	25.0	26.2		ug/L		105	56 - 134	0	15
1,2-Dichlorobenzene	25.0	27.0		ug/L		108	80 - 124	2	20
1,2-Dichloroethane	25.0	27.2		ug/L		109	75 - 120	4	20
1,2-Dichloropropane	25.0	28.0		ug/L		112	76 - 120	4	20
1,3-Dichlorobenzene	25.0	26.9		ug/L		108	77 - 120	0	20
1,4-Dichlorobenzene	25.0	26.5		ug/L		106	80 - 120	1	20
2-Butanone (MEK)	125	130		ug/L		104	57 - 140	8	20
2-Hexanone	125	132		ug/L		105	65 - 127	6	15
4-Methyl-2-pentanone (MIBK)	125	130		ug/L		104	71 - 125	6	35
Acetone	125	113		ug/L		90	56 - 142	5	15
Benzene	25.0	27.7		ug/L		111	71 - 124	9	13
Bromodichloromethane	25.0	26.8		ug/L		107	80 - 122	1	15
Bromoform	25.0	26.2		ug/L		105	61 - 132	9	15
Bromomethane	25.0	29.9		ug/L		120	55 - 144	10	15
Carbon disulfide	25.0	24.0		ug/L		96	59 - 134	9	15
Carbon tetrachloride	25.0	26.8		ug/L		107	72 - 134	11	15
Chlorobenzene	25.0	27.3		ug/L		109	80 - 120	3	25
Dibromochloromethane	25.0	27.3		ug/L		109	75 - 125	5	15
Chloroethane	25.0	32.5		ug/L		130	69 - 136	11	15
Chloroform	25.0	26.5		ug/L		106	73 - 127	7	20

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

Lab Sample ID: LCSD 480-703213/37
Matrix: Water
Analysis Batch: 703213

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
Chloromethane			25.0	27.7		ug/L		111	68 - 124	8	15
cis-1,2-Dichloroethene			25.0	27.8		ug/L		111	74 - 124	6	15
cis-1,3-Dichloropropene			25.0	26.7		ug/L		107	74 - 124	4	15
Cyclohexane			25.0	27.4		ug/L		110	59 - 135	18	20
Dichlorodifluoromethane			25.0	28.1		ug/L		112	59 - 135	7	20
Ethylbenzene			25.0	27.3		ug/L		109	77 - 123	7	15
1,2-Dibromoethane			25.0	27.8		ug/L		111	77 - 120	1	15
Isopropylbenzene			25.0	27.6		ug/L		110	77 - 122	6	20
Methyl acetate			50.0	54.4		ug/L		109	74 - 133	9	20
Methyl tert-butyl ether			25.0	25.6		ug/L		102	77 - 120	1	37
Methylcyclohexane			25.0	27.3		ug/L		109	68 - 134	15	20
Methylene Chloride			25.0	27.1		ug/L		108	75 - 124	4	15
Styrene			25.0	27.0		ug/L		108	80 - 120	0	20
Tetrachloroethene			25.0	28.5		ug/L		114	74 - 122	10	20
Toluene			25.0	27.3		ug/L		109	80 - 122	6	15
trans-1,2-Dichloroethene			25.0	27.7		ug/L		111	73 - 127	12	20
trans-1,3-Dichloropropene			25.0	26.9		ug/L		108	80 - 120	8	15
Trichloroethene			25.0	27.9		ug/L		111	74 - 123	9	16
Trichlorofluoromethane			25.0	31.0		ug/L		124	62 - 150	8	20
Vinyl chloride			25.0	29.9		ug/L		120	65 - 133	7	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*106*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*
Dibromofluoromethane (Surr)	*109*		*75 - 123*

Lab Sample ID: MB 480-703350/11
Matrix: Water
Analysis Batch: 703350

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-Trichloroethane	ND		1.0	0.82	ug/L			03/12/24 14:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/12/24 14:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/12/24 14:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/12/24 14:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/12/24 14:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/12/24 14:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/12/24 14:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/12/24 14:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/12/24 14:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/12/24 14:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/12/24 14:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/12/24 14:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/12/24 14:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/12/24 14:37	1
2-Hexanone	ND		5.0	1.2	ug/L			03/12/24 14:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/12/24 14:37	1

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

Lab Sample ID: MB 480-703350/11
Matrix: Water
Analysis Batch: 703350

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			03/12/24 14:37	1
Benzene	ND		1.0	0.41	ug/L			03/12/24 14:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/12/24 14:37	1
Bromoform	ND		1.0	0.26	ug/L			03/12/24 14:37	1
Bromomethane	ND		1.0	0.69	ug/L			03/12/24 14:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/12/24 14:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/12/24 14:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/12/24 14:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/12/24 14:37	1
Chloroethane	ND		1.0	0.32	ug/L			03/12/24 14:37	1
Chloroform	ND		1.0	0.34	ug/L			03/12/24 14:37	1
Chloromethane	ND		1.0	0.35	ug/L			03/12/24 14:37	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/12/24 14:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/12/24 14:37	1
Cyclohexane	ND		1.0	0.18	ug/L			03/12/24 14:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/12/24 14:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/12/24 14:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/12/24 14:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/12/24 14:37	1
Methyl acetate	ND		2.5	1.3	ug/L			03/12/24 14:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/12/24 14:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/12/24 14:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/12/24 14:37	1
Styrene	ND		1.0	0.73	ug/L			03/12/24 14:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/12/24 14:37	1
Toluene	ND		1.0	0.51	ug/L			03/12/24 14:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/12/24 14:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/12/24 14:37	1
Trichloroethene	ND		1.0	0.46	ug/L			03/12/24 14:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/12/24 14:37	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/12/24 14:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/12/24 14:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*114*		*80 - 120*		*03/12/24 14:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*		*03/12/24 14:37*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*03/12/24 14:37*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*03/12/24 14:37*	*1*

Lab Sample ID: LCS 480-703350/9
Matrix: Water
Analysis Batch: 703350

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-Trichloroethane	25.0	25.5		ug/L		102	73 - 126
1,1,2,2-Tetrachloroethane	25.0	27.9		ug/L		112	76 - 120
1,1,2-Trichloroethane	25.0	28.2		ug/L		113	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.6		ug/L		102	61 - 148

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

Lab Sample ID: LCS 480-703350/9
Matrix: Water
Analysis Batch: 703350

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	25.0	26.3		ug/L		105	77 - 120
1,1-Dichloroethene	25.0	24.6		ug/L		98	66 - 127
1,2,4-Trichlorobenzene	25.0	26.2		ug/L		105	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	28.4		ug/L		114	56 - 134
1,2-Dichlorobenzene	25.0	26.9		ug/L		108	80 - 124
1,2-Dichloroethane	25.0	26.7		ug/L		107	75 - 120
1,2-Dichloropropane	25.0	26.3		ug/L		105	76 - 120
1,3-Dichlorobenzene	25.0	26.7		ug/L		107	77 - 120
1,4-Dichlorobenzene	25.0	26.3		ug/L		105	80 - 120
2-Butanone (MEK)	125	127		ug/L		102	57 - 140
2-Hexanone	125	139		ug/L		111	65 - 127
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	71 - 125
Acetone	125	131		ug/L		105	56 - 142
Benzene	25.0	24.8		ug/L		99	71 - 124
Bromodichloromethane	25.0	25.0		ug/L		100	80 - 122
Bromoform	25.0	23.6		ug/L		94	61 - 132
Bromomethane	25.0	19.1		ug/L		76	55 - 144
Carbon disulfide	25.0	21.9		ug/L		88	59 - 134
Carbon tetrachloride	25.0	24.7		ug/L		99	72 - 134
Chlorobenzene	25.0	26.6		ug/L		107	80 - 120
Dibromochloromethane	25.0	26.5		ug/L		106	75 - 125
Chloroethane	25.0	20.5		ug/L		82	69 - 136
Chloroform	25.0	24.6		ug/L		99	73 - 127
Chloromethane	25.0	21.3		ug/L		85	68 - 124
cis-1,2-Dichloroethene	25.0	24.5		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124
Cyclohexane	25.0	26.5		ug/L		106	59 - 135
Dichlorodifluoromethane	25.0	22.5		ug/L		90	59 - 135
Ethylbenzene	25.0	27.9		ug/L		112	77 - 123
1,2-Dibromoethane	25.0	27.3		ug/L		109	77 - 120
Isopropylbenzene	25.0	29.2		ug/L		117	77 - 122
Methyl acetate	50.0	49.8		ug/L		100	74 - 133
Methyl tert-butyl ether	25.0	24.5		ug/L		98	77 - 120
Methylcyclohexane	25.0	25.9		ug/L		104	68 - 134
Methylene Chloride	25.0	24.4		ug/L		98	75 - 124
Styrene	25.0	27.0		ug/L		108	80 - 120
Tetrachloroethene	25.0	26.2		ug/L		105	74 - 122
Toluene	25.0	27.3		ug/L		109	80 - 122
trans-1,2-Dichloroethene	25.0	24.4		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	29.4		ug/L		118	80 - 120
Trichloroethene	25.0	25.5		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	19.1		ug/L		76	62 - 150
Vinyl chloride	25.0	22.4		ug/L		90	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*114*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*114*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*

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

Lab Sample ID: LCS 480-703350/9
Matrix: Water
Analysis Batch: 703350

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*100*		*75 - 123*

Lab Sample ID: MB 480-703451/8
Matrix: Water
Analysis Batch: 703451

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-Trichloroethane	ND		1.0	0.82	ug/L			03/13/24 03:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/13/24 03:50	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/13/24 03:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/13/24 03:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/13/24 03:50	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/13/24 03:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/13/24 03:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/13/24 03:50	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/13/24 03:50	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/13/24 03:50	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/13/24 03:50	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/13/24 03:50	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/13/24 03:50	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/13/24 03:50	1
2-Hexanone	ND		5.0	1.2	ug/L			03/13/24 03:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/13/24 03:50	1
Acetone	ND		10	3.0	ug/L			03/13/24 03:50	1
Benzene	ND		1.0	0.41	ug/L			03/13/24 03:50	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/13/24 03:50	1
Bromoform	ND		1.0	0.26	ug/L			03/13/24 03:50	1
Bromomethane	ND		1.0	0.69	ug/L			03/13/24 03:50	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/13/24 03:50	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/13/24 03:50	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/13/24 03:50	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/13/24 03:50	1
Chloroethane	ND		1.0	0.32	ug/L			03/13/24 03:50	1
Chloroform	ND		1.0	0.34	ug/L			03/13/24 03:50	1
Chloromethane	ND		1.0	0.35	ug/L			03/13/24 03:50	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/13/24 03:50	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/13/24 03:50	1
Cyclohexane	ND		1.0	0.18	ug/L			03/13/24 03:50	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/13/24 03:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/13/24 03:50	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/13/24 03:50	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/13/24 03:50	1
Methyl acetate	ND		2.5	1.3	ug/L			03/13/24 03:50	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/13/24 03:50	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/13/24 03:50	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/13/24 03:50	1
Styrene	ND		1.0	0.73	ug/L			03/13/24 03:50	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/13/24 03:50	1

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

Lab Sample ID: MB 480-703451/8
Matrix: Water
Analysis Batch: 703451

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.51	ug/L			03/13/24 03:50	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/13/24 03:50	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/13/24 03:50	1
Trichloroethene	ND		1.0	0.46	ug/L			03/13/24 03:50	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/13/24 03:50	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/13/24 03:50	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/13/24 03:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/13/24 03:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*03/13/24 03:50*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*03/13/24 03:50*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*03/13/24 03:50*	*1*

Lab Sample ID: LCS 480-703451/6
Matrix: Water
Analysis Batch: 703451

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-Trichloroethane	25.0	21.6		ug/L		86	73 - 126
1,1,2,2-Tetrachloroethane	25.0	31.1	*+	ug/L		124	76 - 120
1,1,2-Trichloroethane	25.0	29.0		ug/L		116	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.4		ug/L		86	61 - 148
1,1-Dichloroethane	25.0	24.0		ug/L		96	77 - 120
1,1-Dichloroethene	25.0	22.1		ug/L		88	66 - 127
1,2,4-Trichlorobenzene	25.0	28.1		ug/L		112	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	31.0		ug/L		124	56 - 134
1,2-Dichlorobenzene	25.0	27.8		ug/L		111	80 - 124
1,2-Dichloroethane	25.0	24.3		ug/L		97	75 - 120
1,2-Dichloropropane	25.0	25.4		ug/L		102	76 - 120
1,3-Dichlorobenzene	25.0	27.1		ug/L		109	77 - 120
1,4-Dichlorobenzene	25.0	26.9		ug/L		108	80 - 120
2-Butanone (MEK)	125	119		ug/L		95	57 - 140
2-Hexanone	125	140		ug/L		112	65 - 127
4-Methyl-2-pentanone (MIBK)	125	140		ug/L		112	71 - 125
Acetone	125	108		ug/L		87	56 - 142
Benzene	25.0	23.2		ug/L		93	71 - 124
Bromodichloromethane	25.0	23.6		ug/L		94	80 - 122
Bromoform	25.0	23.3		ug/L		93	61 - 132
Bromomethane	25.0	14.9		ug/L		60	55 - 144
Carbon disulfide	25.0	19.6		ug/L		79	59 - 134
Carbon tetrachloride	25.0	20.4		ug/L		81	72 - 134
Chlorobenzene	25.0	26.4		ug/L		105	80 - 120
Dibromochloromethane	25.0	25.8		ug/L		103	75 - 125
Chloroethane	25.0	15.8	*-	ug/L		63	69 - 136
Chloroform	25.0	22.6		ug/L		91	73 - 127
Chloromethane	25.0	18.1		ug/L		72	68 - 124
cis-1,2-Dichloroethene	25.0	23.3		ug/L		93	74 - 124

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

Lab Sample ID: LCS 480-703451/6
Matrix: Water
Analysis Batch: 703451

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,3-Dichloropropene	25.0	24.0		ug/L		96	74 - 124
Cyclohexane	25.0	22.5		ug/L		90	59 - 135
Dichlorodifluoromethane	25.0	21.6		ug/L		86	59 - 135
Ethylbenzene	25.0	26.4		ug/L		106	77 - 123
1,2-Dibromoethane	25.0	28.2		ug/L		113	77 - 120
Isopropylbenzene	25.0	29.0		ug/L		116	77 - 122
Methyl acetate	50.0	51.3		ug/L		103	74 - 133
Methyl tert-butyl ether	25.0	23.9		ug/L		96	77 - 120
Methylcyclohexane	25.0	22.3		ug/L		89	68 - 134
Methylene Chloride	25.0	23.8		ug/L		95	75 - 124
Styrene	25.0	26.4		ug/L		105	80 - 120
Tetrachloroethene	25.0	24.4		ug/L		98	74 - 122
Toluene	25.0	26.4		ug/L		105	80 - 122
trans-1,2-Dichloroethene	25.0	22.3		ug/L		89	73 - 127
trans-1,3-Dichloropropene	25.0	28.2		ug/L		113	80 - 120
Trichloroethene	25.0	23.2		ug/L		93	74 - 123
Trichlorofluoromethane	25.0	15.7		ug/L		63	62 - 150
Vinyl chloride	25.0	19.0		ug/L		76	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*91*		*75 - 123*

Lab Sample ID: LCSD 480-703451/35
Matrix: Water
Analysis Batch: 703451

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
1,1,1-Trichloroethane	25.0	23.1		ug/L		93	73 - 126	7	15
1,1,2,2-Tetrachloroethane	25.0	30.2	*+	ug/L		121	76 - 120	3	15
1,1,2-Trichloroethane	25.0	29.4		ug/L		117	76 - 122	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.5		ug/L		98	61 - 148	13	20
1,1-Dichloroethane	25.0	25.1		ug/L		100	77 - 120	5	20
1,1-Dichloroethene	25.0	24.0		ug/L		96	66 - 127	8	16
1,2,4-Trichlorobenzene	25.0	27.6		ug/L		111	79 - 122	2	20
1,2-Dibromo-3-Chloropropane	25.0	29.0		ug/L		116	56 - 134	7	15
1,2-Dichlorobenzene	25.0	27.0		ug/L		108	80 - 124	3	20
1,2-Dichloroethane	25.0	24.0		ug/L		96	75 - 120	1	20
1,2-Dichloropropane	25.0	25.5		ug/L		102	76 - 120	0	20
1,3-Dichlorobenzene	25.0	27.0		ug/L		108	77 - 120	1	20
1,4-Dichlorobenzene	25.0	26.4		ug/L		106	80 - 120	2	20
2-Butanone (MEK)	125	117		ug/L		94	57 - 140	2	20
2-Hexanone	125	140		ug/L		112	65 - 127	0	15
4-Methyl-2-pentanone (MIBK)	125	140		ug/L		112	71 - 125	0	35
Acetone	125	107		ug/L		86	56 - 142	1	15
Benzene	25.0	24.2		ug/L		97	71 - 124	4	13

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

Lab Sample ID: LCSD 480-703451/35
Matrix: Water
Analysis Batch: 703451

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
Bromodichloromethane	25.0	22.7		ug/L		91	80 - 122	4	15
Bromoform	25.0	22.9		ug/L		92	61 - 132	2	15
Bromomethane	25.0	15.7		ug/L		63	55 - 144	5	15
Carbon disulfide	25.0	21.0		ug/L		84	59 - 134	7	15
Carbon tetrachloride	25.0	22.6		ug/L		90	72 - 134	10	15
Chlorobenzene	25.0	27.3		ug/L		109	80 - 120	3	25
Dibromochloromethane	25.0	25.4		ug/L		102	75 - 125	1	15
Chloroethane	25.0	17.5		ug/L		70	69 - 136	10	15
Chloroform	25.0	23.2		ug/L		93	73 - 127	2	20
Chloromethane	25.0	19.5		ug/L		78	68 - 124	8	15
cis-1,2-Dichloroethene	25.0	23.7		ug/L		95	74 - 124	2	15
cis-1,3-Dichloropropene	25.0	22.9		ug/L		91	74 - 124	5	15
Cyclohexane	25.0	26.1		ug/L		105	59 - 135	15	20
Dichlorodifluoromethane	25.0	24.1		ug/L		96	59 - 135	11	20
Ethylbenzene	25.0	28.2		ug/L		113	77 - 123	7	15
1,2-Dibromoethane	25.0	27.9		ug/L		112	77 - 120	1	15
Isopropylbenzene	25.0	30.1		ug/L		121	77 - 122	4	20
Methyl acetate	50.0	50.4		ug/L		101	74 - 133	2	20
Methyl tert-butyl ether	25.0	23.2		ug/L		93	77 - 120	3	37
Methylcyclohexane	25.0	25.0		ug/L		100	68 - 134	11	20
Methylene Chloride	25.0	24.3		ug/L		97	75 - 124	2	15
Styrene	25.0	27.1		ug/L		109	80 - 120	3	20
Tetrachloroethene	25.0	27.0		ug/L		108	74 - 122	10	20
Toluene	25.0	28.1		ug/L		113	80 - 122	7	15
trans-1,2-Dichloroethene	25.0	23.9		ug/L		96	73 - 127	7	20
trans-1,3-Dichloropropene	25.0	26.8		ug/L		107	80 - 120	5	15
Trichloroethene	25.0	24.4		ug/L		98	74 - 123	5	16
Trichlorofluoromethane	25.0	17.4		ug/L		70	62 - 150	11	20
Vinyl chloride	25.0	20.9		ug/L		84	65 - 133	10	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*
Dibromofluoromethane (Surr)	*88*		*75 - 123*

Lab Sample ID: MB 480-703570/8
Matrix: Water
Analysis Batch: 703570

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-Trichloroethane	ND		1.0	0.82	ug/L			03/13/24 13:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/13/24 13:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/13/24 13:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/13/24 13:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/13/24 13:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/13/24 13:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/13/24 13:40	1

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

Lab Sample ID: MB 480-703570/8
Matrix: Water
Analysis Batch: 703570

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/13/24 13:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/13/24 13:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/13/24 13:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/13/24 13:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/13/24 13:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/13/24 13:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/13/24 13:40	1
2-Hexanone	ND		5.0	1.2	ug/L			03/13/24 13:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/13/24 13:40	1
Acetone	ND		10	3.0	ug/L			03/13/24 13:40	1
Benzene	ND		1.0	0.41	ug/L			03/13/24 13:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/13/24 13:40	1
Bromoform	ND		1.0	0.26	ug/L			03/13/24 13:40	1
Bromomethane	ND		1.0	0.69	ug/L			03/13/24 13:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/13/24 13:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/13/24 13:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/13/24 13:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/13/24 13:40	1
Chloroethane	ND		1.0	0.32	ug/L			03/13/24 13:40	1
Chloroform	ND		1.0	0.34	ug/L			03/13/24 13:40	1
Chloromethane	ND		1.0	0.35	ug/L			03/13/24 13:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/13/24 13:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/13/24 13:40	1
Cyclohexane	ND		1.0	0.18	ug/L			03/13/24 13:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/13/24 13:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/13/24 13:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/13/24 13:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/13/24 13:40	1
Methyl acetate	ND		2.5	1.3	ug/L			03/13/24 13:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/13/24 13:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/13/24 13:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/13/24 13:40	1
Styrene	ND		1.0	0.73	ug/L			03/13/24 13:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/13/24 13:40	1
Toluene	ND		1.0	0.51	ug/L			03/13/24 13:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/13/24 13:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/13/24 13:40	1
Trichloroethene	ND		1.0	0.46	ug/L			03/13/24 13:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/13/24 13:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/13/24 13:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/13/24 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*03/13/24 13:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*77 - 120*		*03/13/24 13:40*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*03/13/24 13:40*	*1*
Dibromofluoromethane (Surr)	*88*		*75 - 123*		*03/13/24 13:40*	*1*

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

Lab Sample ID: LCS 480-703570/6
Matrix: Water
Analysis Batch: 703570

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-Trichloroethane	25.0	25.0		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	27.6		ug/L		110	76 - 120
1,1,2-Trichloroethane	25.0	26.8		ug/L		107	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.6		ug/L		102	61 - 148
1,1-Dichloroethane	25.0	24.4		ug/L		98	77 - 120
1,1-Dichloroethene	25.0	23.9		ug/L		96	66 - 127
1,2,4-Trichlorobenzene	25.0	26.7		ug/L		107	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	28.6		ug/L		114	56 - 134
1,2-Dichlorobenzene	25.0	27.2		ug/L		109	80 - 124
1,2-Dichloroethane	25.0	23.7		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	25.4		ug/L		102	76 - 120
1,3-Dichlorobenzene	25.0	27.0		ug/L		108	77 - 120
1,4-Dichlorobenzene	25.0	27.8		ug/L		111	80 - 120
2-Butanone (MEK)	125	113		ug/L		90	57 - 140
2-Hexanone	125	124		ug/L		99	65 - 127
4-Methyl-2-pentanone (MIBK)	125	129		ug/L		103	71 - 125
Acetone	125	89.3		ug/L		71	56 - 142
Benzene	25.0	24.7		ug/L		99	71 - 124
Bromodichloromethane	25.0	26.6		ug/L		107	80 - 122
Bromoform	25.0	26.1		ug/L		105	61 - 132
Bromomethane	25.0	21.2		ug/L		85	55 - 144
Carbon disulfide	25.0	25.0		ug/L		100	59 - 134
Carbon tetrachloride	25.0	25.5		ug/L		102	72 - 134
Chlorobenzene	25.0	27.2		ug/L		109	80 - 120
Dibromochloromethane	25.0	30.3		ug/L		121	75 - 125
Chloroethane	25.0	22.8		ug/L		91	69 - 136
Chloroform	25.0	22.9		ug/L		92	73 - 127
Chloromethane	25.0	23.0		ug/L		92	68 - 124
cis-1,2-Dichloroethene	25.0	23.2		ug/L		93	74 - 124
cis-1,3-Dichloropropene	25.0	28.0		ug/L		112	74 - 124
Cyclohexane	25.0	26.1		ug/L		104	59 - 135
Dichlorodifluoromethane	25.0	24.3		ug/L		97	59 - 135
Ethylbenzene	25.0	27.5		ug/L		110	77 - 123
1,2-Dibromoethane	25.0	25.8		ug/L		103	77 - 120
Isopropylbenzene	25.0	30.8	*+	ug/L		123	77 - 122
Methyl acetate	50.0	43.1		ug/L		86	74 - 133
Methyl tert-butyl ether	25.0	22.9		ug/L		92	77 - 120
Methylcyclohexane	25.0	27.7		ug/L		111	68 - 134
Methylene Chloride	25.0	21.2		ug/L		85	75 - 124
Styrene	25.0	29.1		ug/L		117	80 - 120
Tetrachloroethene	25.0	28.0		ug/L		112	74 - 122
Toluene	25.0	28.6		ug/L		114	80 - 122
trans-1,2-Dichloroethene	25.0	24.4		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	30.2	*+	ug/L		121	80 - 120
Trichloroethene	25.0	25.5		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	26.0		ug/L		104	62 - 150
Vinyl chloride	25.0	25.8		ug/L		103	65 - 133

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

Lab Sample ID: LCS 480-703570/6
Matrix: Water
Analysis Batch: 703570

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	*103*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*89*		*75 - 123*

Lab Sample ID: MB 480-703703/8
Matrix: Water
Analysis Batch: 703703

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-Trichloroethane	ND		1.0	0.82	ug/L			03/14/24 13:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/14/24 13:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/14/24 13:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/14/24 13:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/14/24 13:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/14/24 13:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/14/24 13:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/14/24 13:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/14/24 13:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/14/24 13:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/14/24 13:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/14/24 13:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/14/24 13:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/14/24 13:32	1
2-Hexanone	ND		5.0	1.2	ug/L			03/14/24 13:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/14/24 13:32	1
Acetone	ND		10	3.0	ug/L			03/14/24 13:32	1
Benzene	ND		1.0	0.41	ug/L			03/14/24 13:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/14/24 13:32	1
Bromoform	ND		1.0	0.26	ug/L			03/14/24 13:32	1
Bromomethane	ND		1.0	0.69	ug/L			03/14/24 13:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/14/24 13:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/14/24 13:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/14/24 13:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/14/24 13:32	1
Chloroethane	ND		1.0	0.32	ug/L			03/14/24 13:32	1
Chloroform	ND		1.0	0.34	ug/L			03/14/24 13:32	1
Chloromethane	ND		1.0	0.35	ug/L			03/14/24 13:32	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/14/24 13:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/14/24 13:32	1
Cyclohexane	ND		1.0	0.18	ug/L			03/14/24 13:32	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/14/24 13:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/14/24 13:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/14/24 13:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/14/24 13:32	1
Methyl acetate	ND		2.5	1.3	ug/L			03/14/24 13:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/14/24 13:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/14/24 13:32	1

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

Lab Sample ID: MB 480-703703/8
Matrix: Water
Analysis Batch: 703703

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0	0.44	ug/L			03/14/24 13:32	1
Styrene	ND		1.0	0.73	ug/L			03/14/24 13:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/14/24 13:32	1
Toluene	ND		1.0	0.51	ug/L			03/14/24 13:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/14/24 13:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/14/24 13:32	1
Trichloroethene	ND		1.0	0.46	ug/L			03/14/24 13:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/14/24 13:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/14/24 13:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/14/24 13:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 120*		*03/14/24 13:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*		*03/14/24 13:32*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*03/14/24 13:32*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*03/14/24 13:32*	*1*

Lab Sample ID: LCS 480-703703/6
Matrix: Water
Analysis Batch: 703703

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-Trichloroethane	25.0	26.1		ug/L		104	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.8		ug/L		107	76 - 120
1,1,2-Trichloroethane	25.0	26.0		ug/L		104	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.9		ug/L		100	61 - 148
1,1-Dichloroethane	25.0	24.8		ug/L		99	77 - 120
1,1-Dichloroethene	25.0	23.4		ug/L		94	66 - 127
1,2,4-Trichlorobenzene	25.0	27.4		ug/L		109	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	27.8		ug/L		111	56 - 134
1,2-Dichlorobenzene	25.0	26.4		ug/L		106	80 - 124
1,2-Dichloroethane	25.0	23.1		ug/L		92	75 - 120
1,2-Dichloropropane	25.0	25.2		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	26.1		ug/L		105	77 - 120
1,4-Dichlorobenzene	25.0	27.1		ug/L		108	80 - 120
2-Butanone (MEK)	125	108		ug/L		86	57 - 140
2-Hexanone	125	127		ug/L		102	65 - 127
4-Methyl-2-pentanone (MIBK)	125	126		ug/L		101	71 - 125
Acetone	125	83.1		ug/L		67	56 - 142
Benzene	25.0	24.4		ug/L		98	71 - 124
Bromodichloromethane	25.0	24.9		ug/L		99	80 - 122
Bromoform	25.0	26.5		ug/L		106	61 - 132
Bromomethane	25.0	20.9		ug/L		84	55 - 144
Carbon disulfide	25.0	25.8		ug/L		103	59 - 134
Carbon tetrachloride	25.0	28.0		ug/L		112	72 - 134
Chlorobenzene	25.0	25.1		ug/L		101	80 - 120
Dibromochloromethane	25.0	28.1		ug/L		112	75 - 125
Chloroethane	25.0	20.8		ug/L		83	69 - 136

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

Lab Sample ID: LCS 480-703703/6
Matrix: Water
Analysis Batch: 703703

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	25.0	23.6		ug/L		94	73 - 127
Chloromethane	25.0	20.9		ug/L		84	68 - 124
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124
Cyclohexane	25.0	27.2		ug/L		109	59 - 135
Dichlorodifluoromethane	25.0	21.6		ug/L		86	59 - 135
Ethylbenzene	25.0	27.2		ug/L		109	77 - 123
1,2-Dibromoethane	25.0	25.9		ug/L		104	77 - 120
Isopropylbenzene	25.0	29.8		ug/L		119	77 - 122
Methyl acetate	50.0	41.9		ug/L		84	74 - 133
Methyl tert-butyl ether	25.0	23.8		ug/L		95	77 - 120
Methylcyclohexane	25.0	26.6		ug/L		107	68 - 134
Methylene Chloride	25.0	22.2		ug/L		89	75 - 124
Styrene	25.0	27.5		ug/L		110	80 - 120
Tetrachloroethene	25.0	26.5		ug/L		106	74 - 122
Toluene	25.0	27.6		ug/L		110	80 - 122
trans-1,2-Dichloroethene	25.0	24.6		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	29.6		ug/L		118	80 - 120
Trichloroethene	25.0	22.7		ug/L		91	74 - 123
Trichlorofluoromethane	25.0	23.2		ug/L		93	62 - 150
Vinyl chloride	25.0	22.2		ug/L		89	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*89*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-703614/1-A
Matrix: Water
Analysis Batch: 703700

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 703614

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		03/13/24 13:47	03/14/24 12:40	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*15 - 110*	*03/13/24 13:47*	*03/14/24 12:40*	*1*

Lab Sample ID: LCS 480-703614/2-A
Matrix: Water
Analysis Batch: 703700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 703614

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.25		ug/L		113	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*39*		*15 - 110*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: 480-217677-3 MS
Client Sample ID: MW-22-030724
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 703874
Prep Batch: 703614

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	1700		2.00	1800	4	ug/L		3354	40 - 140		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*36*		*15 - 110*

Lab Sample ID: 480-217677-3 MSD
Client Sample ID: MW-22-030724
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 703874
Prep Batch: 703614

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	1700		2.00	1720	4	ug/L		-311	40 - 140	4	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*34*		*15 - 110*

GC/MS VOA

Analysis Batch: 703213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217677-2	MW-21-030724	Total/NA	Water	8260C	
480-217677-3	MW-22-030724	Total/NA	Water	8260C	
MB 480-703213/11	Method Blank	Total/NA	Water	8260C	
LCS 480-703213/9	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-703213/37	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 703350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217677-1	TMW-02-030724	Total/NA	Water	8260C	
MB 480-703350/11	Method Blank	Total/NA	Water	8260C	
LCS 480-703350/9	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 703451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217677-4	TMW-20-030724	Total/NA	Water	8260C	
480-217677-5	PTMW-01-030724	Total/NA	Water	8260C	
480-217677-9	MW-23-030824	Total/NA	Water	8260C	
480-217677-11	MW-06S-030824	Total/NA	Water	8260C	
480-217677-12	MW-24-030824	Total/NA	Water	8260C	
480-217677-13	TB-02-030824	Total/NA	Water	8260C	
MB 480-703451/8	Method Blank	Total/NA	Water	8260C	
LCS 480-703451/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-703451/35	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 703570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217677-8	MW-07S-030824	Total/NA	Water	8260C	
480-217677-9 - DL	MW-23-030824	Total/NA	Water	8260C	
480-217677-11 - DL	MW-06S-030824	Total/NA	Water	8260C	
MB 480-703570/8	Method Blank	Total/NA	Water	8260C	
LCS 480-703570/6	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 703703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217677-8 - DL	MW-07S-030824	Total/NA	Water	8260C	
MB 480-703703/8	Method Blank	Total/NA	Water	8260C	
LCS 480-703703/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 703614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217677-3	MW-22-030724	Total/NA	Water	3510C	
480-217677-6	MW-09-030824	Total/NA	Water	3510C	
480-217677-7	MW-10-030824	Total/NA	Water	3510C	
480-217677-8	MW-07S-030824	Total/NA	Water	3510C	
480-217677-9	MW-23-030824	Total/NA	Water	3510C	
480-217677-10	MW-11R-030824	Total/NA	Water	3510C	
480-217677-11	MW-06S-030824	Total/NA	Water	3510C	
MB 480-703614/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-703614/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 703614 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217677-3 MS	MW-22-030724	Total/NA	Water	3510C	
480-217677-3 MSD	MW-22-030724	Total/NA	Water	3510C	

Analysis Batch: 703700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217677-6	MW-09-030824	Total/NA	Water	8270D SIM ID	703614
480-217677-7	MW-10-030824	Total/NA	Water	8270D SIM ID	703614
480-217677-8	MW-07S-030824	Total/NA	Water	8270D SIM ID	703614
480-217677-9	MW-23-030824	Total/NA	Water	8270D SIM ID	703614
480-217677-10	MW-11R-030824	Total/NA	Water	8270D SIM ID	703614
480-217677-11	MW-06S-030824	Total/NA	Water	8270D SIM ID	703614
MB 480-703614/1-A	Method Blank	Total/NA	Water	8270D SIM ID	703614
LCS 480-703614/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	703614

Analysis Batch: 703874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217677-3	MW-22-030724	Total/NA	Water	8270D SIM ID	703614
480-217677-3 MS	MW-22-030724	Total/NA	Water	8270D SIM ID	703614
480-217677-3 MSD	MW-22-030724	Total/NA	Water	8270D SIM ID	703614

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: TMW-02-030724
Lab Sample ID: 480-217677-1
Date Collected: 03/07/24 11:56
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		20	703350	CC	EET BUF	03/12/24 22:33

Client Sample ID: MW-21-030724
Lab Sample ID: 480-217677-2
Date Collected: 03/07/24 12:30
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		125	703213	CC	EET BUF	03/11/24 16:47

Client Sample ID: MW-22-030724
Lab Sample ID: 480-217677-3
Date Collected: 03/07/24 13:00
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1000	703213	CC	EET BUF	03/11/24 17:11
Total/NA	Prep	3510C			703614	LSC	EET BUF	03/13/24 13:47
Total/NA	Analysis	8270D SIM ID		200	703874	EMD	EET BUF	03/15/24 12:18

Client Sample ID: TMW-20-030724
Lab Sample ID: 480-217677-4
Date Collected: 03/07/24 13:40
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		500	703451	CC	EET BUF	03/13/24 05:29

Client Sample ID: PTMW-01-030724
Lab Sample ID: 480-217677-5
Date Collected: 03/07/24 14:50
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		200	703451	CC	EET BUF	03/13/24 05:54

Client Sample ID: MW-09-030824
Lab Sample ID: 480-217677-6
Date Collected: 03/08/24 08:00
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			703614	LSC	EET BUF	03/13/24 13:47
Total/NA	Analysis	8270D SIM ID		1	703700	EMD	EET BUF	03/14/24 17:06

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-10-030824
Lab Sample ID: 480-217677-7
Date Collected: 03/08/24 08:30
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			703614	LSC	EET BUF	03/13/24 13:47
Total/NA	Analysis	8270D SIM ID		1	703700	EMD	EET BUF	03/14/24 17:27

Client Sample ID: MW-07S-030824
Lab Sample ID: 480-217677-8
Date Collected: 03/08/24 09:30
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	703570	CC	EET BUF	03/13/24 15:48
Total/NA	Analysis	8260C	DL	2	703703	CC	EET BUF	03/14/24 14:17
Total/NA	Prep	3510C			703614	LSC	EET BUF	03/13/24 13:47
Total/NA	Analysis	8270D SIM ID		1	703700	EMD	EET BUF	03/14/24 17:49

Client Sample ID: MW-23-030824
Lab Sample ID: 480-217677-9
Date Collected: 03/08/24 10:10
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C	DL	10	703570	CC	EET BUF	03/13/24 16:11
Total/NA	Analysis	8260C		4	703451	CC	EET BUF	03/13/24 06:44
Total/NA	Prep	3510C			703614	LSC	EET BUF	03/13/24 13:47
Total/NA	Analysis	8270D SIM ID		1	703700	EMD	EET BUF	03/14/24 18:12

Client Sample ID: MW-11R-030824
Lab Sample ID: 480-217677-10
Date Collected: 03/08/24 10:48
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			703614	LSC	EET BUF	03/13/24 13:47
Total/NA	Analysis	8270D SIM ID		1	703700	EMD	EET BUF	03/14/24 18:34

Client Sample ID: MW-06S-030824
Lab Sample ID: 480-217677-11
Date Collected: 03/08/24 12:20
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C	DL	8	703570	CC	EET BUF	03/13/24 16:33
Total/NA	Analysis	8260C		2	703451	CC	EET BUF	03/13/24 07:08
Total/NA	Prep	3510C			703614	LSC	EET BUF	03/13/24 13:47
Total/NA	Analysis	8270D SIM ID		1	703700	EMD	EET BUF	03/14/24 18:57

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-24-030824
Lab Sample ID: 480-217677-12
Date Collected: 03/08/24 12:58
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	703451	CC	EET BUF	03/13/24 07:33

Client Sample ID: TB-02-030824
Lab Sample ID: 480-217677-13
Date Collected: 03/08/24 00:00
Matrix: Water
Date Received: 03/09/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	703451	CC	EET BUF	03/13/24 07:57

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-217677-1
Project/Site: Phytoremediation Court Street Building 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-217677-1	TMW-02-030724	Water	03/07/24 11:56	03/09/24 08:00
480-217677-2	MW-21-030724	Water	03/07/24 12:30	03/09/24 08:00
480-217677-3	MW-22-030724	Water	03/07/24 13:00	03/09/24 08:00
480-217677-4	TMW-20-030724	Water	03/07/24 13:40	03/09/24 08:00
480-217677-5	PTMW-01-030724	Water	03/07/24 14:50	03/09/24 08:00
480-217677-6	MW-09-030824	Water	03/08/24 08:00	03/09/24 08:00
480-217677-7	MW-10-030824	Water	03/08/24 08:30	03/09/24 08:00
480-217677-8	MW-07S-030824	Water	03/08/24 09:30	03/09/24 08:00
480-217677-9	MW-23-030824	Water	03/08/24 10:10	03/09/24 08:00
480-217677-10	MW-11R-030824	Water	03/08/24 10:48	03/09/24 08:00
480-217677-11	MW-06S-030824	Water	03/08/24 12:20	03/09/24 08:00
480-217677-12	MW-24-030824	Water	03/08/24 12:58	03/09/24 08:00
480-217677-13	TB-02-030824	Water	03/08/24 00:00	03/09/24 08:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Syracuse

Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-192583-40339.2
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: #225	Page: ~~Page 2 of 4~~ 1 of 2
Company: Ramboll Americas Engineering Solutions	PWSID:			Job #: 19410106233
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-506-3236	PO #: ~~1940006251~~ 1940008542			
Email: jason.newton@ramboll.com	WO #: 60622666			
Project Name: Phytoremediation Court Street Building 5	Project #: 48021513			
Site: New York Former LM Court St bldg #5	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	8270D_SIM_MS_ID - SIM List	Total Number of containers	Special Instructions/Note:
Preservation Code:					N	N	A	N		
IMW-02-030724	3-7-24	1156	G	Water	N	N	X			
MW-21-030724	3-7-24	1230	G	Water	N	N	X			
MW-22-030724	3-7-24	1300	G	Water	N	N	X	X		
IMW-20-030724	3-7-24	1340	G	Water	N	N	X			
PTMW-01-030724	3-7-24	1450	G	Water	N	N	X			
MW-09-030824	3-8-24	0800	G	Water	N	N		X		
MW-10-030824	3-8-24	0830	G	Water	N	N		X		
MW-07S-030824	3-8-24	0930	G	Water	N	N	X	X		
MW-23-030824	3-8-24	1010	G	Water	N	N	X	X		
MW-11R-030824	3-8-24	1048	G	Water	N	N		X		
MW-06S-030824	3-8-24	1220	G	Water	N	N	X	X		

480-217677 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 3-8-24 1420	Company: Ramboll	Received by:	Date/Time: 3/8/24 1420	Company: ES-SYR
Relinquished by:	Date/Time: 3-8-24, 1900	Company: SYR	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 3/9/24 800	Company: TRB

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.6 #4 ICE

Ver: 06/08/2021

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information
Client Contact: Jason Newton
Company: Ramboll Americas Engineering Solutions
Address: 333 West Washington Street
City: Syracuse
State, Zip: NY, 13202
Phone: 315-506-3236
Email: jason.newton@ramboll.com
Project Name: Phytoremediation Court Street Building 5
Site: ~~New York~~ Former LM Court St bldg #5

Sampler: Jason Newton
Phone: 315-506-3236
PWSID:
Due Date Requested:
TAT Requested (days): Standard
Compliance Project: Δ Yes Δ No
PO #: ~~1040006251~~ 1940008542
WO #: 60622666
Project #: 48021513
SSOW#:

Lab PM: Schove, John R
E-Mail: John.Schove@et.eurofinsus.com
Carrier Tracking No(s):
State of Origin: Syracuse #225

COC No: 480-192583-40339.3
Page: ~~Page 3 of 4~~ Page 2 of 2
Job #: 194010623 3

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	8270D_SIM_MS_ID - SIM List	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	A	N	X	
MW-24-030824	3-8-24	1258	G	Water	N	N	X			
TB-02-030824	—	—	—	Water	N	N	X			
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological
Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	3-8-24 / 1420	Ramboll	Received by:	3/8/24 1420	ES-SYR
Relinquished by: English	3-8-24, 1900		Received by:		
Relinquished by:			Received by:		

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll Americas Engineering Solutions

Job Number: 480-217677-1

Login Number: 217677
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	RAMBOLL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

PRE-GROUNDWATER COLLECTION TRENCH START-UP GROUNDWATER SAMPLING

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll Americas Engineering Solutions
333 West Washington Street
Syracuse, New York 13202

Generated 11/6/2024 12:41:20 PM

JOB DESCRIPTION

Phytoremediation Court Street Building 5

JOB NUMBER

480-225038-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Eurofins Buffalo

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 Northeast, LLC Project Manager.

Authorization



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Definitions/Glossary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

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

Job ID: 480-225038-1 Eurofins Buffalo

Job Narrative
480-225038-1

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 11/1/2024 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-731029 recovered above the upper control limit for 2-Hexanone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-17A-103124 (480-225038-1), MW-18A-103124 (480-225038-2) and TB-01-103124 (480-225038-3).

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 480-731029 recovered outside control limits for the following analytes: Bromoform and Bromomethane. The following associated samples are impacted: MW-17A-103124 (480-225038-1), MW-18A-103124 (480-225038-2) and TB-01-103124 (480-225038-3)

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

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

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-17A-103124 — Lab Sample ID: 480-225038-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.75		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-18A-103124 — Lab Sample ID: 480-225038-2

No Detections.

Client Sample ID: TB-01-103124 — Lab Sample ID: 480-225038-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-17A-103124
Lab Sample ID: 480-225038-1
Date Collected: 10/31/24 09:41
Matrix: Water
Date Received: 11/01/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/04/24 15:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/04/24 15:15	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/04/24 15:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/04/24 15:15	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/04/24 15:15	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/04/24 15:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/04/24 15:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/04/24 15:15	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/04/24 15:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/04/24 15:15	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/04/24 15:15	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/04/24 15:15	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/04/24 15:15	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/04/24 15:15	1
2-Hexanone	ND		5.0	1.2	ug/L			11/04/24 15:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/04/24 15:15	1
Acetone	ND		10	3.0	ug/L			11/04/24 15:15	1
Benzene	ND		1.0	0.41	ug/L			11/04/24 15:15	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/04/24 15:15	1
Bromoform	ND	*1	1.0	0.26	ug/L			11/04/24 15:15	1
Bromomethane	ND	*1	1.0	0.69	ug/L			11/04/24 15:15	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/04/24 15:15	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/04/24 15:15	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/04/24 15:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/04/24 15:15	1
Chloroethane	ND		1.0	0.32	ug/L			11/04/24 15:15	1
Chloroform	ND		1.0	0.34	ug/L			11/04/24 15:15	1
Chloromethane	ND		1.0	0.35	ug/L			11/04/24 15:15	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/04/24 15:15	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/04/24 15:15	1
Cyclohexane	ND		1.0	0.18	ug/L			11/04/24 15:15	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/04/24 15:15	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/04/24 15:15	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/04/24 15:15	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/04/24 15:15	1
Methyl acetate	ND		2.5	1.3	ug/L			11/04/24 15:15	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/04/24 15:15	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/04/24 15:15	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/04/24 15:15	1
Styrene	ND		1.0	0.73	ug/L			11/04/24 15:15	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/04/24 15:15	1
Toluene	ND		1.0	0.51	ug/L			11/04/24 15:15	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/04/24 15:15	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/04/24 15:15	1
Trichloroethene	ND		1.0	0.46	ug/L			11/04/24 15:15	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/04/24 15:15	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/04/24 15:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/04/24 15:15	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-17A-103124
Lab Sample ID: 480-225038-1
Date Collected: 10/31/24 09:41
Matrix: Water
Date Received: 11/01/24 10:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*11/04/24 15:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*11/04/24 15:15*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*11/04/24 15:15*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*11/04/24 15:15*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.75		0.20	0.10	ug/L		11/01/24 14:13	11/04/24 19:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*15 - 110*	*11/01/24 14:13*	*11/04/24 19:00*	*1*

Client Sample ID: MW-18A-103124
Lab Sample ID: 480-225038-2
Date Collected: 10/31/24 10:10
Matrix: Water
Date Received: 11/01/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/04/24 15:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/04/24 15:38	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/04/24 15:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/04/24 15:38	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/04/24 15:38	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/04/24 15:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/04/24 15:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/04/24 15:38	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/04/24 15:38	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/04/24 15:38	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/04/24 15:38	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/04/24 15:38	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/04/24 15:38	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/04/24 15:38	1
2-Hexanone	ND		5.0	1.2	ug/L			11/04/24 15:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/04/24 15:38	1
Acetone	ND		10	3.0	ug/L			11/04/24 15:38	1
Benzene	ND		1.0	0.41	ug/L			11/04/24 15:38	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/04/24 15:38	1
Bromoform	ND	*1	1.0	0.26	ug/L			11/04/24 15:38	1
Bromomethane	ND	*1	1.0	0.69	ug/L			11/04/24 15:38	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/04/24 15:38	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/04/24 15:38	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/04/24 15:38	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/04/24 15:38	1
Chloroethane	ND		1.0	0.32	ug/L			11/04/24 15:38	1
Chloroform	ND		1.0	0.34	ug/L			11/04/24 15:38	1
Chloromethane	ND		1.0	0.35	ug/L			11/04/24 15:38	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/04/24 15:38	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/04/24 15:38	1
Cyclohexane	ND		1.0	0.18	ug/L			11/04/24 15:38	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/04/24 15:38	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/04/24 15:38	1

Client Sample ID: MW-18A-103124
Lab Sample ID: 480-225038-2
Date Collected: 10/31/24 10:10
Matrix: Water
Date Received: 11/01/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/04/24 15:38	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/04/24 15:38	1
Methyl acetate	ND		2.5	1.3	ug/L			11/04/24 15:38	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/04/24 15:38	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/04/24 15:38	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/04/24 15:38	1
Styrene	ND		1.0	0.73	ug/L			11/04/24 15:38	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/04/24 15:38	1
Toluene	ND		1.0	0.51	ug/L			11/04/24 15:38	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/04/24 15:38	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/04/24 15:38	1
Trichloroethene	ND		1.0	0.46	ug/L			11/04/24 15:38	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/04/24 15:38	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/04/24 15:38	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/04/24 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/04/24 15:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*11/04/24 15:38*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*11/04/24 15:38*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 123*		*11/04/24 15:38*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		11/01/24 14:13	11/04/24 19:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*41*		*15 - 110*	*11/01/24 14:13*	*11/04/24 19:22*	*1*

Client Sample ID: TB-01-103124
Lab Sample ID: 480-225038-3
Date Collected: 10/31/24 00:00
Matrix: Water
Date Received: 11/01/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/04/24 16:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/04/24 16:02	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/04/24 16:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/04/24 16:02	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/04/24 16:02	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/04/24 16:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/04/24 16:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/04/24 16:02	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/04/24 16:02	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/04/24 16:02	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/04/24 16:02	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/04/24 16:02	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/04/24 16:02	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/04/24 16:02	1
2-Hexanone	ND		5.0	1.2	ug/L			11/04/24 16:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/04/24 16:02	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: TB-01-103124
Lab Sample ID: 480-225038-3
Date Collected: 10/31/24 00:00
Matrix: Water
Date Received: 11/01/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			11/04/24 16:02	1
Benzene	ND		1.0	0.41	ug/L			11/04/24 16:02	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/04/24 16:02	1
Bromoform	ND	*1	1.0	0.26	ug/L			11/04/24 16:02	1
Bromomethane	ND	*1	1.0	0.69	ug/L			11/04/24 16:02	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/04/24 16:02	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/04/24 16:02	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/04/24 16:02	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/04/24 16:02	1
Chloroethane	ND		1.0	0.32	ug/L			11/04/24 16:02	1
Chloroform	ND		1.0	0.34	ug/L			11/04/24 16:02	1
Chloromethane	ND		1.0	0.35	ug/L			11/04/24 16:02	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/04/24 16:02	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/04/24 16:02	1
Cyclohexane	ND		1.0	0.18	ug/L			11/04/24 16:02	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/04/24 16:02	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/04/24 16:02	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/04/24 16:02	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/04/24 16:02	1
Methyl acetate	ND		2.5	1.3	ug/L			11/04/24 16:02	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/04/24 16:02	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/04/24 16:02	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/04/24 16:02	1
Styrene	ND		1.0	0.73	ug/L			11/04/24 16:02	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/04/24 16:02	1
Toluene	ND		1.0	0.51	ug/L			11/04/24 16:02	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/04/24 16:02	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/04/24 16:02	1
Trichloroethene	ND		1.0	0.46	ug/L			11/04/24 16:02	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/04/24 16:02	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/04/24 16:02	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/04/24 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/04/24 16:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*11/04/24 16:02*	*1*
4-Bromofluorobenzene (Surr)	*80*		*73 - 120*		*11/04/24 16:02*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*11/04/24 16:02*	*1*

Surrogate Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-225038-1	MW-17A-103124	92	100	89	92
480-225038-2	MW-18A-103124	95	100	89	89
480-225038-3	TB-01-103124	96	102	80	92
LCS 480-731029/6	Lab Control Sample	100	100	88	94
LCSD 480-731029/48	Lab Control Sample Dup	99	101	85	92
MB 480-731029/8	Method Blank	95	99	96	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
480-225038-1	MW-17A-103124	42							
480-225038-2	MW-18A-103124	41							
LCS 480-730850/2-A	Lab Control Sample	45							
MB 480-730850/1-A	Method Blank	39							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-731029/8
Matrix: Water
Analysis Batch: 731029

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-Trichloroethane	ND		1.0	0.82	ug/L			11/04/24 11:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/04/24 11:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/04/24 11:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/04/24 11:53	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/04/24 11:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/04/24 11:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/04/24 11:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/04/24 11:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/04/24 11:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/04/24 11:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/04/24 11:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/04/24 11:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/04/24 11:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/04/24 11:53	1
2-Hexanone	ND		5.0	1.2	ug/L			11/04/24 11:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/04/24 11:53	1
Acetone	ND		10	3.0	ug/L			11/04/24 11:53	1
Benzene	ND		1.0	0.41	ug/L			11/04/24 11:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/04/24 11:53	1
Bromoform	ND		1.0	0.26	ug/L			11/04/24 11:53	1
Bromomethane	ND		1.0	0.69	ug/L			11/04/24 11:53	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/04/24 11:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/04/24 11:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/04/24 11:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/04/24 11:53	1
Chloroethane	ND		1.0	0.32	ug/L			11/04/24 11:53	1
Chloroform	ND		1.0	0.34	ug/L			11/04/24 11:53	1
Chloromethane	ND		1.0	0.35	ug/L			11/04/24 11:53	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/04/24 11:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/04/24 11:53	1
Cyclohexane	ND		1.0	0.18	ug/L			11/04/24 11:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/04/24 11:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/04/24 11:53	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/04/24 11:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/04/24 11:53	1
Methyl acetate	ND		2.5	1.3	ug/L			11/04/24 11:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/04/24 11:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/04/24 11:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/04/24 11:53	1
Styrene	ND		1.0	0.73	ug/L			11/04/24 11:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/04/24 11:53	1
Toluene	ND		1.0	0.51	ug/L			11/04/24 11:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/04/24 11:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/04/24 11:53	1
Trichloroethene	ND		1.0	0.46	ug/L			11/04/24 11:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/04/24 11:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/04/24 11:53	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/04/24 11:53	1

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

Lab Sample ID: MB 480-731029/8
Matrix: Water
Analysis Batch: 731029

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/04/24 11:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*11/04/24 11:53*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*11/04/24 11:53*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*11/04/24 11:53*	*1*

Lab Sample ID: LCS 480-731029/6
Matrix: Water
Analysis Batch: 731029

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-Trichloroethane	25.0	27.0		ug/L		108	73 - 126
1,1,2,2-Tetrachloroethane	25.0	28.6		ug/L		114	76 - 120
1,1,2-Trichloroethane	25.0	25.2		ug/L		101	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.4		ug/L		106	61 - 148
1,1-Dichloroethane	25.0	26.9		ug/L		108	77 - 120
1,1-Dichloroethene	25.0	24.7		ug/L		99	66 - 127
1,2,4-Trichlorobenzene	25.0	29.2		ug/L		117	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	26.6		ug/L		106	56 - 134
1,2-Dichlorobenzene	25.0	28.2		ug/L		113	80 - 124
1,2-Dichloroethane	25.0	25.3		ug/L		101	75 - 120
1,2-Dichloropropane	25.0	26.1		ug/L		104	76 - 120
1,3-Dichlorobenzene	25.0	27.6		ug/L		110	77 - 120
1,4-Dichlorobenzene	25.0	27.4		ug/L		110	80 - 120
2-Butanone (MEK)	125	137		ug/L		109	57 - 140
2-Hexanone	125	146		ug/L		117	65 - 127
4-Methyl-2-pentanone (MIBK)	125	150		ug/L		120	71 - 125
Acetone	125	128		ug/L		102	56 - 142
Benzene	25.0	25.4		ug/L		101	71 - 124
Bromodichloromethane	25.0	26.1		ug/L		104	80 - 122
Bromoform	25.0	24.9		ug/L		100	61 - 132
Bromomethane	25.0	24.2		ug/L		97	55 - 144
Carbon disulfide	25.0	27.0		ug/L		108	59 - 134
Carbon tetrachloride	25.0	26.8		ug/L		107	72 - 134
Chlorobenzene	25.0	25.5		ug/L		102	80 - 120
Dibromochloromethane	25.0	28.6		ug/L		114	75 - 125
Chloroethane	25.0	25.2		ug/L		101	69 - 136
Chloroform	25.0	23.5		ug/L		94	73 - 127
Chloromethane	25.0	30.3		ug/L		121	68 - 124
cis-1,2-Dichloroethene	25.0	25.5		ug/L		102	74 - 124
cis-1,3-Dichloropropene	25.0	27.1		ug/L		108	74 - 124
Cyclohexane	25.0	29.9		ug/L		120	59 - 135
Dichlorodifluoromethane	25.0	32.2		ug/L		129	59 - 135
Ethylbenzene	25.0	25.5		ug/L		102	77 - 123
1,2-Dibromoethane	25.0	25.1		ug/L		101	77 - 120
Isopropylbenzene	25.0	29.4		ug/L		118	77 - 122
Methyl acetate	50.0	55.1		ug/L		110	74 - 133
Methyl tert-butyl ether	25.0	24.8		ug/L		99	77 - 120
Methylcyclohexane	25.0	28.1		ug/L		112	68 - 134

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

Lab Sample ID: LCS 480-731029/6
Matrix: Water
Analysis Batch: 731029

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methylene Chloride			25.0	24.8		ug/L		99	75 - 124		
Styrene			25.0	24.5		ug/L		98	80 - 120		
Tetrachloroethene			25.0	28.2		ug/L		113	74 - 122		
Toluene			25.0	25.6		ug/L		103	80 - 122		
trans-1,2-Dichloroethene			25.0	25.4		ug/L		102	73 - 127		
trans-1,3-Dichloropropene			25.0	27.6		ug/L		110	80 - 120		
Trichloroethene			25.0	24.5		ug/L		98	74 - 123		
Trichlorofluoromethane			25.0	29.4		ug/L		118	62 - 150		
Vinyl chloride			25.0	28.8		ug/L		115	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*
Dibromofluoromethane (Surr)	*94*		*75 - 123*

Lab Sample ID: LCSD 480-731029/48
Matrix: Water
Analysis Batch: 731029

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
1,1,1-Trichloroethane			25.0	25.1		ug/L		100	73 - 126	7	15
1,1,2,2-Tetrachloroethane			25.0	27.1		ug/L		109	76 - 120	5	15
1,1,2-Trichloroethane			25.0	24.3		ug/L		97	76 - 122	4	15
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	24.3		ug/L		97	61 - 148	9	20
1,1-Dichloroethane			25.0	26.4		ug/L		105	77 - 120	2	20
1,1-Dichloroethene			25.0	22.8		ug/L		91	66 - 127	8	16
1,2,4-Trichlorobenzene			25.0	27.2		ug/L		109	79 - 122	7	20
1,2-Dibromo-3-Chloropropane			25.0	24.3		ug/L		97	56 - 134	9	15
1,2-Dichlorobenzene			25.0	26.2		ug/L		105	80 - 124	8	20
1,2-Dichloroethane			25.0	25.1		ug/L		100	75 - 120	1	20
1,2-Dichloropropane			25.0	24.6		ug/L		98	76 - 120	6	20
1,3-Dichlorobenzene			25.0	25.7		ug/L		103	77 - 120	7	20
1,4-Dichlorobenzene			25.0	26.2		ug/L		105	80 - 120	5	20
2-Butanone (MEK)			125	145		ug/L		116	57 - 140	6	20
2-Hexanone			125	159		ug/L		127	65 - 127	8	15
4-Methyl-2-pentanone (MIBK)			125	157		ug/L		125	71 - 125	4	35
Acetone			125	141		ug/L		113	56 - 142	9	15
Benzene			25.0	24.4		ug/L		97	71 - 124	4	13
Bromodichloromethane			25.0	24.1		ug/L		96	80 - 122	8	15
Bromoform			25.0	19.3	*1	ug/L		77	61 - 132	25	15
Bromomethane			25.0	20.3	*1	ug/L		81	55 - 144	18	15
Carbon disulfide			25.0	24.7		ug/L		99	59 - 134	9	15
Carbon tetrachloride			25.0	25.2		ug/L		101	72 - 134	6	15
Chlorobenzene			25.0	23.6		ug/L		95	80 - 120	8	25
Dibromochloromethane			25.0	24.6		ug/L		98	75 - 125	15	15
Chloroethane			25.0	21.7		ug/L		87	69 - 136	15	15
Chloroform			25.0	22.8		ug/L		91	73 - 127	3	20

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

Lab Sample ID: LCSD 480-731029/48
Matrix: Water
Analysis Batch: 731029

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
Chloromethane			25.0	29.4		ug/L		117	68 - 124	3	15
cis-1,2-Dichloroethene			25.0	24.7		ug/L		99	74 - 124	3	15
cis-1,3-Dichloropropene			25.0	25.0		ug/L		100	74 - 124	8	15
Cyclohexane			25.0	28.9		ug/L		116	59 - 135	4	20
Dichlorodifluoromethane			25.0	31.1		ug/L		124	59 - 135	3	20
Ethylbenzene			25.0	24.2		ug/L		97	77 - 123	5	15
1,2-Dibromoethane			25.0	23.6		ug/L		94	77 - 120	6	15
Isopropylbenzene			25.0	26.8		ug/L		107	77 - 122	9	20
Methyl acetate			50.0	56.0		ug/L		112	74 - 133	2	20
Methyl tert-butyl ether			25.0	24.0		ug/L		96	77 - 120	3	37
Methylcyclohexane			25.0	26.0		ug/L		104	68 - 134	8	20
Methylene Chloride			25.0	25.3		ug/L		101	75 - 124	2	15
Styrene			25.0	22.8		ug/L		91	80 - 120	7	20
Tetrachloroethene			25.0	24.2		ug/L		97	74 - 122	15	20
Toluene			25.0	23.9		ug/L		96	80 - 122	7	15
trans-1,2-Dichloroethene			25.0	23.5		ug/L		94	73 - 127	8	20
trans-1,3-Dichloropropene			25.0	25.7		ug/L		103	80 - 120	7	15
Trichloroethene			25.0	22.7		ug/L		91	74 - 123	7	16
Trichlorofluoromethane			25.0	26.2		ug/L		105	62 - 150	12	20
Vinyl chloride			25.0	25.6		ug/L		102	65 - 133	12	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*85*		*73 - 120*
Dibromofluoromethane (Surr)	*92*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-730850/1-A
Matrix: Water
Analysis Batch: 731038

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 730850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		11/01/24 14:13	11/04/24 12:34	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*15 - 110*	*11/01/24 14:13*	*11/04/24 12:34*	*1*

Lab Sample ID: LCS 480-730850/2-A
Matrix: Water
Analysis Batch: 731038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 730850

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.15		ug/L		107	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*45*		*15 - 110*

QC Association Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

GC/MS VOA

Analysis Batch: 731029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225038-1	MW-17A-103124	Total/NA	Water	8260C	
480-225038-2	MW-18A-103124	Total/NA	Water	8260C	
480-225038-3	TB-01-103124	Total/NA	Water	8260C	
MB 480-731029/8	Method Blank	Total/NA	Water	8260C	
LCS 480-731029/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-731029/48	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 730850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225038-1	MW-17A-103124	Total/NA	Water	3510C	
480-225038-2	MW-18A-103124	Total/NA	Water	3510C	
MB 480-730850/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-730850/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 731038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225038-1	MW-17A-103124	Total/NA	Water	8270D SIM ID	730850
480-225038-2	MW-18A-103124	Total/NA	Water	8270D SIM ID	730850
MB 480-730850/1-A	Method Blank	Total/NA	Water	8270D SIM ID	730850
LCS 480-730850/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	730850

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: MW-17A-103124
Lab Sample ID: 480-225038-1
Date Collected: 10/31/24 09:41
Matrix: Water
Date Received: 11/01/24 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	731029	ZN	EET BUF	11/04/24 15:15
Total/NA	Prep	3510C			730850	LSC	EET BUF	11/01/24 14:13
Total/NA	Analysis	8270D SIM ID		1	731038	JMM	EET BUF	11/04/24 19:00

Client Sample ID: MW-18A-103124
Lab Sample ID: 480-225038-2
Date Collected: 10/31/24 10:10
Matrix: Water
Date Received: 11/01/24 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	731029	ZN	EET BUF	11/04/24 15:38
Total/NA	Prep	3510C			730850	LSC	EET BUF	11/01/24 14:13
Total/NA	Analysis	8270D SIM ID		1	731038	JMM	EET BUF	11/04/24 19:22

Client Sample ID: TB-01-103124
Lab Sample ID: 480-225038-3
Date Collected: 10/31/24 00:00
Matrix: Water
Date Received: 11/01/24 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	731029	ZN	EET BUF	11/04/24 16:02

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-225038-1
Project/Site: Phytoremediation Court Street Building 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-225038-1	MW-17A-103124	Water	10/31/24 09:41	11/01/24 10:30
480-225038-2	MW-18A-103124	Water	10/31/24 10:10	11/01/24 10:30
480-225038-3	TB-01-103124	Water	10/31/24 00:00	11/01/24 10:30

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-192583-40339.3
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: ~~Page 3 of 4~~ Page 1 OF 1
Company: Ramboll Americas Engineering Solutions	PWSID:			Job #: 194101062 33.005.02
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-506-3236	PO #: ~~1940006251~~ 1940085 42			
Email: jason.newton@ramboll.com	WO #: 60622666			
Project Name: Phytoremediation Court Street Building 5	Project #: 48021513			
Site: New York Former Lm Court St bldg #5	SSOW#:			

Analysis Requested

Syracuse #225

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	8270D_SIM_MS_ID - SIM List 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
MW-17A-103124	10/31/24	0941	G	Water	N	N	X	X	5	
MW-18A-103124	10/31/24	1010	G	Water	N	N	X	X	5	
TB-01-103124	—	—	—	Water	N	N	X		3	
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

480-225038 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed .. samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 10-31-24 / 1115	Company: Ramboll	Received by:	Date/Time: 10/31/24 1115	Company: ES-SYR
Relinquished by:	Date/Time: 10.31.24, 19w	Company:	Received by:	Date/Time: 11/1/24 1030	Company: DHL
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.3 IR #3C

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll Americas Engineering Solutions

Job Number: 480-225038-1

Login Number: 225038
List Number: 1
Creator: Stapleton, Kaitlyn

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.3 IR#SC ice
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Ramboll Americas Engineering Solutions
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

SUPPLEMENTAL INFLUENT SAMPLING

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll Americas Engineering Solutions
333 West Washington Street
Syracuse, New York 13202

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JOB DESCRIPTION

Former LM Court St Bldg #5

JOB NUMBER

480-216114-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

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 Northeast, LLC Project Manager.

Authorization



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Table of Contents

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Definitions/Glossary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216114-1
Project/Site: Former LM Court St Bldg #5

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

Job ID: 480-216114-1 Eurofins Buffalo

Job Narrative
480-216114-1

Receipt
The sample was received on 1/3/2024 10:30 AM. 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 was 2.2° C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216114-1
Project/Site: Former LM Court St Bldg #5

Client Sample ID: INFLUENT-010224
Lab Sample ID: 480-216114-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.36	J	1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	2.9		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	7.6		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	3.6		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	4.6		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216114-1
Project/Site: Former LM Court St Bldg #5

Client Sample ID: INFLUENT-010224
Lab Sample ID: 480-216114-1
Date Collected: 01/02/24 08:40
Matrix: Water
Date Received: 01/03/24 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/03/24 15:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/03/24 15:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/03/24 15:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.36**	**J**	1.0	0.31	ug/L			01/03/24 15:13	1
1,1-Dichloroethane	**2.9**		1.0	0.38	ug/L			01/03/24 15:13	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/03/24 15:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/03/24 15:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/03/24 15:13	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/03/24 15:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/03/24 15:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/03/24 15:13	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/03/24 15:13	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/03/24 15:13	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/03/24 15:13	1
2-Hexanone	ND		5.0	1.2	ug/L			01/03/24 15:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/03/24 15:13	1
Acetone	ND		10	3.0	ug/L			01/03/24 15:13	1
Benzene	ND		1.0	0.41	ug/L			01/03/24 15:13	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/03/24 15:13	1
Bromoform	ND		1.0	0.26	ug/L			01/03/24 15:13	1
Bromomethane	ND		1.0	0.69	ug/L			01/03/24 15:13	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/03/24 15:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/03/24 15:13	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/03/24 15:13	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/03/24 15:13	1
Chloroethane	ND		1.0	0.32	ug/L			01/03/24 15:13	1
Chloroform	ND		1.0	0.34	ug/L			01/03/24 15:13	1
Chloromethane	ND		1.0	0.35	ug/L			01/03/24 15:13	1
cis-1,2-Dichloroethene	**7.6**		1.0	0.81	ug/L			01/03/24 15:13	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/03/24 15:13	1
Cyclohexane	ND		1.0	0.18	ug/L			01/03/24 15:13	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/03/24 15:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/03/24 15:13	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/03/24 15:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/03/24 15:13	1
Methyl acetate	ND		2.5	1.3	ug/L			01/03/24 15:13	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/03/24 15:13	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/03/24 15:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/03/24 15:13	1
Styrene	ND		1.0	0.73	ug/L			01/03/24 15:13	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/03/24 15:13	1
Toluene	ND		1.0	0.51	ug/L			01/03/24 15:13	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/03/24 15:13	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/03/24 15:13	1
Trichloroethene	ND		1.0	0.46	ug/L			01/03/24 15:13	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/03/24 15:13	1
Vinyl chloride	**3.6**		1.0	0.90	ug/L			01/03/24 15:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/03/24 15:13	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216114-1
Project/Site: Former LM Court St Bldg #5

Client Sample ID: INFLUENT-010224
Lab Sample ID: 480-216114-1
Date Collected: 01/02/24 08:40
Matrix: Water
Date Received: 01/03/24 10:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		01/03/24 15:13	1
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		01/03/24 15:13	1
4-Bromofluorobenzene (Surr)	97		73 - 120		01/03/24 15:13	1
Dibromofluoromethane (Surr)	98		75 - 123		01/03/24 15:13	1

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.6		0.20	0.10	ug/L		01/04/24 14:11	01/05/24 17:50	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	38		15 - 110	01/04/24 14:11	01/05/24 17:50	1

Surrogate Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216114-1
Project/Site: Former LM Court St Bldg #5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-216114-1	INFLUENT-010224	100	103	97	98
LCS 480-696921/6	Lab Control Sample	101	99	101	98
MB 480-696921/8	Method Blank	100	101	99	103

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216114-1
Project/Site: Former LM Court St Bldg #5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DXE (15-110)						
480-216114-1	INFLUENT-010224	38						
480-216114-1 MS	INFLUENT-010224	34						
480-216114-1 MSD	INFLUENT-010224	39						
LCS 480-697100/2-A	Lab Control Sample	40						
MB 480-697100/1-A	Method Blank	38						

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-696921/8
Matrix: Water
Analysis Batch: 696921

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-Trichloroethane	ND		1.0	0.82	ug/L			01/03/24 13:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/03/24 13:46	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/03/24 13:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/03/24 13:46	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/03/24 13:46	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/03/24 13:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/03/24 13:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/03/24 13:46	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/03/24 13:46	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/03/24 13:46	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/03/24 13:46	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/03/24 13:46	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/03/24 13:46	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/03/24 13:46	1
2-Hexanone	ND		5.0	1.2	ug/L			01/03/24 13:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/03/24 13:46	1
Acetone	ND		10	3.0	ug/L			01/03/24 13:46	1
Benzene	ND		1.0	0.41	ug/L			01/03/24 13:46	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/03/24 13:46	1
Bromoform	ND		1.0	0.26	ug/L			01/03/24 13:46	1
Bromomethane	ND		1.0	0.69	ug/L			01/03/24 13:46	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/03/24 13:46	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/03/24 13:46	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/03/24 13:46	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/03/24 13:46	1
Chloroethane	ND		1.0	0.32	ug/L			01/03/24 13:46	1
Chloroform	ND		1.0	0.34	ug/L			01/03/24 13:46	1
Chloromethane	ND		1.0	0.35	ug/L			01/03/24 13:46	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/03/24 13:46	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/03/24 13:46	1
Cyclohexane	ND		1.0	0.18	ug/L			01/03/24 13:46	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/03/24 13:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/03/24 13:46	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/03/24 13:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/03/24 13:46	1
Methyl acetate	ND		2.5	1.3	ug/L			01/03/24 13:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/03/24 13:46	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/03/24 13:46	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/03/24 13:46	1
Styrene	ND		1.0	0.73	ug/L			01/03/24 13:46	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/03/24 13:46	1
Toluene	ND		1.0	0.51	ug/L			01/03/24 13:46	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/03/24 13:46	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/03/24 13:46	1
Trichloroethene	ND		1.0	0.46	ug/L			01/03/24 13:46	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/03/24 13:46	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/03/24 13:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/03/24 13:46	1

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

Lab Sample ID: MB 480-696921/8
Matrix: Water
Analysis Batch: 696921

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/03/24 13:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*01/03/24 13:46*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*01/03/24 13:46*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*01/03/24 13:46*	*1*

Lab Sample ID: LCS 480-696921/6
Matrix: Water
Analysis Batch: 696921

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-Trichloroethane	25.0	25.5		ug/L		102	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.1		ug/L		100	76 - 120
1,1,2-Trichloroethane	25.0	25.4		ug/L		102	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.6		ug/L		99	61 - 148
1,1-Dichloroethane	25.0	24.6		ug/L		99	77 - 120
1,1-Dichloroethene	25.0	23.8		ug/L		95	66 - 127
1,2,4-Trichlorobenzene	25.0	26.1		ug/L		104	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	21.6		ug/L		86	56 - 134
1,2-Dichlorobenzene	25.0	25.6		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	24.0		ug/L		96	75 - 120
1,2-Dichloropropane	25.0	24.5		ug/L		98	76 - 120
1,3-Dichlorobenzene	25.0	25.9		ug/L		104	77 - 120
1,4-Dichlorobenzene	25.0	25.6		ug/L		102	80 - 120
2-Butanone (MEK)	125	131		ug/L		105	57 - 140
2-Hexanone	125	135		ug/L		108	65 - 127
4-Methyl-2-pentanone (MIBK)	125	121		ug/L		97	71 - 125
Acetone	125	126		ug/L		101	56 - 142
Benzene	25.0	24.3		ug/L		97	71 - 124
Bromodichloromethane	25.0	26.1		ug/L		104	80 - 122
Bromoform	25.0	30.5		ug/L		122	61 - 132
Bromomethane	25.0	24.5		ug/L		98	55 - 144
Carbon disulfide	25.0	23.0		ug/L		92	59 - 134
Carbon tetrachloride	25.0	27.0		ug/L		108	72 - 134
Chlorobenzene	25.0	25.5		ug/L		102	80 - 120
Dibromochloromethane	25.0	27.8		ug/L		111	75 - 125
Chloroethane	25.0	24.1		ug/L		96	69 - 136
Chloroform	25.0	23.9		ug/L		95	73 - 127
Chloromethane	25.0	25.6		ug/L		102	68 - 124
cis-1,2-Dichloroethene	25.0	23.9		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	25.0		ug/L		100	74 - 124
Cyclohexane	25.0	24.9		ug/L		99	59 - 135
Dichlorodifluoromethane	25.0	26.5		ug/L		106	59 - 135
Ethylbenzene	25.0	26.3		ug/L		105	77 - 123
1,2-Dibromoethane	25.0	25.4		ug/L		102	77 - 120
Isopropylbenzene	25.0	27.1		ug/L		108	77 - 122
Methyl acetate	50.0	48.8		ug/L		98	74 - 133
Methyl tert-butyl ether	25.0	22.4		ug/L		89	77 - 120
Methylcyclohexane	25.0	23.6		ug/L		94	68 - 134

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

Lab Sample ID: LCS 480-696921/6
Matrix: Water
Analysis Batch: 696921

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	22.6		ug/L		90	75 - 124
Styrene	25.0	26.7		ug/L		107	80 - 120
Tetrachloroethene	25.0	26.5		ug/L		106	74 - 122
Toluene	25.0	25.5		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	24.5		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	22.6		ug/L		90	80 - 120
Trichloroethene	25.0	24.4		ug/L		98	74 - 123
Trichlorofluoromethane	25.0	24.6		ug/L		98	62 - 150
Vinyl chloride	25.0	25.8		ug/L		103	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-697100/1-A
Matrix: Water
Analysis Batch: 697240

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 697100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		01/04/24 14:11	01/05/24 16:23	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*15 - 110*	*01/04/24 14:11*	*01/05/24 16:23*	*1*

Lab Sample ID: LCS 480-697100/2-A
Matrix: Water
Analysis Batch: 697240

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 697100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.18		ug/L		109	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*40*		*15 - 110*

Lab Sample ID: 480-216114-1 MS
Matrix: Water
Analysis Batch: 697240

Client Sample ID: INFLUENT-010224
Prep Type: Total/NA
Prep Batch: 697100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	4.6		2.00	6.92		ug/L		114	40 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*34*		*15 - 110*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: 480-216114-1 MSD
Client Sample ID: INFLUENT-010224
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 697240
Prep Batch: 697100

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	4.6		2.00	6.93		ug/L		114	40 - 140	0	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*39*		*15 - 110*

QC Association Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216114-1
Project/Site: Former LM Court St Bldg #5

GC/MS VOA

Analysis Batch: 696921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216114-1	INFLUENT-010224	Total/NA	Water	8260C	
MB 480-696921/8	Method Blank	Total/NA	Water	8260C	
LCS 480-696921/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 697100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216114-1	INFLUENT-010224	Total/NA	Water	3510C	
MB 480-697100/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-697100/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-216114-1 MS	INFLUENT-010224	Total/NA	Water	3510C	
480-216114-1 MSD	INFLUENT-010224	Total/NA	Water	3510C	

Analysis Batch: 697240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216114-1	INFLUENT-010224	Total/NA	Water	8270D SIM ID	697100
MB 480-697100/1-A	Method Blank	Total/NA	Water	8270D SIM ID	697100
LCS 480-697100/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	697100
480-216114-1 MS	INFLUENT-010224	Total/NA	Water	8270D SIM ID	697100
480-216114-1 MSD	INFLUENT-010224	Total/NA	Water	8270D SIM ID	697100

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Project/Site: Former LM Court St Bldg #5

Job ID: 480-216114-1

Client Sample ID: INFLUENT-010224

Date Collected: 01/02/24 08:40
Date Received: 01/03/24 10:30

Lab Sample ID: 480-216114-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	696921	ZN	EET BUF	01/03/24 15:13
Total/NA	Prep	3510C			697100	LSC	EET BUF	01/04/24 14:11
Total/NA	Analysis	8270D SIM ID		1	697240	JMM	EET BUF	01/05/24 17:50

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216114-1
Project/Site: Former LM Court St Bldg #5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Ramboll Americas Engineering Solutions
Project/Site: Former LM Court St Bldg #5

Job ID: 480-216114-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll Americas Engineering Solutions
Project/Site: Former LM Court St Bldg #5

Job ID: 480-216114-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-216114-1	INFLUENT-010224	Water	01/02/24 08:40	01/03/24 10:30

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

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Syracuse

Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-182201-32176.1
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: #225	Page: Page ~~1 of 4~~ 1 of 1
Company: Ramboll US Corporation	PWSID:			Job #: TBD
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-506-3236	PO #: ~~1040006251~~ TBD			
Email: jason.newton@obg.com	WO #:			
Project Name: Phytoremediation GW Analysis	Project #: 48021953			
Site: former GE Lm Court st bldg #5	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA

M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL Volatiles	8270D_SIM_MS_ID - SIM - 1,4 Dioxane	Total Number of containers	Special Instructions/Note:
Preservation Code:							A	N		
influent - 010224	1/2/24	0940	G	Water	N	N	X	X		Match Previous Influent
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

480-216114 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	1/2/24 0855	Ramboll	[signature]	1-2-24 0855	Eurofins
2	[signature]	1-2-24 1900	Eurofins	[signature]	1-3-24 1030	TAB
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.2 ICE

Ver: 01/16/2019

1/10/2024

Login Sample Receipt Checklist

Client: Ramboll Americas Engineering Solutions

Job Number: 480-216114-1

Login Number: 216114
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	RAMBOLL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll Americas Engineering Solutions
333 West Washington Street
Syracuse, New York 13202

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JOB DESCRIPTION

Phytoremediation Court Street Building 5
Monthly Influent

JOB NUMBER

480-216807-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

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 Northeast, LLC Project Manager.

Authorization



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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

Job ID: 480-216807-1 Eurofins Buffalo

Job Narrative
480-216807-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD 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 sample was received on 2/3/2024 10:00 AM. 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 2.8°C

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

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

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216807-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-020224
Lab Sample ID: 480-216807-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.9		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	7.3		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	2.7		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	4.6		0.80	0.40	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216807-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-020224
Lab Sample ID: 480-216807-1
Date Collected: 02/02/24 12:00
Matrix: Wastewater
Date Received: 02/03/24 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/05/24 13:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/05/24 13:42	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/05/24 13:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/05/24 13:42	1
1,1-Dichloroethane	**2.9**		1.0	0.38	ug/L			02/05/24 13:42	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/05/24 13:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/05/24 13:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/05/24 13:42	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/05/24 13:42	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/05/24 13:42	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/05/24 13:42	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/05/24 13:42	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/05/24 13:42	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/05/24 13:42	1
2-Hexanone	ND		5.0	1.2	ug/L			02/05/24 13:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/05/24 13:42	1
Acetone	ND		10	3.0	ug/L			02/05/24 13:42	1
Benzene	ND		1.0	0.41	ug/L			02/05/24 13:42	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/05/24 13:42	1
Bromoform	ND		1.0	0.26	ug/L			02/05/24 13:42	1
Bromomethane	ND		1.0	0.69	ug/L			02/05/24 13:42	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/05/24 13:42	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/05/24 13:42	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/05/24 13:42	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/05/24 13:42	1
Chloroethane	ND		1.0	0.32	ug/L			02/05/24 13:42	1
Chloroform	ND		1.0	0.34	ug/L			02/05/24 13:42	1
Chloromethane	ND		1.0	0.35	ug/L			02/05/24 13:42	1
cis-1,2-Dichloroethene	**7.3**		1.0	0.81	ug/L			02/05/24 13:42	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/05/24 13:42	1
Cyclohexane	ND		1.0	0.18	ug/L			02/05/24 13:42	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/05/24 13:42	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/05/24 13:42	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/05/24 13:42	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/05/24 13:42	1
Methyl acetate	ND		2.5	1.3	ug/L			02/05/24 13:42	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/05/24 13:42	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/05/24 13:42	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/05/24 13:42	1
Styrene	ND		1.0	0.73	ug/L			02/05/24 13:42	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/05/24 13:42	1
Toluene	ND		1.0	0.51	ug/L			02/05/24 13:42	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/05/24 13:42	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/05/24 13:42	1
Trichloroethene	ND		1.0	0.46	ug/L			02/05/24 13:42	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/05/24 13:42	1
Vinyl chloride	**2.7**		1.0	0.90	ug/L			02/05/24 13:42	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/05/24 13:42	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216807-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-020224
Lab Sample ID: 480-216807-1
Date Collected: 02/02/24 12:00
Matrix: Wastewater
Date Received: 02/03/24 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		02/05/24 13:42	1
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		02/05/24 13:42	1
4-Bromofluorobenzene (Surr)	97		73 - 120		02/05/24 13:42	1
Dibromofluoromethane (Surr)	97		75 - 123		02/05/24 13:42	1

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.6		0.80	0.40	ug/L		02/05/24 09:07	02/07/24 02:34	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	35		15 - 110	02/05/24 09:07	02/07/24 02:34	1

Surrogate Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216807-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Wastewater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-216807-1	INFLUENT-020224	98	99	97	97

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
LCS 480-699828/6	Lab Control Sample	100	96	98	94
MB 480-699828/8	Method Blank	98	94	97	93

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216807-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Wastewater **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
480-216807-1	INFLUENT-020224	35							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
LCS 480-699855/2-A	Lab Control Sample	35							
MB 480-699855/1-A	Method Blank	30							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-699828/8
Matrix: Water
Analysis Batch: 699828

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-Trichloroethane	ND		1.0	0.82	ug/L			02/05/24 11:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/05/24 11:31	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/05/24 11:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/05/24 11:31	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/05/24 11:31	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/05/24 11:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/05/24 11:31	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/05/24 11:31	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/05/24 11:31	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/05/24 11:31	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/05/24 11:31	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/05/24 11:31	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/05/24 11:31	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/05/24 11:31	1
2-Hexanone	ND		5.0	1.2	ug/L			02/05/24 11:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/05/24 11:31	1
Acetone	ND		10	3.0	ug/L			02/05/24 11:31	1
Benzene	ND		1.0	0.41	ug/L			02/05/24 11:31	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/05/24 11:31	1
Bromoform	ND		1.0	0.26	ug/L			02/05/24 11:31	1
Bromomethane	ND		1.0	0.69	ug/L			02/05/24 11:31	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/05/24 11:31	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/05/24 11:31	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/05/24 11:31	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/05/24 11:31	1
Chloroethane	ND		1.0	0.32	ug/L			02/05/24 11:31	1
Chloroform	ND		1.0	0.34	ug/L			02/05/24 11:31	1
Chloromethane	ND		1.0	0.35	ug/L			02/05/24 11:31	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/05/24 11:31	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/05/24 11:31	1
Cyclohexane	ND		1.0	0.18	ug/L			02/05/24 11:31	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/05/24 11:31	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/05/24 11:31	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/05/24 11:31	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/05/24 11:31	1
Methyl acetate	ND		2.5	1.3	ug/L			02/05/24 11:31	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/05/24 11:31	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/05/24 11:31	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/05/24 11:31	1
Styrene	ND		1.0	0.73	ug/L			02/05/24 11:31	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/05/24 11:31	1
Toluene	ND		1.0	0.51	ug/L			02/05/24 11:31	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/05/24 11:31	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/05/24 11:31	1
Trichloroethene	ND		1.0	0.46	ug/L			02/05/24 11:31	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/05/24 11:31	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/05/24 11:31	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/05/24 11:31	1

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

Lab Sample ID: MB 480-699828/8
Matrix: Water
Analysis Batch: 699828

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*80 - 120*		*02/05/24 11:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*02/05/24 11:31*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*02/05/24 11:31*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*02/05/24 11:31*	*1*

Lab Sample ID: LCS 480-699828/6
Matrix: Water
Analysis Batch: 699828

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-Trichloroethane	25.0	25.6		ug/L		102	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.2		ug/L		101	76 - 120
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.2		ug/L		85	61 - 148
1,1-Dichloroethane	25.0	24.5		ug/L		98	77 - 120
1,1-Dichloroethene	25.0	20.6		ug/L		83	66 - 127
1,2,4-Trichlorobenzene	25.0	25.8		ug/L		103	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.6		ug/L		90	56 - 134
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	22.5		ug/L		90	75 - 120
1,2-Dichloropropane	25.0	24.4		ug/L		98	76 - 120
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.1		ug/L		101	80 - 120
2-Butanone (MEK)	125	132		ug/L		105	57 - 140
2-Hexanone	125	131		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	120		ug/L		96	71 - 125
Acetone	125	116		ug/L		93	56 - 142
Benzene	25.0	24.1		ug/L		96	71 - 124
Bromodichloromethane	25.0	25.0		ug/L		100	80 - 122
Bromoform	25.0	30.1		ug/L		120	61 - 132
Bromomethane	25.0	21.2		ug/L		85	55 - 144
Carbon disulfide	25.0	19.9		ug/L		80	59 - 134
Carbon tetrachloride	25.0	27.2		ug/L		109	72 - 134
Chlorobenzene	25.0	24.8		ug/L		99	80 - 120
Dibromochloromethane	25.0	26.8		ug/L		107	75 - 125
Chloroethane	25.0	21.2		ug/L		85	69 - 136
Chloroform	25.0	23.6		ug/L		94	73 - 127
Chloromethane	25.0	25.2		ug/L		101	68 - 124
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	74 - 124
cis-1,3-Dichloropropene	25.0	25.4		ug/L		102	74 - 124
Cyclohexane	25.0	26.5		ug/L		106	59 - 135
Dichlorodifluoromethane	25.0	22.3		ug/L		89	59 - 135
Ethylbenzene	25.0	25.6		ug/L		103	77 - 123
1,2-Dibromoethane	25.0	24.6		ug/L		98	77 - 120
Isopropylbenzene	25.0	27.5		ug/L		110	77 - 122
Methyl acetate	50.0	42.4		ug/L		85	74 - 133
Methyl tert-butyl ether	25.0	21.6		ug/L		86	77 - 120
Methylcyclohexane	25.0	24.4		ug/L		98	68 - 134

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

Lab Sample ID: LCS 480-699828/6
Matrix: Water
Analysis Batch: 699828

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	22.0		ug/L		88	75 - 124
Styrene	25.0	25.1		ug/L		101	80 - 120
Tetrachloroethene	25.0	25.7		ug/L		103	74 - 122
Toluene	25.0	25.2		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	73 - 127
trans-1,3-Dichloropropene	25.0	23.4		ug/L		94	80 - 120
Trichloroethene	25.0	24.9		ug/L		100	74 - 123
Trichlorofluoromethane	25.0	21.1		ug/L		84	62 - 150
Vinyl chloride	25.0	24.6		ug/L		98	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*94*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-699855/1-A
Matrix: Water
Analysis Batch: 699924

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699855

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.80	0.40	ug/L		02/05/24 09:07	02/06/24 20:32	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*30*		*15 - 110*	*02/05/24 09:07*	*02/06/24 20:32*	*1*

Lab Sample ID: LCS 480-699855/2-A
Matrix: Water
Analysis Batch: 699924

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699855

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.24		ug/L		112	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*35*		*15 - 110*

QC Association Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216807-1
Project/Site: Phytoremediation Court Street Building 5

GC/MS VOA

Analysis Batch: 699828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216807-1	INFLUENT-020224	Total/NA	Wastewater	8260C	
MB 480-699828/8	Method Blank	Total/NA	Water	8260C	
LCS 480-699828/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 699855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216807-1	INFLUENT-020224	Total/NA	Wastewater	3510C	
MB 480-699855/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-699855/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 699924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216807-1	INFLUENT-020224	Total/NA	Wastewater	8270D SIM ID	699855
MB 480-699855/1-A	Method Blank	Total/NA	Water	8270D SIM ID	699855
LCS 480-699855/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	699855

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216807-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-020224
Lab Sample ID: 480-216807-1
Date Collected: 02/02/24 12:00
Matrix: Wastewater
Date Received: 02/03/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	699828	ZN	EET BUF	02/05/24 13:42
Total/NA	Prep	3510C			699855	ER	EET BUF	02/05/24 09:07
Total/NA	Analysis	8270D SIM ID		1	699924	JMM	EET BUF	02/07/24 02:34

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216807-1
Project/Site: Phytoremediation Court Street Building 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216807-1
Project/Site: Phytoremediation Court Street Building 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-216807-1
Project/Site: Phytoremediation Court Street Building 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-216807-1	INFLUENT-020224	Wastewater	02/02/24 12:00	02/03/24 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information
Client Contact: Jason Newton
Company: Ramboll Americas Engineering Solutions
Address: 333 West Washington Street
City: Syracuse
State, Zip: NY, 13202
Phone: 315-506-3236
Email: jason.newton@ramboll.com
Project Name: Phytoremediation Court Street Building 5
Site: New York Farrar Lm Courtst bldg# 5

Sampler: Jason Newton
Phone: 315-506-3236
PWSID:
Due Date Requested:
TAT Requested (days): Standard
Compliance Project: Δ Yes Δ No
PO #: ~~4043000251~~ 1940008542
WO #: 60622666
Project #: 48021513
SSOW#:

Lab PM: Schove, John R
E-Mail: John.Schove@et.eurofinsus.com
Carrier Tracking No(s):
State of Origin:
Syracuse #225

COC No: 480-192583-40339.1
Page: Page 1 of 1
Job #: 1940106233.005.02

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	8270D_SIM_MS_ID - SIM List - 1,4 Dioxane	Total Number of containers
			Preservation Code:				A	N	
Influent-020224	2/2/24	1200	G	Water	N	N	X	X	
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Special Instructions/Note: Match Previous Influent

480-216807 Chain of Custody

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)
Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	2-2-24/1227	Ramboll	Received by:	2-2-24, 12:27	Spr
Relinquished by:	2-2-24, 1900		Received by:	2/3/23 1000	TAS
Relinquished by:			Received by:		

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: #1 2.8

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll Americas Engineering Solutions

Job Number: 480-216807-1

Login Number: 216807
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	RAMBOLL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll Americas Engineering Solutions
333 West Washington Street
Syracuse, New York 13202

Generated 4/8/2024 9:36:57 AM

JOB DESCRIPTION

Phytoremediation Court Street Building 5
Monthly Influent

JOB NUMBER

480-218393-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

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 Northeast, LLC Project Manager.

Authorization



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4/8/2024 9:36:57 AM

Authorized for release by
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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

Job ID: 480-218393-1 Eurofins Buffalo

Job Narrative
480-218393-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD 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 sample was received on 4/3/2024 11:00 AM. 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 3.7°C.

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

GC/MS Semi VOA
Method 8270D_SIM_MS_ID: The breakdown of 4,4'-DDT in the tuning evaluation exceeded 20%. Breakdown is not a criteria of the method but rather an internal check performed by the laboratory to evaluate the peak shape of 1,4-Dioxane and 1,4-Dioxane-d8. No adverse performance was observed and QC recoveries were in control. The data have been reported.

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

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-218393-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT
Lab Sample ID: 480-218393-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.3		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	8.2		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	4.9		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	6.0		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll Americas Engineering Solutions
Job ID: 480-218393-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT
Lab Sample ID: 480-218393-1

Date Collected: 04/02/24 10:30
Matrix: Wastewater
Date Received: 04/03/24 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/04/24 04:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/04/24 04:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/04/24 04:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/04/24 04:51	1
1,1-Dichloroethane	**3.3**		1.0	0.38	ug/L			04/04/24 04:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/04/24 04:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/04/24 04:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/04/24 04:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/04/24 04:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/04/24 04:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/04/24 04:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/04/24 04:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/04/24 04:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/04/24 04:51	1
2-Hexanone	ND		5.0	1.2	ug/L			04/04/24 04:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/04/24 04:51	1
Acetone	ND		10	3.0	ug/L			04/04/24 04:51	1
Benzene	ND		1.0	0.41	ug/L			04/04/24 04:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/04/24 04:51	1
Bromoform	ND		1.0	0.26	ug/L			04/04/24 04:51	1
Bromomethane	ND		1.0	0.69	ug/L			04/04/24 04:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/04/24 04:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/04/24 04:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/04/24 04:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/04/24 04:51	1
Chloroethane	ND		1.0	0.32	ug/L			04/04/24 04:51	1
Chloroform	ND		1.0	0.34	ug/L			04/04/24 04:51	1
Chloromethane	ND		1.0	0.35	ug/L			04/04/24 04:51	1
cis-1,2-Dichloroethene	**8.2**		1.0	0.81	ug/L			04/04/24 04:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/04/24 04:51	1
Cyclohexane	ND		1.0	0.18	ug/L			04/04/24 04:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/04/24 04:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/04/24 04:51	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/04/24 04:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/04/24 04:51	1
Methyl acetate	ND		2.5	1.3	ug/L			04/04/24 04:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/04/24 04:51	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/04/24 04:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/04/24 04:51	1
Styrene	ND		1.0	0.73	ug/L			04/04/24 04:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/04/24 04:51	1
Toluene	ND		1.0	0.51	ug/L			04/04/24 04:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/04/24 04:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/04/24 04:51	1
Trichloroethene	ND		1.0	0.46	ug/L			04/04/24 04:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/04/24 04:51	1
Vinyl chloride	**4.9**		1.0	0.90	ug/L			04/04/24 04:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/04/24 04:51	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-218393-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT
Lab Sample ID: 480-218393-1
Date Collected: 04/02/24 10:30
Matrix: Wastewater
Date Received: 04/03/24 11:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		04/04/24 04:51	1
1,2-Dichloroethane-d4 (Surr)	97		77 - 120		04/04/24 04:51	1
4-Bromofluorobenzene (Surr)	104		73 - 120		04/04/24 04:51	1
Dibromofluoromethane (Surr)	101		75 - 123		04/04/24 04:51	1

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.0		0.20	0.10	ug/L		04/04/24 13:50	04/06/24 07:53	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	34		15 - 110	04/04/24 13:50	04/06/24 07:53	1

Surrogate Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-218393-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Wastewater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-218393-1	INFLUENT	98	97	104	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
LCS 480-706070/6	Lab Control Sample	98	97	98	99
LCSD 480-706070/42	Lab Control Sample Dup	98	95	99	100
MB 480-706070/8	Method Blank	102	98	104	100

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-218393-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Wastewater **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DXE (15-110)						
480-218393-1	INFLUENT	34						
480-218393-1 MS	INFLUENT	36						
480-218393-1 MSD	INFLUENT	37						

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DXE (15-110)						
LCS 480-706270/2-A	Lab Control Sample	35						
MB 480-706270/1-A	Method Blank	33						

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-706070/8
Matrix: Water
Analysis Batch: 706070

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-Trichloroethane	ND		1.0	0.82	ug/L			04/04/24 00:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/04/24 00:00	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/04/24 00:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/04/24 00:00	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/04/24 00:00	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/04/24 00:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/04/24 00:00	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/04/24 00:00	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/04/24 00:00	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/04/24 00:00	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/04/24 00:00	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/04/24 00:00	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/04/24 00:00	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/04/24 00:00	1
2-Hexanone	ND		5.0	1.2	ug/L			04/04/24 00:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/04/24 00:00	1
Acetone	ND		10	3.0	ug/L			04/04/24 00:00	1
Benzene	ND		1.0	0.41	ug/L			04/04/24 00:00	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/04/24 00:00	1
Bromoform	ND		1.0	0.26	ug/L			04/04/24 00:00	1
Bromomethane	ND		1.0	0.69	ug/L			04/04/24 00:00	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/04/24 00:00	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/04/24 00:00	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/04/24 00:00	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/04/24 00:00	1
Chloroethane	ND		1.0	0.32	ug/L			04/04/24 00:00	1
Chloroform	ND		1.0	0.34	ug/L			04/04/24 00:00	1
Chloromethane	ND		1.0	0.35	ug/L			04/04/24 00:00	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/04/24 00:00	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/04/24 00:00	1
Cyclohexane	ND		1.0	0.18	ug/L			04/04/24 00:00	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/04/24 00:00	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/04/24 00:00	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/04/24 00:00	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/04/24 00:00	1
Methyl acetate	ND		2.5	1.3	ug/L			04/04/24 00:00	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/04/24 00:00	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/04/24 00:00	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/04/24 00:00	1
Styrene	ND		1.0	0.73	ug/L			04/04/24 00:00	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/04/24 00:00	1
Toluene	ND		1.0	0.51	ug/L			04/04/24 00:00	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/04/24 00:00	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/04/24 00:00	1
Trichloroethene	ND		1.0	0.46	ug/L			04/04/24 00:00	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/04/24 00:00	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/04/24 00:00	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/04/24 00:00	1

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

Lab Sample ID: MB 480-706070/8
Matrix: Water
Analysis Batch: 706070

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/04/24 00:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*04/04/24 00:00*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*04/04/24 00:00*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*04/04/24 00:00*	*1*

Lab Sample ID: LCS 480-706070/6
Matrix: Water
Analysis Batch: 706070

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-Trichloroethane	25.0	25.3		ug/L		101	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	76 - 120
1,1,2-Trichloroethane	25.0	23.8		ug/L		95	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.4		ug/L		106	61 - 148
1,1-Dichloroethane	25.0	25.0		ug/L		100	77 - 120
1,1-Dichloroethene	25.0	25.2		ug/L		101	66 - 127
1,2,4-Trichlorobenzene	25.0	26.6		ug/L		106	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.3		ug/L		101	56 - 134
1,2-Dichlorobenzene	25.0	26.1		ug/L		104	80 - 124
1,2-Dichloroethane	25.0	24.9		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	25.3		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	25.4		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 120
2-Butanone (MEK)	125	113		ug/L		90	57 - 140
2-Hexanone	125	104		ug/L		83	65 - 127
4-Methyl-2-pentanone (MIBK)	125	114		ug/L		91	71 - 125
Acetone	125	111		ug/L		89	56 - 142
Benzene	25.0	25.5		ug/L		102	71 - 124
Bromodichloromethane	25.0	24.4		ug/L		98	80 - 122
Bromoform	25.0	22.6		ug/L		90	61 - 132
Bromomethane	25.0	23.7		ug/L		95	55 - 144
Carbon disulfide	25.0	25.4		ug/L		102	59 - 134
Carbon tetrachloride	25.0	25.7		ug/L		103	72 - 134
Chlorobenzene	25.0	25.0		ug/L		100	80 - 120
Dibromochloromethane	25.0	24.7		ug/L		99	75 - 125
Chloroethane	25.0	24.0		ug/L		96	69 - 136
Chloroform	25.0	24.4		ug/L		97	73 - 127
Chloromethane	25.0	25.2		ug/L		101	68 - 124
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	24.0		ug/L		96	74 - 124
Cyclohexane	25.0	24.9		ug/L		100	59 - 135
Dichlorodifluoromethane	25.0	26.0		ug/L		104	59 - 135
Ethylbenzene	25.0	24.7		ug/L		99	77 - 123
1,2-Dibromoethane	25.0	25.0		ug/L		100	77 - 120
Isopropylbenzene	25.0	27.8		ug/L		111	77 - 122
Methyl acetate	50.0	45.1		ug/L		90	74 - 133
Methyl tert-butyl ether	25.0	24.8		ug/L		99	77 - 120
Methylcyclohexane	25.0	25.6		ug/L		103	68 - 134

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

Lab Sample ID: LCS 480-706070/6
Matrix: Water
Analysis Batch: 706070

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	24.1		ug/L		96	75 - 124
Styrene	25.0	24.4		ug/L		97	80 - 120
Tetrachloroethene	25.0	25.3		ug/L		101	74 - 122
Toluene	25.0	25.3		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	25.8		ug/L		103	73 - 127
trans-1,3-Dichloropropene	25.0	24.0		ug/L		96	80 - 120
Trichloroethene	25.0	25.5		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	26.8		ug/L		107	62 - 150
Vinyl chloride	25.0	26.4		ug/L		106	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Lab Sample ID: LCSD 480-706070/42
Matrix: Water
Analysis Batch: 706070

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
1,1,1-Trichloroethane	25.0	24.7		ug/L		99	73 - 126	2	15
1,1,2,2-Tetrachloroethane	25.0	24.4		ug/L		98	76 - 120	0	15
1,1,2-Trichloroethane	25.0	24.0		ug/L		96	76 - 122	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.9		ug/L		104	61 - 148	2	20
1,1-Dichloroethane	25.0	24.8		ug/L		99	77 - 120	1	20
1,1-Dichloroethene	25.0	24.7		ug/L		99	66 - 127	2	16
1,2,4-Trichlorobenzene	25.0	25.8		ug/L		103	79 - 122	3	20
1,2-Dibromo-3-Chloropropane	25.0	23.4		ug/L		93	56 - 134	8	15
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 124	1	20
1,2-Dichloroethane	25.0	24.2		ug/L		97	75 - 120	3	20
1,2-Dichloropropane	25.0	24.3		ug/L		97	76 - 120	4	20
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	77 - 120	3	20
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	80 - 120	6	20
2-Butanone (MEK)	125	112		ug/L		89	57 - 140	1	20
2-Hexanone	125	100		ug/L		80	65 - 127	4	15
4-Methyl-2-pentanone (MIBK)	125	111		ug/L		89	71 - 125	2	35
Acetone	125	125		ug/L		100	56 - 142	12	15
Benzene	25.0	25.3		ug/L		101	71 - 124	1	13
Bromodichloromethane	25.0	24.0		ug/L		96	80 - 122	2	15
Bromoform	25.0	19.8		ug/L		79	61 - 132	14	15
Bromomethane	25.0	27.1		ug/L		108	55 - 144	13	15
Carbon disulfide	25.0	25.0		ug/L		100	59 - 134	2	15
Carbon tetrachloride	25.0	24.6		ug/L		99	72 - 134	4	15
Chlorobenzene	25.0	24.6		ug/L		99	80 - 120	1	25
Dibromochloromethane	25.0	23.7		ug/L		95	75 - 125	4	15
Chloroethane	25.0	23.9		ug/L		96	69 - 136	0	15
Chloroform	25.0	24.0		ug/L		96	73 - 127	2	20

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

Lab Sample ID: LCSD 480-706070/42
Matrix: Water
Analysis Batch: 706070

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
Chloromethane			25.0	25.1		ug/L		100	68 - 124	0	15
cis-1,2-Dichloroethene			25.0	26.2		ug/L		105	74 - 124	1	15
cis-1,3-Dichloropropene			25.0	23.3		ug/L		93	74 - 124	3	15
Cyclohexane			25.0	23.8		ug/L		95	59 - 135	5	20
Dichlorodifluoromethane			25.0	25.3		ug/L		101	59 - 135	3	20
Ethylbenzene			25.0	24.1		ug/L		97	77 - 123	2	15
1,2-Dibromoethane			25.0	24.7		ug/L		99	77 - 120	1	15
Isopropylbenzene			25.0	26.1		ug/L		104	77 - 122	6	20
Methyl acetate			50.0	45.9		ug/L		92	74 - 133	2	20
Methyl tert-butyl ether			25.0	24.6		ug/L		99	77 - 120	1	37
Methylcyclohexane			25.0	24.4		ug/L		98	68 - 134	5	20
Methylene Chloride			25.0	24.2		ug/L		97	75 - 124	0	15
Styrene			25.0	24.6		ug/L		99	80 - 120	1	20
Tetrachloroethene			25.0	23.4		ug/L		94	74 - 122	8	20
Toluene			25.0	24.7		ug/L		99	80 - 122	2	15
trans-1,2-Dichloroethene			25.0	25.8		ug/L		103	73 - 127	0	20
trans-1,3-Dichloropropene			25.0	22.6		ug/L		90	80 - 120	6	15
Trichloroethene			25.0	25.1		ug/L		100	74 - 123	2	16
Trichlorofluoromethane			25.0	26.7		ug/L		107	62 - 150	1	20
Vinyl chloride			25.0	27.2		ug/L		109	65 - 133	3	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-706270/1-A
Matrix: Water
Analysis Batch: 706401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 706270

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/04/24 13:50	04/06/24 06:23	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*15 - 110*	*04/04/24 13:50*	*04/06/24 06:23*	*1*

Lab Sample ID: LCS 480-706270/2-A
Matrix: Water
Analysis Batch: 706401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 706270

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.17		ug/L		109	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*35*		*15 - 110*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: 480-218393-1 MS
Matrix: Wastewater
Analysis Batch: 706401

Client Sample ID: INFLUENT
Prep Type: Total/NA
Prep Batch: 706270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	6.0		2.00	8.10		ug/L		104	40 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*36*		*15 - 110*

Lab Sample ID: 480-218393-1 MSD
Matrix: Wastewater
Analysis Batch: 706401

Client Sample ID: INFLUENT
Prep Type: Total/NA
Prep Batch: 706270

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	6.0		2.00	8.04		ug/L		102	40 - 140	1	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*37*		*15 - 110*

QC Association Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-218393-1
Project/Site: Phytoremediation Court Street Building 5

GC/MS VOA

Analysis Batch: 706070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218393-1	INFLUENT	Total/NA	Wastewater	8260C	
MB 480-706070/8	Method Blank	Total/NA	Water	8260C	
LCS 480-706070/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-706070/42	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 706270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218393-1	INFLUENT	Total/NA	Wastewater	3510C	
MB 480-706270/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-706270/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-218393-1 MS	INFLUENT	Total/NA	Wastewater	3510C	
480-218393-1 MSD	INFLUENT	Total/NA	Wastewater	3510C	

Analysis Batch: 706401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218393-1	INFLUENT	Total/NA	Wastewater	8270D SIM ID	706270
MB 480-706270/1-A	Method Blank	Total/NA	Water	8270D SIM ID	706270
LCS 480-706270/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	706270
480-218393-1 MS	INFLUENT	Total/NA	Wastewater	8270D SIM ID	706270
480-218393-1 MSD	INFLUENT	Total/NA	Wastewater	8270D SIM ID	706270

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Job ID: 480-218393-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT
Date Collected: 04/02/24 10:30
Date Received: 04/03/24 11:00

Lab Sample ID: 480-218393-1
Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	706070	CC	EET BUF	04/04/24 04:51
Total/NA	Prep	3510C			706270	LSC	EET BUF	04/04/24 13:50
Total/NA	Analysis	8270D SIM ID		1	706401	JMM	EET BUF	04/06/24 07:53

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-218393-1
Project/Site: Phytoremediation Court Street Building 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-218393-1
Project/Site: Phytoremediation Court Street Building 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-218393-1
Project/Site: Phytoremediation Court Street Building 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-218393-1	INFLUENT	Wastewater	04/02/24 10:30	04/03/24 11:00

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information
Client Contact: Jason Newton
Company: Ramboll Americas Engineering Solutions
Address: 333 West Washington Street
City: Syracuse
State, Zip: NY, 13202
Phone: 315-506-3236
Email: jason.newton@ramboll.com
Project Name: Phytoremediation Court Street Building 5
Site: New York Form Ln Court st bldg # 5

Sampler: Jason Newton
Phone: 315-506-3236
PWSID:
Due Date Requested:
TAT Requested (days): standard
Compliance Project: Δ Yes Δ No
PO #: ~~1940006251~~ 1940008542
WO #: 60622666
Project #: 48021513
SSOW#:

Lab PM: Schove, John R
E-Mail: John.Schove@et.eurofinsus.com
Carrier Tracking No(s):
State of Origin: Syracuse

COC No: 480-192583-40339.4
Page: ~~Page 4 of 4~~ 1 of 1
Job #: 194 01.06233.005.024

Analysis Requested #225

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	8270D_SIM_MS_ID - SIM List 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
Influent-040224	4-2-24	1030	G	Water	N	N	X	X		Match Previous Influent
				Water						

480-218393 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological
Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Special Instructions/QC Requirements:

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Empty Kit Relinquished by:
Relinquished by: [signature] Date/Time: 4-2-24 1044 Company: Ramboll
Relinquished by: Renylds Date/Time: 4-2-24, 1900 Company:
Relinquished by: Date/Time: Company:

Date: Time: Method of Shipment:
Received by: [signature] Date/Time: 4/2/24 1044 Company: ES-SYR
Received by: [signature] Date/Time: 4/3/24 1100 Company: TAB
Received by: Date/Time: Company:

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: #1.3?

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll Americas Engineering Solutions

Job Number: 480-218393-1

Login Number: 218393
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	RAMBOLL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll Americas Engineering Solutions
333 West Washington Street
Syracuse, New York 13202

Generated 5/17/2024 11:14:00 AM

JOB DESCRIPTION

Phytoremediation Court Street Building 5
Monthly Influent

JOB NUMBER

480-219722-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Eurofins Buffalo

Job Notes

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Authorization



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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

Job ID: 480-219722-1 Eurofins Buffalo

Job Narrative
480-219722-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD 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 sample was received on 5/10/2024 9:00 AM. 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 3.2°C.

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

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

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-219722-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-050924
Lab Sample ID: 480-219722-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.8		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	7.1		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	4.9		1.0	0.90	ug/L	1		8260C	Total/NA
1,4-Dioxane	4.7		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll Americas Engineering Solutions
Job ID: 480-219722-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-050924
Lab Sample ID: 480-219722-1
Date Collected: 05/09/24 09:10
Matrix: Wastewater
Date Received: 05/10/24 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/13/24 19:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/13/24 19:16	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/13/24 19:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/13/24 19:16	1
1,1-Dichloroethane	**2.8**		1.0	0.38	ug/L			05/13/24 19:16	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/13/24 19:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/13/24 19:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/13/24 19:16	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/13/24 19:16	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/13/24 19:16	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/13/24 19:16	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/13/24 19:16	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/13/24 19:16	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/13/24 19:16	1
2-Hexanone	ND		5.0	1.2	ug/L			05/13/24 19:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/13/24 19:16	1
Acetone	ND		10	3.0	ug/L			05/13/24 19:16	1
Benzene	ND		1.0	0.41	ug/L			05/13/24 19:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/13/24 19:16	1
Bromoform	ND		1.0	0.26	ug/L			05/13/24 19:16	1
Bromomethane	ND		1.0	0.69	ug/L			05/13/24 19:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/13/24 19:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/13/24 19:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/13/24 19:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/13/24 19:16	1
Chloroethane	ND		1.0	0.32	ug/L			05/13/24 19:16	1
Chloroform	ND		1.0	0.34	ug/L			05/13/24 19:16	1
Chloromethane	ND		1.0	0.35	ug/L			05/13/24 19:16	1
cis-1,2-Dichloroethene	**7.1**		1.0	0.81	ug/L			05/13/24 19:16	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/13/24 19:16	1
Cyclohexane	ND		1.0	0.18	ug/L			05/13/24 19:16	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/13/24 19:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/13/24 19:16	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/13/24 19:16	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/13/24 19:16	1
Methyl acetate	ND		2.5	1.3	ug/L			05/13/24 19:16	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/13/24 19:16	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/13/24 19:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/13/24 19:16	1
Styrene	ND		1.0	0.73	ug/L			05/13/24 19:16	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/13/24 19:16	1
Toluene	ND		1.0	0.51	ug/L			05/13/24 19:16	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/13/24 19:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/13/24 19:16	1
Trichloroethene	ND		1.0	0.46	ug/L			05/13/24 19:16	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/13/24 19:16	1
Vinyl chloride	**4.9**		1.0	0.90	ug/L			05/13/24 19:16	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/13/24 19:16	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-219722-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-050924
Lab Sample ID: 480-219722-1
Date Collected: 05/09/24 09:10
Matrix: Wastewater
Date Received: 05/10/24 09:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/13/24 19:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*05/13/24 19:16*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*05/13/24 19:16*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*05/13/24 19:16*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.7**		0.20	0.10	ug/L		05/13/24 16:59	05/15/24 18:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*29*		*15 - 110*	*05/13/24 16:59*	*05/15/24 18:01*	*1*

Surrogate Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-219722-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Wastewater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-219722-1	INFLUENT-050924	98	106	95	106

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
LCS 480-711763/6	Lab Control Sample	97	106	94	107
MB 480-711763/8	Method Blank	98	108	94	113

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-219722-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Wastewater **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
480-219722-1	INFLUENT-050924	29							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
LCS 480-711846/2-A	Lab Control Sample	24							
MB 480-711846/1-A	Method Blank	23							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-711763/8
Matrix: Water
Analysis Batch: 711763

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-Trichloroethane	ND		1.0	0.82	ug/L			05/13/24 13:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/13/24 13:08	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/13/24 13:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/13/24 13:08	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/13/24 13:08	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/13/24 13:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/13/24 13:08	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/13/24 13:08	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/13/24 13:08	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/13/24 13:08	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/13/24 13:08	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/13/24 13:08	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/13/24 13:08	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/13/24 13:08	1
2-Hexanone	ND		5.0	1.2	ug/L			05/13/24 13:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/13/24 13:08	1
Acetone	ND		10	3.0	ug/L			05/13/24 13:08	1
Benzene	ND		1.0	0.41	ug/L			05/13/24 13:08	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/13/24 13:08	1
Bromoform	ND		1.0	0.26	ug/L			05/13/24 13:08	1
Bromomethane	ND		1.0	0.69	ug/L			05/13/24 13:08	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/13/24 13:08	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/13/24 13:08	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/13/24 13:08	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/13/24 13:08	1
Chloroethane	ND		1.0	0.32	ug/L			05/13/24 13:08	1
Chloroform	ND		1.0	0.34	ug/L			05/13/24 13:08	1
Chloromethane	ND		1.0	0.35	ug/L			05/13/24 13:08	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/13/24 13:08	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/13/24 13:08	1
Cyclohexane	ND		1.0	0.18	ug/L			05/13/24 13:08	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/13/24 13:08	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/13/24 13:08	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/13/24 13:08	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/13/24 13:08	1
Methyl acetate	ND		2.5	1.3	ug/L			05/13/24 13:08	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/13/24 13:08	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/13/24 13:08	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/13/24 13:08	1
Styrene	ND		1.0	0.73	ug/L			05/13/24 13:08	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/13/24 13:08	1
Toluene	ND		1.0	0.51	ug/L			05/13/24 13:08	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/13/24 13:08	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/13/24 13:08	1
Trichloroethene	ND		1.0	0.46	ug/L			05/13/24 13:08	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/13/24 13:08	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/13/24 13:08	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/13/24 13:08	1

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

Lab Sample ID: MB 480-711763/8
Matrix: Water
Analysis Batch: 711763

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/13/24 13:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*05/13/24 13:08*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*05/13/24 13:08*	*1*
Dibromofluoromethane (Surr)	*113*		*75 - 123*		*05/13/24 13:08*	*1*

Lab Sample ID: LCS 480-711763/6
Matrix: Water
Analysis Batch: 711763

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-Trichloroethane	25.0	27.3		ug/L		109	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.5		ug/L		102	76 - 120
1,1,2-Trichloroethane	25.0	23.7		ug/L		95	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.4		ug/L		121	61 - 148
1,1-Dichloroethane	25.0	26.8		ug/L		107	77 - 120
1,1-Dichloroethene	25.0	27.5		ug/L		110	66 - 127
1,2,4-Trichlorobenzene	25.0	25.5		ug/L		102	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	21.9		ug/L		87	56 - 134
1,2-Dichlorobenzene	25.0	25.9		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	26.0		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	25.2		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	26.4		ug/L		106	77 - 120
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 120
2-Butanone (MEK)	125	126		ug/L		101	57 - 140
2-Hexanone	125	118		ug/L		94	65 - 127
4-Methyl-2-pentanone (MIBK)	125	126		ug/L		101	71 - 125
Acetone	125	147		ug/L		118	56 - 142
Benzene	25.0	25.8		ug/L		103	71 - 124
Bromodichloromethane	25.0	24.8		ug/L		99	80 - 122
Bromoform	25.0	23.8		ug/L		95	61 - 132
Bromomethane	25.0	26.4		ug/L		106	55 - 144
Carbon disulfide	25.0	28.1		ug/L		113	59 - 134
Carbon tetrachloride	25.0	26.3		ug/L		105	72 - 134
Chlorobenzene	25.0	25.3		ug/L		101	80 - 120
Dibromochloromethane	25.0	24.9		ug/L		100	75 - 125
Chloroethane	25.0	26.5		ug/L		106	69 - 136
Chloroform	25.0	25.5		ug/L		102	73 - 127
Chloromethane	25.0	28.7		ug/L		115	68 - 124
cis-1,2-Dichloroethene	25.0	27.4		ug/L		109	74 - 124
cis-1,3-Dichloropropene	25.0	24.1		ug/L		96	74 - 124
Cyclohexane	25.0	30.4		ug/L		122	59 - 135
Dichlorodifluoromethane	25.0	27.1		ug/L		108	59 - 135
Ethylbenzene	25.0	25.7		ug/L		103	77 - 123
1,2-Dibromoethane	25.0	23.6		ug/L		95	77 - 120
Isopropylbenzene	25.0	27.5		ug/L		110	77 - 122
Methyl acetate	50.0	53.9		ug/L		108	74 - 133
Methyl tert-butyl ether	25.0	25.7		ug/L		103	77 - 120
Methylcyclohexane	25.0	28.4		ug/L		113	68 - 134

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

Lab Sample ID: LCS 480-711763/6
Matrix: Water
Analysis Batch: 711763

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	26.3		ug/L		105	75 - 124
Styrene	25.0	24.4		ug/L		98	80 - 120
Tetrachloroethene	25.0	25.9		ug/L		104	74 - 122
Toluene	25.0	25.7		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	27.7		ug/L		111	73 - 127
trans-1,3-Dichloropropene	25.0	23.5		ug/L		94	80 - 120
Trichloroethene	25.0	26.3		ug/L		105	74 - 123
Trichlorofluoromethane	25.0	30.8		ug/L		123	62 - 150
Vinyl chloride	25.0	27.7		ug/L		111	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-711846/1-A
Matrix: Water
Analysis Batch: 712065

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 711846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		05/13/24 16:57	05/15/24 12:39	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*23*		*15 - 110*	*05/13/24 16:57*	*05/15/24 12:39*	*1*

Lab Sample ID: LCS 480-711846/2-A
Matrix: Water
Analysis Batch: 712065

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 711846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.00		ug/L		100	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*24*		*15 - 110*

QC Association Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-219722-1
Project/Site: Phytoremediation Court Street Building 5

GC/MS VOA

Analysis Batch: 711763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219722-1	INFLUENT-050924	Total/NA	Wastewater	8260C	
MB 480-711763/8	Method Blank	Total/NA	Water	8260C	
LCS 480-711763/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 711846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219722-1	INFLUENT-050924	Total/NA	Wastewater	3510C	
MB 480-711846/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-711846/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 712065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219722-1	INFLUENT-050924	Total/NA	Wastewater	8270D SIM ID	711846
MB 480-711846/1-A	Method Blank	Total/NA	Water	8270D SIM ID	711846
LCS 480-711846/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	711846

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Job ID: 480-219722-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-050924
Date Collected: 05/09/24 09:10
Date Received: 05/10/24 09:00

Lab Sample ID: 480-219722-1
Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	711763	LCH	EET BUF	05/13/24 19:16
Total/NA	Prep	3510C			711846	SJM	EET BUF	05/13/24 16:59
Total/NA	Analysis	8270D SIM ID		1	712065	JMM	EET BUF	05/15/24 18:01

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-219722-1
Project/Site: Phytoremediation Court Street Building 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-219722-1
Project/Site: Phytoremediation Court Street Building 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-219722-1
Project/Site: Phytoremediation Court Street Building 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-219722-1	INFLUENT-050924	Wastewater	05/09/24 09:10	05/10/24 09:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Syracuse

Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-192583-40339.1
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: #225	Page: Page 1 of 1
Company: Ramboll Americas Engineering Solutions	PWSID:			Job #: 1940006233.005.024
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-506-3236	PO #: ~~1940006251~~ 1940008542			
Email: jason.newton@ramboll.com	WO #: 60622666			
Project Name: Phytoremediation Court Street Building 5	Project #: 48021513			
Site: New York Form Ln Court st bldg#5	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	8270D_SIM_MS_ID - SIM List 1,4 Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
Influent-050924	5-9-24	0910	G	Water	N	N	X	X	5	
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

480-219722 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Match Previous Influent

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	5-9-24/0930	Ramboll	[signature]	5-9-24, 0930	Eur
2	[signature] RENGLIA	5-9-24, 1900	Eur	[signature]	5/10/24 0900	TALS
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #1 3.2

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll Americas Engineering Solutions

Job Number: 480-219722-1

Login Number: 219722
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background		
The cooler's custody seal, if present, is intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the sample IDs on the containers and the COC.		
Samples are received within Holding Time (Excluding tests with immediate HTs)..		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.		
If necessary, staff have been informed of any short hold time or quick TAT needs		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Sampling Company provided.		
Samples received within 48 hours of sampling.		
Samples requiring field filtration have been filtered in the field.		
Chlorine Residual checked.		

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jason Newton
Ramboll Americas Engineering Solutions
333 West Washington Street
Syracuse, New York 13202

Generated 7/22/2024 11:16:46 AM

JOB DESCRIPTION

Phytoremediation Court Street Building 5
Monthly Influent

JOB NUMBER

480-221636-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Eurofins Buffalo

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 Northeast, LLC Project Manager.

Authorization



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7/22/2024 11:16:46 AM

Authorized for release by
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Designee for
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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

Job ID: 480-221636-1 Eurofins Buffalo

Job Narrative
480-221636-1

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 sample was received on 7/13/2024 10:00 AM. 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 2.9°C.

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

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

Detection Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-221636-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-071224
Lab Sample ID: 480-221636-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.0		1.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	4.2		1.0	0.81	ug/L	1		8260C	Total/NA
1,4-Dioxane	4.9		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ramboll Americas Engineering Solutions
Job ID: 480-221636-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-071224
Lab Sample ID: 480-221636-1
Date Collected: 07/12/24 08:00
Matrix: Wastewater
Date Received: 07/13/24 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/17/24 05:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/17/24 05:38	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/17/24 05:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/17/24 05:38	1
1,1-Dichloroethane	**2.0**		1.0	0.38	ug/L			07/17/24 05:38	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/17/24 05:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/24 05:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/17/24 05:38	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/17/24 05:38	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/17/24 05:38	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/17/24 05:38	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/17/24 05:38	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/17/24 05:38	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/17/24 05:38	1
2-Hexanone	ND		5.0	1.2	ug/L			07/17/24 05:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/17/24 05:38	1
Acetone	ND		10	3.0	ug/L			07/17/24 05:38	1
Benzene	ND		1.0	0.41	ug/L			07/17/24 05:38	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/17/24 05:38	1
Bromoform	ND		1.0	0.26	ug/L			07/17/24 05:38	1
Bromomethane	ND		1.0	0.69	ug/L			07/17/24 05:38	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/17/24 05:38	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/17/24 05:38	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/17/24 05:38	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/17/24 05:38	1
Chloroethane	ND		1.0	0.32	ug/L			07/17/24 05:38	1
Chloroform	ND		1.0	0.34	ug/L			07/17/24 05:38	1
Chloromethane	ND		1.0	0.35	ug/L			07/17/24 05:38	1
cis-1,2-Dichloroethene	**4.2**		1.0	0.81	ug/L			07/17/24 05:38	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/17/24 05:38	1
Cyclohexane	ND		1.0	0.18	ug/L			07/17/24 05:38	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/17/24 05:38	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/17/24 05:38	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/17/24 05:38	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/17/24 05:38	1
Methyl acetate	ND		2.5	1.3	ug/L			07/17/24 05:38	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/17/24 05:38	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/17/24 05:38	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/17/24 05:38	1
Styrene	ND		1.0	0.73	ug/L			07/17/24 05:38	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/17/24 05:38	1
Toluene	ND		1.0	0.51	ug/L			07/17/24 05:38	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/17/24 05:38	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/17/24 05:38	1
Trichloroethene	ND		1.0	0.46	ug/L			07/17/24 05:38	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/17/24 05:38	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/17/24 05:38	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/17/24 05:38	1

Client: Ramboll Americas Engineering Solutions
Job ID: 480-221636-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-071224
Lab Sample ID: 480-221636-1
Date Collected: 07/12/24 08:00
Matrix: Wastewater
Date Received: 07/13/24 10:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/17/24 05:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/17/24 05:38*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*07/17/24 05:38*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*07/17/24 05:38*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.9**		0.20	0.10	ug/L		07/16/24 07:25	07/17/24 18:20	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*26*		*15 - 110*	*07/16/24 07:25*	*07/17/24 18:20*	*1*

Surrogate Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-221636-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Wastewater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-221636-1	INFLUENT-071224	97	96	92	91

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
LCS 480-718619/6	Lab Control Sample	97	94	95	92
LCSD 480-718619/24	Lab Control Sample Dup	94	95	90	92
MB 480-718619/8	Method Blank	97	92	91	90

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-221636-1
Project/Site: Phytoremediation Court Street Building 5

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Wastewater **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
480-221636-1	INFLUENT-071224	26							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
LCS 480-718526/2-A	Lab Control Sample	29							
MB 480-718526/1-A	Method Blank	26							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-718619/8
Matrix: Water
Analysis Batch: 718619

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-Trichloroethane	ND		1.0	0.82	ug/L			07/17/24 01:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/17/24 01:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/17/24 01:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/17/24 01:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/17/24 01:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/17/24 01:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/24 01:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/17/24 01:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/17/24 01:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/17/24 01:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/17/24 01:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/17/24 01:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/17/24 01:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/17/24 01:32	1
2-Hexanone	ND		5.0	1.2	ug/L			07/17/24 01:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/17/24 01:32	1
Acetone	ND		10	3.0	ug/L			07/17/24 01:32	1
Benzene	ND		1.0	0.41	ug/L			07/17/24 01:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/17/24 01:32	1
Bromoform	ND		1.0	0.26	ug/L			07/17/24 01:32	1
Bromomethane	ND		1.0	0.69	ug/L			07/17/24 01:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/17/24 01:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/17/24 01:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/17/24 01:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/17/24 01:32	1
Chloroethane	ND		1.0	0.32	ug/L			07/17/24 01:32	1
Chloroform	ND		1.0	0.34	ug/L			07/17/24 01:32	1
Chloromethane	ND		1.0	0.35	ug/L			07/17/24 01:32	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/17/24 01:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/17/24 01:32	1
Cyclohexane	ND		1.0	0.18	ug/L			07/17/24 01:32	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/17/24 01:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/17/24 01:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/17/24 01:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/17/24 01:32	1
Methyl acetate	ND		2.5	1.3	ug/L			07/17/24 01:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/17/24 01:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/17/24 01:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/17/24 01:32	1
Styrene	ND		1.0	0.73	ug/L			07/17/24 01:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/17/24 01:32	1
Toluene	ND		1.0	0.51	ug/L			07/17/24 01:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/17/24 01:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/17/24 01:32	1
Trichloroethene	ND		1.0	0.46	ug/L			07/17/24 01:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/17/24 01:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/17/24 01:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/17/24 01:32	1

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

Lab Sample ID: MB 480-718619/8
Matrix: Water
Analysis Batch: 718619

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/17/24 01:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*07/17/24 01:32*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*07/17/24 01:32*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*07/17/24 01:32*	*1*

Lab Sample ID: LCS 480-718619/6
Matrix: Water
Analysis Batch: 718619

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-Trichloroethane	25.0	25.1		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.0		ug/L		104	76 - 120
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.9		ug/L		91	61 - 148
1,1-Dichloroethane	25.0	24.4		ug/L		98	77 - 120
1,1-Dichloroethene	25.0	24.5		ug/L		98	66 - 127
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		99	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	30.0		ug/L		120	56 - 134
1,2-Dichlorobenzene	25.0	24.6		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	23.6		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	24.3		ug/L		97	76 - 120
1,3-Dichlorobenzene	25.0	24.7		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	80 - 120
2-Butanone (MEK)	125	137		ug/L		110	57 - 140
2-Hexanone	125	141		ug/L		112	65 - 127
4-Methyl-2-pentanone (MIBK)	125	137		ug/L		110	71 - 125
Acetone	125	134		ug/L		107	56 - 142
Benzene	25.0	23.3		ug/L		93	71 - 124
Bromodichloromethane	25.0	24.6		ug/L		98	80 - 122
Bromoform	25.0	26.7		ug/L		107	61 - 132
Bromomethane	25.0	21.8		ug/L		87	55 - 144
Carbon disulfide	25.0	23.7		ug/L		95	59 - 134
Carbon tetrachloride	25.0	25.9		ug/L		104	72 - 134
Chlorobenzene	25.0	23.9		ug/L		96	80 - 120
Dibromochloromethane	25.0	26.2		ug/L		105	75 - 125
Chloroethane	25.0	24.3		ug/L		97	69 - 136
Chloroform	25.0	22.2		ug/L		89	73 - 127
Chloromethane	25.0	23.3		ug/L		93	68 - 124
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	74 - 124
cis-1,3-Dichloropropene	25.0	24.2		ug/L		97	74 - 124
Cyclohexane	25.0	26.3		ug/L		105	59 - 135
Dichlorodifluoromethane	25.0	21.9		ug/L		88	59 - 135
Ethylbenzene	25.0	24.6		ug/L		98	77 - 123
1,2-Dibromoethane	25.0	24.8		ug/L		99	77 - 120
Isopropylbenzene	25.0	26.3		ug/L		105	77 - 122
Methyl acetate	50.0	51.5		ug/L		103	74 - 133
Methyl tert-butyl ether	25.0	23.2		ug/L		93	77 - 120
Methylcyclohexane	25.0	25.1		ug/L		100	68 - 134

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

Lab Sample ID: LCS 480-718619/6
Matrix: Water
Analysis Batch: 718619

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methylene Chloride			25.0	23.7		ug/L		95	75 - 124		
Styrene			25.0	24.5		ug/L		98	80 - 120		
Tetrachloroethene			25.0	23.8		ug/L		95	74 - 122		
Toluene			25.0	23.6		ug/L		94	80 - 122		
trans-1,2-Dichloroethene			25.0	23.9		ug/L		96	73 - 127		
trans-1,3-Dichloropropene			25.0	26.1		ug/L		104	80 - 120		
Trichloroethene			25.0	23.6		ug/L		94	74 - 123		
Trichlorofluoromethane			25.0	24.0		ug/L		96	62 - 150		
Vinyl chloride			25.0	24.6		ug/L		99	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*
Dibromofluoromethane (Surr)	*92*		*75 - 123*

Lab Sample ID: LCSD 480-718619/24
Matrix: Water
Analysis Batch: 718619

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
1,1,1-Trichloroethane			25.0	24.9		ug/L		100	73 - 126	1	15
1,1,2,2-Tetrachloroethane			25.0	24.8		ug/L		99	76 - 120	5	15
1,1,2-Trichloroethane			25.0	24.9		ug/L		99	76 - 122	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	23.2		ug/L		93	61 - 148	1	20
1,1-Dichloroethane			25.0	24.9		ug/L		99	77 - 120	2	20
1,1-Dichloroethene			25.0	24.8		ug/L		99	66 - 127	1	16
1,2,4-Trichlorobenzene			25.0	23.1		ug/L		92	79 - 122	7	20
1,2-Dibromo-3-Chloropropane			25.0	28.3		ug/L		113	56 - 134	6	15
1,2-Dichlorobenzene			25.0	23.6		ug/L		94	80 - 124	4	20
1,2-Dichloroethane			25.0	24.0		ug/L		96	75 - 120	2	20
1,2-Dichloropropane			25.0	24.5		ug/L		98	76 - 120	1	20
1,3-Dichlorobenzene			25.0	23.3		ug/L		93	77 - 120	6	20
1,4-Dichlorobenzene			25.0	22.6		ug/L		90	80 - 120	6	20
2-Butanone (MEK)			125	137		ug/L		109	57 - 140	1	20
2-Hexanone			125	138		ug/L		110	65 - 127	2	15
4-Methyl-2-pentanone (MIBK)			125	135		ug/L		108	71 - 125	1	35
Acetone			125	134		ug/L		107	56 - 142	0	15
Benzene			25.0	23.7		ug/L		95	71 - 124	2	13
Bromodichloromethane			25.0	24.4		ug/L		98	80 - 122	1	15
Bromoform			25.0	25.3		ug/L		101	61 - 132	5	15
Bromomethane			25.0	21.6		ug/L		87	55 - 144	1	15
Carbon disulfide			25.0	24.2		ug/L		97	59 - 134	2	15
Carbon tetrachloride			25.0	26.6		ug/L		106	72 - 134	3	15
Chlorobenzene			25.0	23.5		ug/L		94	80 - 120	2	25
Dibromochloromethane			25.0	25.1		ug/L		100	75 - 125	4	15
Chloroethane			25.0	23.9		ug/L		95	69 - 136	2	15
Chloroform			25.0	22.6		ug/L		90	73 - 127	2	20

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

Lab Sample ID: LCSD 480-718619/24
Matrix: Water
Analysis Batch: 718619

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
Chloromethane			25.0	24.2		ug/L		97	68 - 124	4	15
cis-1,2-Dichloroethene			25.0	24.0		ug/L		96	74 - 124	1	15
cis-1,3-Dichloropropene			25.0	23.5		ug/L		94	74 - 124	3	15
Cyclohexane			25.0	26.9		ug/L		108	59 - 135	2	20
Dichlorodifluoromethane			25.0	20.6		ug/L		82	59 - 135	6	20
Ethylbenzene			25.0	24.3		ug/L		97	77 - 123	1	15
1,2-Dibromoethane			25.0	24.7		ug/L		99	77 - 120	1	15
Isopropylbenzene			25.0	24.8		ug/L		99	77 - 122	6	20
Methyl acetate			50.0	52.0		ug/L		104	74 - 133	1	20
Methyl tert-butyl ether			25.0	23.4		ug/L		94	77 - 120	1	37
Methylcyclohexane			25.0	25.3		ug/L		101	68 - 134	1	20
Methylene Chloride			25.0	24.4		ug/L		98	75 - 124	3	15
Styrene			25.0	24.0		ug/L		96	80 - 120	2	20
Tetrachloroethene			25.0	23.4		ug/L		93	74 - 122	2	20
Toluene			25.0	23.4		ug/L		94	80 - 122	1	15
trans-1,2-Dichloroethene			25.0	23.3		ug/L		93	73 - 127	2	20
trans-1,3-Dichloropropene			25.0	24.3		ug/L		97	80 - 120	7	15
Trichloroethene			25.0	23.9		ug/L		96	74 - 123	1	16
Trichlorofluoromethane			25.0	23.5		ug/L		94	62 - 150	2	20
Vinyl chloride			25.0	24.5		ug/L		98	65 - 133	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*
Dibromofluoromethane (Surr)	*92*		*75 - 123*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-718526/1-A
Matrix: Water
Analysis Batch: 718706

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 718526

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		07/16/24 07:25	07/17/24 13:22	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*26*		*15 - 110*	*07/16/24 07:25*	*07/17/24 13:22*	*1*

Lab Sample ID: LCS 480-718526/2-A
Matrix: Water
Analysis Batch: 718706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 718526

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.26		ug/L		113	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*29*		*15 - 110*

QC Association Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-221636-1
Project/Site: Phytoremediation Court Street Building 5

GC/MS VOA

Analysis Batch: 718619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221636-1	INFLUENT-071224	Total/NA	Wastewater	8260C	
MB 480-718619/8	Method Blank	Total/NA	Water	8260C	
LCS 480-718619/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-718619/24	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 718526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221636-1	INFLUENT-071224	Total/NA	Wastewater	3510C	
MB 480-718526/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-718526/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 718706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221636-1	INFLUENT-071224	Total/NA	Wastewater	8270D SIM ID	718526
MB 480-718526/1-A	Method Blank	Total/NA	Water	8270D SIM ID	718526
LCS 480-718526/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	718526

Lab Chronicle

Client: Ramboll Americas Engineering Solutions
Job ID: 480-221636-1
Project/Site: Phytoremediation Court Street Building 5

Client Sample ID: INFLUENT-071224
Lab Sample ID: 480-221636-1
Date Collected: 07/12/24 08:00
Matrix: Wastewater
Date Received: 07/13/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	718619	ERS	EET BUF	07/17/24 05:38
Total/NA	Prep	3510C			718526	DP	EET BUF	07/16/24 07:25
Total/NA	Analysis	8270D SIM ID		1	718706	EMD	EET BUF	07/17/24 18:20

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-221636-1
Project/Site: Phytoremediation Court Street Building 5

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-221636-1
Project/Site: Phytoremediation Court Street Building 5

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Ramboll Americas Engineering Solutions
Job ID: 480-221636-1
Project/Site: Phytoremediation Court Street Building 5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-221636-1	INFLUENT-071224	Wastewater	07/12/24 08:00	07/13/24 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

Syracuse eurofins Environment Testing

Client Information	Sampler: Jason Newton	Lab PM: Schove, John R	Carrier Tracking No(s): #225	COC No: 480-192583-40339.2
Client Contact: Jason Newton	Phone: 315-506-3236	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 2 of 4 1 of 1
Company: Ramboll Americas Engineering Solutions	PWSID:			Job #: 194010623 3
Address: 333 West Washington Street	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone: 315-506-3236	PO #: ~~1940006251~~ 1940008542			
Email: jason.newton@ramboll.com	WO #: 60622666			
Project Name: Phytoremediation Court Street Building 5	Project #: 48021513			
Site: New York Former LM Court St bldg #5	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	8270D_SIM_MS_ID - SIM List - 1,4 Dioxane	Total Number of containers	Special Instructions/Note:
Preservation Code:							A	N		
Infwnt-071224	7/12/24	0800	G	Water	N	N	X	X	5	Match Previous Infwnt
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

480-221636 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	7/12/24 0820	Ramboll	RCnglish	7-12-24 0820	[signature]
2	RCnglish	7-12-24 1900	[signature]	[signature]	7-13-24 1000	TAT
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.9 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll Americas Engineering Solutions

Job Number: 480-221636-1

Login Number: 221636
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	RAMBOLL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Appendix I

Laboratory Analysis Results (not included within electronic submittal)

APPENDIX C
2025 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Intended for
Lockheed Martin Corporation

Document type
FINAL REPORT

Date
January 2026

2025 Annual Operations and Maintenance Report

Former GE Court Street Building 5 Site

RAMBOLL Bright ideas. Sustainable change.

2025 Annual Operations and Maintenance Report
Former GE Court Street Building 5 Site

Project no.	**1940112129**
Recipient	**Lockheed Martin Corporation**
Document type	**Final Report**
Date	**January 2026**

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1. Introduction

1.1 2025 Highlights

Highlights of remedial activities during 2025 at the Former GE Court Street Building 5 site (herein referred to as the "site") are listed below:

- Compliance with the Effluent Limitations and Monitoring Requirements issued by the New York State Department of Environmental Conservation (NYSDEC) on December 6, 1999 and subsequent extensions including on July 3, 2025.
- On January 21, 2025, Lockheed Martin Corporation (Lockheed Martin) submitted the 2024 Annual Operation and Maintenance (O&M) Report, including the Year 5 Phytoremediation Pilot Test Report included as an appendix.
- On January 24, 2025, the 2024 Annual O&M Report was received by the document repository (East Syracuse Free Library).
- On February 18, 2025, Lockheed Martin submitted a request to extend the existing Effluent Limitations & Monitoring Requirements (ELMR) which was due to expire in April 2025. On February 28, 2025, Lockheed Martin submitted supplemental information to the NYSDEC, as requested by the NYSDEC, in support of extension of the existing ELMR.
- During the growing season, Lockheed Martin continued management of the hybrid poplars, including stand inspections. During May, July, and September of 2025, in accordance with the Work Plan approved in 2020, stand inspections were completed. The Year 6 Phytoremediation Pilot Test Report is included as an attachment to this report.
- On July 1, 2025, as approved by the NYSDEC, Lockheed Martin placed the treatment system into seasonal shutdown.
- On July 3, 2025, NYSDEC issued the renewed and modified ELMR with an effective date of July 3, 2025 and expiration date of July 3, 2030.
- On August 12, 2025, NYSDEC confirmed receipt of the 2024 Annual O&M Report. In the notification letter, the NYSDEC denied the request to extend the seasonal shutdown by one additional month (from 4 months to 5 months). The NYSDEC noted that this request can be reevaluated when more data on the current shutdown period is available.
- On October 31, 2025, Lockheed Martin restarted the treatment system into seasonal operation.
- On November 17, 2025, Lockheed Martin performed the annual slab inspection of Building 5. This was the 15th annual slab inspection to identify potential new slab breaches since the inspection performed in 2010 and the last round of soil vapor intrusion sampling that was conducted during the 2008/2009 heating season. As outlined in the inspection program, the results of the inspection are included within this report.

1.2 Background

This report has been prepared to provide an overview of the O&M activities conducted to implement the remedial program during 2025 at the site. The Record of Decision (ROD) was issued by the NYSDEC for the site in March 1999. The ROD selected No Further Action as the remedy for the site. The remedy consists of the continued O&M of the groundwater and collection treatment (GCT) system [operated as an Interim Remedial Measure (IRM) since January 1998], and monitoring of site conditions.

In January 1998, the construction of the GCT system was completed at the site to prevent migration of residual volatile organic compounds (VOCs) in the groundwater towards Sanders Creek and the South Branch of Ley Creek, and to reduce the mass of VOCs in the groundwater. The GCT system began treating groundwater collected from the collection trench on February 11, 1998 and has operated consistently since that time.

The following summarizes the history of the Firms associated with the O&M of the GCT system on behalf of Lockheed Martin:

- Initial start-up to April 13, 2000 - Parsons Engineering Science, Inc.
- April 14, 2000 to December 31, 2002 - Bergmann Associates
- January 1, 2003 to September 14, 2003 - ENSR
- September 15, 2003 to current – Ramboll Americas Engineering Solutions, Inc (formerly O'Brien & Gere Engineers, Inc. – pre 2019)

Figure 1 is a site plan showing the location of the GCT system, including the collection trench and treatment building. The GCT system removes VOCs from collected groundwater using an air stripper. A Carbtrol multistage diffuser air stripper was used since startup of the GCT until being replaced in 2008 with a new QED EZ-Stacker Low Profile Air Stripper system. After treatment, the collected groundwater is discharged to Sanders Creek in accordance with effluent limitations and monitoring requirements issued by the NYSDEC.

In 2006, the Building 5 property was owned by DE&JD Associates, Inc., and was used as an active warehouse and distribution facility (operated by Climax) until its sale to B&B Family Limited Partnership in the summer of 2006. Current use of the building is now associated with manufacturing of hardwood flooring (operations planned for the building include cutting, molding, and planing of lumber) by Premier Hardwood Products, Inc. The Building 5A property is owned by G&A Properties, LLC and is occupied by WJW Associates and Raymond Corporation. In December 1999, the NYSDEC granted a petition by G&A Properties, LLC to modify the site boundary to exclude the area where Building 5A is located. The site area was reduced from approximately 14 acres to approximately 10 acres as a result.

In June 1999, the NYSDEC reclassified the site from Class 3 to Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites. A Class 4 site is a site that has been properly closed, but requires continued operation, maintenance and/or monitoring.

1.3 Report Overview

This Annual O&M Report contains a summary of:

- GCT system operations
- GCT system performance
- Storm sewer outfall quality
- Groundwater quality
- Building slab inspection

2. GCT Systems Operational Summary

Construction of the GCT system was completed in January 1998 and has since operated consistently, as approved, through 2025. This section briefly describes the GCT system, system shut-down and alarm conditions encountered, modifications made to the GCT system process and monitoring requirements, and other miscellaneous site O&M activities completed during the year.

2.1 GCT System Description

The GCT system includes a collection trench and sump from which groundwater is pumped to a treatment system as shown on Figure 1. The collection trench and treatment system is briefly described in this section. Details regarding the operation and installation of the GCT system are available in the Interim Remedial Measures Work Plan for the Groundwater Collection and Treatment System (EMCON, November 1997), the Certification Report for the Groundwater Collection and Treatment System Installation (Blasland, Bouck & Lee, Inc., Revised May 1998), and the Operations and Maintenance Plan for the Groundwater Collection and Treatment System (IT Corporation, Revised January 2000). The January 2000 O&M Plan was accepted by the NYSDEC in March 2000.

The groundwater collection trench is approximately 830 feet in total length, with a collection pipe slope of 0.2 percent and a collection sump at the northeast end. Based on variations in the ground surface elevation, the final depth of the collection trench ranges from 8 to 14 feet below grade. Pumps are located within the collection sump to transfer groundwater to the treatment building.

The groundwater is discharged into the air stripper designed to remove VOCs. The treated water flows by gravity from the air stripper to a catch basin (CB 2) and ultimately through storm sewer piping to Sanders Creek (OF 01A).

2.2 System Shut-Down and Alarm Conditions

GCT system shut-downs and alarms periodically occurred during the operation of the GCT system. For each alarm response, an initial assessment and corrective action occurred within four hours. In 2025, there were no major unscheduled shut-down events. The seasonal shut-down occurred from July 1 through October 31, 2025. Minor unscheduled shut-downs and alarms occurred throughout the year due to either high water level in the collection sump due to area flooding or local utility company power outage. In addition, there were no scheduled system shut-downs in 2025.

Overall, the GCT system has operated consistently with no significant operational concerns.

2.3 GCT System Monitoring and Process Modifications

During 2025, no major GCT system monitoring and process modifications were performed. However, as described in the following sections, the Phytoremediation Pilot Study continued throughout the year at the site.

2.4 Miscellaneous Site O&M Activities

The following additional site O&M activities were completed or performed in 2025:

- Throughout the year, the Phytoremediation Pilot Test was continued from 2020. Stand inspections were completed in May, July and September of 2025 with reports issued for each. Copies of these reports are included within the Year 6 Phytoremediation Pilot Test Report located in Appendix H. Activities conducted in 2025, in addition to the documented inspections, included tree watering, tree pruning and removal of ground vegetation.
- As required by NYSDEC as set forth in a letter from the NYSDEC to Lockheed Martin, dated December 9, 2009, Lockheed Martin instituted a slab inspection program for Building 5 associated with the soil vapor intrusion assessment performed at the Site. On November 17, 2025, Lockheed Martin performed the slab inspection of Building 5. This was the 15th annual slab inspection to identify new slab breaches since the first inspection performed in 2010 and the last round of soil vapor intrusion sampling that was conducted during the 2008/2009 heating season. As outlined in the inspection program, the results of the inspection are included within Appendix F.

3. GCT System Performance Summary

This section addresses the performance of the GCT system with brief discussions on the quantity and quality of the groundwater collected. A review of system mass removal, hydraulic containment, and evaluation of treated groundwater quality and air emissions are included for the operational year.

3.1 Groundwater Collection System Performance

The following is a summary of the quantity and quality of groundwater collected and treated by the GCT system. This section includes annual totalized flow, groundwater quality, estimated VOC mass removal, and a discussion on hydraulic containment.

3.1.1 Quantity of Collected Groundwater

The quantity of collected groundwater is monitored by totaling flow meters located within the GCT system treatment building. Figure 2 shows the total gallons of groundwater that has been collected and treated during the operational year. Figure 3 presents the average monthly flow rate of groundwater collected and treated between each normal O&M event of the year. These figures demonstrate that the GCT system has been operating in a stable, consistent mode throughout the year. Over the year, the GCT system collected and treated VOC impacted groundwater. The amount is consistent with historical annual groundwater quantities collected and treated as summarized below:

Table 3.1 Historical Summary – Amount of Groundwater Collected and Treated

Year	Amount of Groundwater Collected and Treated (million gallons)
1998	1.90
1999	1.60
2000	1.73
2001	1.71
2002	1.86
2003	1.78
2004	1.88
2005	1.98
2006	2.49
2007	1.63
2008	1.5
2009	1.7
2010	1.56
2011	2.37
2012	1.46
2013	1.91
2014	1.91
2015	1.22
2016	1.57
2017	2.03
2018	1.84

Year	Amount of Groundwater Collected and Treated (million gallons)
2019	2.14
2020	1.69
2021	1.74
2022	1.59
2023	1.70
2024 [a]	1.38
2025 [b]	1.56

[a] Seasonal operation (shutdown between July 1st – December 13th)

[b] Seasonal operation (shutdown between July 1st – October 31st)

The semi-annual flow rates are consistent with flow rates encountered during previous years of operation and are consistent with weather conditions during that portion of the year. The flow rates are summarized in the following table:

Table 3.2 Historical Summary – Average Groundwater Collection Rate

Year	January – June (gpm)	July – December (gpm)
1998	6.2	2.9
1999	6.3	1.4
2000	5.3	1.55
2001	4.55	2.11
2002	5.24	1.72
2003	4.77	2.11
2004	5.53	2.13
2005	5.31	2.11
2006	6.03	3.29
2007	5.84	1.2
2008	5.23	1.89
2009	4.55	2.06
2010	3.58	2.43
2011	6.71	2.16
2012	4.77	0.72
2013	4.65	2.7
2014	5.98	1.41
2015	2.46	2.09
2016	4.96	1.19
2017	5.52	2.09
2018	5.0	2.03
2019	5.43	2.89
2020	5.25	1.21
2021	3.25	3.26
2022	4.89	1.25
2023	4.83	1.70
2024 [a]	4.33	0.28
2025 [b]	4.80	0.81

[a] Seasonal operation (shutdown between July 1st – December 13th)

[b] Seasonal operation (shutdown between July 1st – October 31st)

3.1.2 Quality of Collected Groundwater

The quality of the collected groundwater is monitored by collecting influent samples prior to treatment within the GCT treatment building. During 2025, quarterly monitoring of VOC concentrations was conducted. Additionally, Lockheed Martin sampled for influent groundwater pH, and total dissolved solids (TDS) to evaluate the system. Appendix A provides a summary of influent groundwater quality data.

Appendix A summarizes the concentration of VOCs in the influent groundwater samples collected during the year. The operational year data is consistent with historical data. Additionally, influent data prior to phytoremediation pilot test implementation compared to Year 6 influent data indicates a general decrease in VOC concentrations.

3.1.3 VOC Mass Removal Estimate

An estimate of VOC mass removal for individual compounds from the groundwater due to operation of the GCT system has been calculated using the following assumption:

- The influent VOC concentrations of individual compounds measured from a specific sampling event remain constant until the next sampling event.

Appendix B presents the calculated estimate of VOC mass removed. In summary, approximately 0.09 pounds of VOCs have been removed from the groundwater during the year. The total VOC mass removal is broken down by compound as follows:

- 0.02 pounds of 1,1-dichloroethane
- 0.037 pounds of 1,2-dichloroethene
- 0.000 pounds of chloroethane
- 0.035 pounds of vinyl chloride
- 0.000 pounds of trichloroethene

A summary of VOC mass removal for previous years based on treatment system flows is provided below and can be viewed within Figure 4:

Table 3.3 Historical Summary – Estimate of Total VOC Mass Removal

Year	Estimate of Total VOC Mass Removal (lbs)
1998	4.00
1999	3.20
2000	2.20
2001	1.72
2002	1.84
2003	1.52
2004	1.50
2005	2.29
2006	1.56
2007	1.76
2008	0.53
2009	0.69

Year	Estimate of Total VOC Mass Removal (lbs)
2010	0.52
2011	0.95
2012	0.35
2013	0.28
2014	0.46
2015	0.12
2016	0.25
2017	0.42 [1]
2018	0.22
2019	0.24
2020	0.19
2021	0.27
2022	0.25
2023	0.13
2024 [a]	0.11
2025 [b]	0.09

[1] Due to a laboratory error, the 4th quarter influent sample was not analyzed completely, and therefore, is not included in the total mass removed calculation for the 2017 year.
[a] Seasonal operation (shut down between July 19th – December 13th)
[b] Seasonal operation (shutdown between July 1st – October 31st)

In addition to the mass of VOCs removed from the groundwater through operation of the GCT system, additional VOC mass was reduced by natural degradation.

3.1.4 Hydraulic Containment

Groundwater elevations were measured from shallow monitoring wells, staff gauges and the collection trench clean-out risers. Groundwater elevation monitoring data was collected semi-annually (March and September) during 2025 from MW-1S, MW-2S, MW-3S, MW-4S, MW-6S, MW-7S, MW-8S, MW-9, MW-10, MW-11R, MW-12, MW-13, MW-15, MW-16AR, MW-17A, MW-18A, MW-19S, SG-1R, SG-2R, SG-3R, SG-5R, SG-7R, SG-8, SG-9, CO-N and CO-S. These data are summarized in Table 1.

The GCT system has consistently maintained lower heads along the collection trench relative to the surrounding groundwater regime, as evidenced by the lower elevations measured within the collection trench (*i.e.*, cleanouts CO-N and CO-S) compared to nearby monitoring wells, piezometers and staff gauges. The collection system has established hydraulic control of the VOC-impacted shallow groundwater, thereby preventing migration of the VOC-impacted shallow groundwater, located east of the collection trench, toward the South Branch of Ley Creek and Sanders Creek. Continued operation of the GCT system will prevent and control the migration of VOC-impacted shallow groundwater.

In addition to the semi-annual measurements, groundwater flow within the collection trench is confirmed by inspection of the collection system cleanouts (CO-N and CO-S) during the year.

Each of the inspections indicated that water was freely draining from the collection trench toward the collection sump.

3.2 Groundwater Treatment System Performance

This section addresses the GCT system performance by examining both groundwater effluent discharges and air emissions. Both discharges are reviewed on a quarterly basis to confirm compliance with NYSDEC effluent limitations and are discussed in detail in the sections below.

3.2.1 Treated Groundwater Effluent Discharge Quality

The quality of treated groundwater effluent discharge is monitored by collecting effluent samples from GCT system piping located within the GCT system treatment building following treatment. During 2025, sample collection and analysis was performed in accordance with the Effluent Limitations and Monitoring Requirements established for the system by the NYSDEC. Quarterly monitoring of flow rate, VOC concentrations (1,1-dichloroethane, 1,2-dichloroethene, vinyl chloride, trichloroethene), pH, TDS, and zinc was conducted. In addition, at the request of the NYSDEC, 1,4-dioxane has been included in the quarterly events.

Appendix C presents a summary of effluent analytical data generated during operation of the GCT system during the year. As shown in Appendix C, no effluent limitations were exceeded during the year.

3.2.2 Air Emission Evaluation

The O&M Plan provided an evaluation method to confirm that the VOCs emitted from the air stripper do not create ambient air quality impacts above short-term guideline concentrations (SGCs) or annual guideline concentrations (AGCs) defined in the NYSDEC's Guidelines for the Control of Toxic Ambient Contaminants - Air Guide 1 (NYSDEC, Draft 1991). In the NYSDEC's response to the 2022 Annual O&M Report (comments letter dated March 23, 2023), it was requested that Lockheed Martin update the air emissions evaluation consistent with current DAR-1 requirements.

Based on the request, Lockheed Martin has updated the original air emissions evaluation for the Site by modeling mass emissions from the GCT system using the highest treatment flow rate (gpm) recorded in the past operational quarters multiplied by the highest individual influent COC concentrations observed in the year and assumed that mass emission occurred every hour of the year. This modeling was performed using the AERSCREEN air dispersion model and included site-specific source information (including, but not limited to, stack height, stack diameter, building dimensions and other information). The results of the model, which are summarized in the Table 2, indicate that projected air quality impacts are well below current SGCs and AGCs. LMC will update these results on an annual basis, as part of each Annual O&M Report.

4. Storm Sewer Outfall Quality

A storm sewer outfall sample was collected from outfall OF-02 on April 2, 2025 and analyzed for VOCs. Outfall OF-02 discharges to the South Branch of Ley Creek, as shown in Figure 1. The sample was collected during a “dry weather” period, meaning that surface water was not flowing into the catch basins at the time of sample collection. Lockheed Martin received laboratory analytical data for the annual dry weather storm sewer sampling performed at the outfall and notified the NYSDEC of the results. A summary of the storm sewer outfall sampling analytical results showing detected concentrations of VOCs using EPA Method 8260 is presented in Appendix D. The outfall analysis data from the event is consistent with historical data for the site.

During April 2026, Outfall OF-02 will be sampled during “dry weather” conditions as specified in the August 1997 Storm Sewer IRM Work Plan, and Lockheed Martin’s June 30, 1998 letter and NYSDEC’s August 28, 1998 letter regarding the Storm Sewer IRM.

5. Groundwater Quality

In March 2025, groundwater samples were collected and analyzed from monitoring wells MW-1S, MW-2S, MW-8S, MW-10, MW-11R, MW-12, MW-16AR, MW-17A, MW-18A and MW-19S.

A summary of groundwater monitoring well analytical results showing detected concentrations of VOCs using EPA Method 8260 is presented in Appendix E. Monitoring well locations are shown on Figure 1. The groundwater analysis data from the event are consistent with historical data for the site.

During March 2026, groundwater samples will be collected from monitoring wells MW-1S, MW-2S, MW-8S, MW-10, MW-11R, MW-12, MW-16AR, MW-17A, MW-18A and MW-19S.

6. Conclusions

This section provides conclusions drawn based upon the operation of the GCT system during 2025 and remedial goals for the site as specified in the ROD.

6.1 GCT System Operational Performance

The GCT system collected approximately 1.56 million gallons of groundwater during 2025 and has treated this groundwater in compliance with NYSDEC requirements for air emissions and treated water discharges. The GCT system has operated consistently, experiencing minimal shut-down periods with no significant operational concerns.

The GCT system has consistently maintained lower heads along the collection trench relative to the surrounding shallow groundwater regime. Therefore, hydraulic control has been established, preventing migration of the VOC-impacted shallow groundwater, located east of the collection trench, toward the South Branch of Ley Creek and Sanders Creek.

6.2 Attainment of Remedial Goals

The remedial goals specified in the ROD for the site (NYSDEC, March 1999) are as follows:

- Prevent the migration of VOC impacted shallow groundwater to the South Branch of Ley Creek and to Sanders Creek, to the extent feasible considering site conditions.
- Reduce the level of residual VOCs in the shallow groundwater to attain NYSDEC groundwater standards (6 NYCRR Part 703), to the extent feasible considering site conditions, currently available technology, implementability, and cost-effectiveness.
- Reduce the level of residual VOCs in site soils to attain NYSDEC Soil Cleanup Objectives (NYSDEC Technical and Administrative Guidance Memorandum 4046), to the extent feasible considering site conditions, currently available technology, implementability, and cost-effectiveness.

The GCT system has been successful in establishing hydraulic control, preventing migration of the VOC-impacted shallow groundwater, located south and east of the collection trench, toward the South Branch of Ley Creek and Sanders Creek. Additional VOC-impacted groundwater is being collected and controlled from areas located north and west of the collection trench. The concentration of VOCs in the storm sewer outfall OF-02 (South Branch of Ley Creek) continue to be at trace levels, similar to past sample results.

The GCT system has removed 0.09 pounds of VOCs from groundwater during 2025 in pursuit of reducing the level of residual VOCs in the shallow groundwater. Additional VOC mass reduction has also been accomplished through natural degradation. As discussed in the Feasibility Study (EMCON, January 1999), it is anticipated that groundwater quality at portions of the site (*e.g.*, near former source areas) will not achieve groundwater standards, criteria, and guidelines (SCGs) (6 NYCRR Part 703) for a number of decades. It is also anticipated that shutdown of the GCT system may be appropriate prior to achieving groundwater quality SCGs across the site. In accordance with the FS and the ROD, O&M of the GCT system will continue until groundwater concentrations of site-related VOCs have leveled off at a relatively low concentration over the majority of the site, significant quantities of contaminants are no longer being removed, or it can

be demonstrated that the full-scale phytoremediation system and/or natural attenuation of VOCs will be protective of water quality in the South Branch of Ley Creek and Sanders Creek.

6.3 Plans for 2026

The following bullets present Lockheed Martin's plans for the site in 2026 in addition to the operation of the GCT system and regular sampling activities:

- Continue to review and assess operational improvement options for their potential effectiveness for future use at the site.
- Continue implementation of the Phytoremediation Pilot Test Work Plan with tree stand inspections, tree pruning, vegetation management and monthly influent/effluent monitoring and analysis.
- Complete the inspection report and perform next round of visual inspections on the building slab associated with vapor intrusion (VI). Results of the inspections will be summarized in a report to the NYSDEC.
- As discussed in the Year 6 Phytoremediation Pilot Test Report (located in Appendix H), the seasonal shutdown from July 1 through November 1, 2025 (restarted on October 31st) did not appear to have any negative effect(s). VOCs were detected during the annual sampling event in wells MW-10 and MW-11R, which are immediately upgradient of wells MW-17A and MW-18A; however, no VOCs were detected in MW-17A and MW-18A during the annual and post-shutdown sampling events (in March and October 2025, respectively). A low concentration of 1,4-dioxane was detected in well MW-17A during the post-shutdown event, consistent with the results observed in 2024. Historical data for 1,4-dioxane concentrations prior to 2024 are not available for this monitoring well.
- As discussed in the Year 6 Phytoremediation Pilot Test Report (located in Appendix H), the data collected to date demonstrate that the concentrations of CVOCs in the treatment system influent (collection trench effluent) are reliably below the substantive requirements established by NYSDEC for discharge to the storm sewer. Lockheed Martin is requesting approval from NYSDEC for a 5-month seasonal shutdown for 2026 (from July 1 through December 1, 2026) subject to the same conditions established by NYSDEC in 2024 and 2025 with a four month shutdown (July 1 – November 1).

TABLES

Table 1

Semi-Annual Groundwater Elevation Data

Table 1
Semi-Annual Groundwater Elevation Data
2025 Annual Operations and Maintenance Report
Former GE Court Street Building 5 Site

Well	March 7, 2025 Groundwater Elevation (ft. MSL)	September 9, 2025 Groundwater Elevation (ft. MSL)
MW-1S	381.09	378.51
MW-2S	380.87	374.82
MW-3S	379.07	375.70
MW-4S	378.02	374.13
MW-6S	382.68	372.80
MW-7S	381.27	373.46
MW-8S	377.38	373.29
MW-9	380.61	373.09
MW-10	380.51	DRY
MW-11R	381.22	371.95
MW-12	380.00	371.57
MW-13	375.85	Inaccessible
MW-15	379.97	DRY
MW-16AR	376.93	373.60
MW-17A	378.05	372.32
MW-18A	378.86	373.90
MW-19S	378.33	376.28
SG-1R	374.75	374.25
SG-2R	Damaged	Damaged
SG-3R	372.93	372.28
SG-5R	374.86	374.26
SG-7R	374.42	DRY
SG-8	372.74	372.14
SG-9	372.84	372.21
CO-N	374.28	374.04
CO-S	375.77	374.10

Notes:

1. March comparison of groundwater elevations recorded on both sides of the trench to elevations recorded in the collection trench (i.e., interpolation based on cleanouts) confirm an inward hydraulic gradient.

2. Treatment system was deactivated on 7/1/2025. As expected, an inward hydralic gradient was n observed on 9/9/2025.

Table 2

Toxics AERSCREEN Modeling Results

Table 2
Toxics AERSCREEN Modeling Results 2025
Lockheed Martin - Court St Site
Syracuse, New York

Pollutants	CAS Number	Water Treatment Flow Rate (gal/min)	Concentration in Water (µg/L)	Emission Rate[a] (lb/hr)	Normalized Short-Term Concentration[b] (µg/m³/lb/hr)	Normalized Annual Concentration[b] (µg/m³/lb/hr)	Short-Term Concentration[c] (µg/m³)	Annual Concentration[c] (µg/m³)	Short-Term Guideline Concentration (SGC)[d] (µg/m³)	Annual Guideline Concentration (AGC)[d] (µg/m³)	% SGC	% AGC	Emission Rate to Meet SGC[e] (lb/hr)	Concentration in Water to Meet SGC[f] (µg/L)	Emission Rate to Meet AGC[e] (lb/hr)	Concentration in Water to Meet AGC[f] (µg/L)	Maximum Allowable Concentration in Water (µg/L)
		4.6															
Vinyl Chloride	00075-01-4		7.9	1.82E-05	1,589	159	2.89E-02	2.89E-03	180,000	0.11	<1	3	113	49,185,719	6.92E-04	301	301
1, 1-Dichloroethane	00075-34-3		2.4	5.53E-06	1,589	159	8.78E-03	8.78E-04	---	0.63	---	<1	---	---	3.96E-03	1,722	1,722
1, 2-Dichloroethene	00156-59-2		6.2	1.43E-05	1,589	159	2.27E-02	2.27E-03	---	63	---	<1	---	---	0.396	172,150	172,150
Trichloroethylene	00079-01-6		1	2.30E-06	1,589	159	3.66E-03	3.66E-04	20	0.21	<1	<1	1.26E-02	5,465	1.32E-03	574	574
Chloroethane	00075-00-3		1	2.30E-06	1,589	159	3.66E-03	3.66E-04	---	10,000	---	<1	---	---	62.9	27,325,400	27,325,400
1,4-Dioxane	00123-91-1		5.3	1.22E-05	1,589	159	1.94E-02	1.94E-03	3,000	0.20	<1	<1	1.89	819,762	1.26E-03	547	547

Notes:
(a) Emission Rate (lb/hr) = Water Treatment Flow Rate (gal/min) x 60 (min/hr) x Concentration in Water (µg/L) x 3.785 (L/gal) ÷ 1,000,000 (µg/g) ÷ 453.592 (g/lb)
(b) AERSCREEN modeling was performed on a normalized basis with an emission rate of 1 lb/hr.
(c) Short-Term/Annual Concentration (µg/m^3) = Emission Rate (lb/hr) x Normalized Short-Term/Annual Concentration (µg/m^3)
(d) AGCs and SGCs were obtained from the February 21, 2021 version of NYSDEC's DAR-1.
(e) Emission Rate to Meet SGC/AGC (lb/hr) = SGC/AGC (µg/m^3) ÷ Normalized Short-Term/Annual Concentration (µg/m^3/lb/hr)
(f) Concentration in Water to Meet SGC/AGC (µg/L) = Emission Rate to Meet SGC/AGC (lb/hr) x 453.592 (g/lb) x 1,000,000 (µg/g) ÷ 60 (min/hr) ÷ Water Treatment Flow Rate (gal/min) ÷ 3.785 (L/gal)

FIGURES

Figure 1
Site Plan

N

DEERE ROAD

298

FORMER SG-1

CREEK

SANDERS

BUILDING 5

BUILDING 5A

EXISTING STORM SEWER LINES AND EXISTING EFFLUENT LINE (COMBINED FROM CB-2)

COLLECTION SUMP

MW-19S

INFLUENT LINES

SG-2

MW-3S

CB-3

CB-2

MW-1S

CLEANOUT RISER (CR-SOUTH)

MW-12

OF-02

CREEK

(SOUTH BRANCH)

FORMER SG-5

MW-6S

MW-2S

TREATMENT BUILDING

CB-20

MW-4S

OF-01A

CB-4

MW-16A

MW-11R

MW-18A

MW-7S

SG-6

FLOW

LEY

MW-8S

MW-9

MW-10

ROUTE

SG-8

MW-13

FORMER SG-4

LOCATION OF GROUNDWATER COLLECTION SYSTEM TRENCH

SG-3

MW-17A

SG-9

FORMER EFFLUENT LINE

MW-15

CLEANOUT RISER (CR-NORTH)

SG-7

0 120 240

SCALE IN FEET

1" 1/2" 0" 1"

LEGEND:

- MONITORING WELL (ONLY THOSE WELLS INCLUDED IN PERIODIC HYDRAULIC OR GROUNDWATER MONITORING ARE SHOWN)
- STAFF GAUGE
- OUTFALL
- CATCH BASIN
- EXISTING STORM SEWER LINES
- YARD PIPING (APPROXIMATE LOCATIONS COLLECTION TRENCH AND INFLUENT LINE)
- FORMER EFFLUENT LINE
- EXISTING EFFLUENT LINE

NOTE: ORIGINAL BASED ON EMCON DRAWING DATED 2/1998

FIGURE 1

ANNUAL OPERATIONS AND MAINTENANCE REPORT
FORMER GE COURT STREET BUILDING 5

SITE PLAN

Figure 2
Total Gallons of Groundwater Collected and Treated

Figure 2
Total Gallons of Groundwater Collected and Treated
2025 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

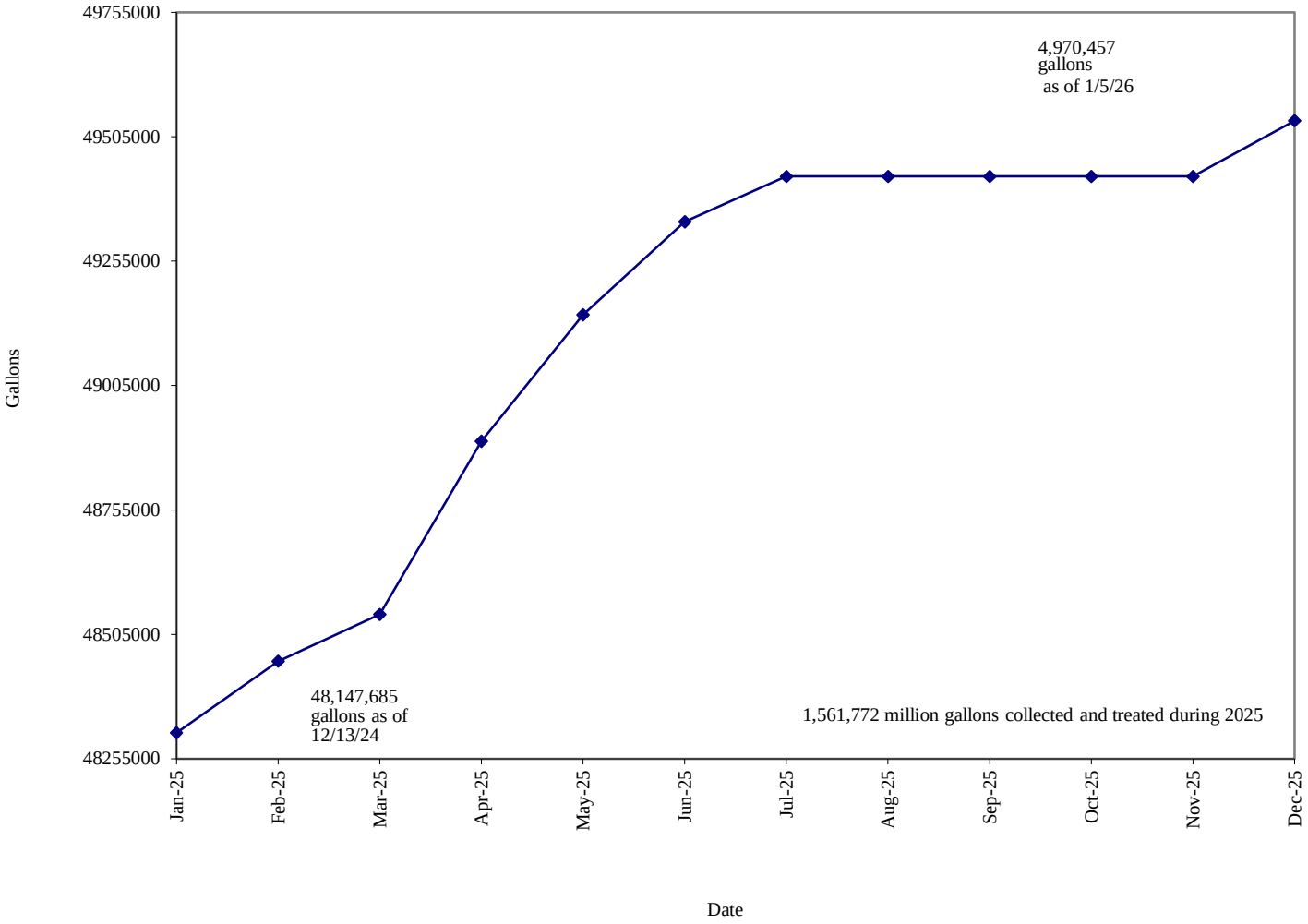
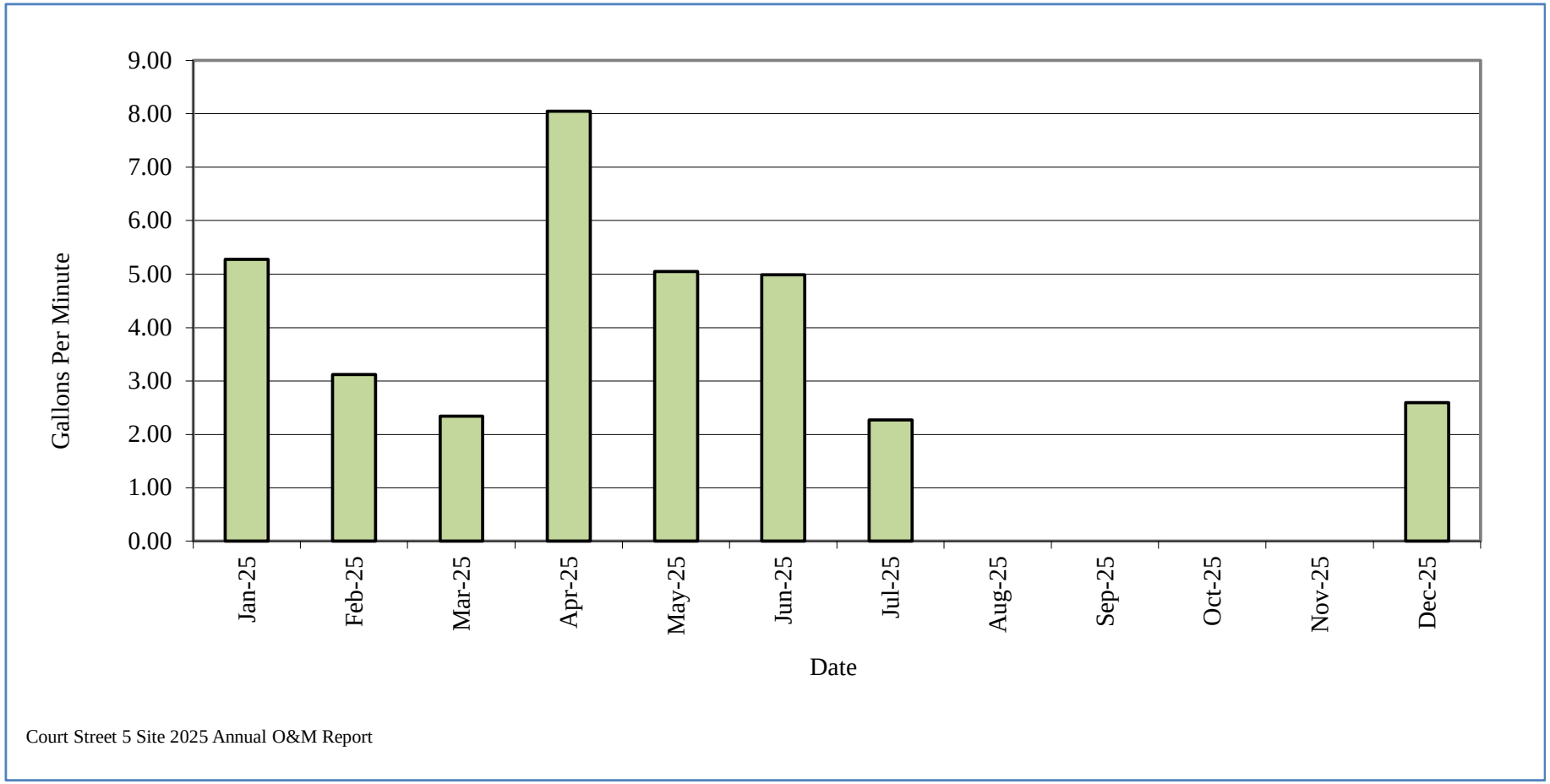


Figure 3

Average Flow Rate of Groundwater Collected and Treated

Figure 3
Average Monthly Flow Rate of Groundwater Collected and Treated
2025 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

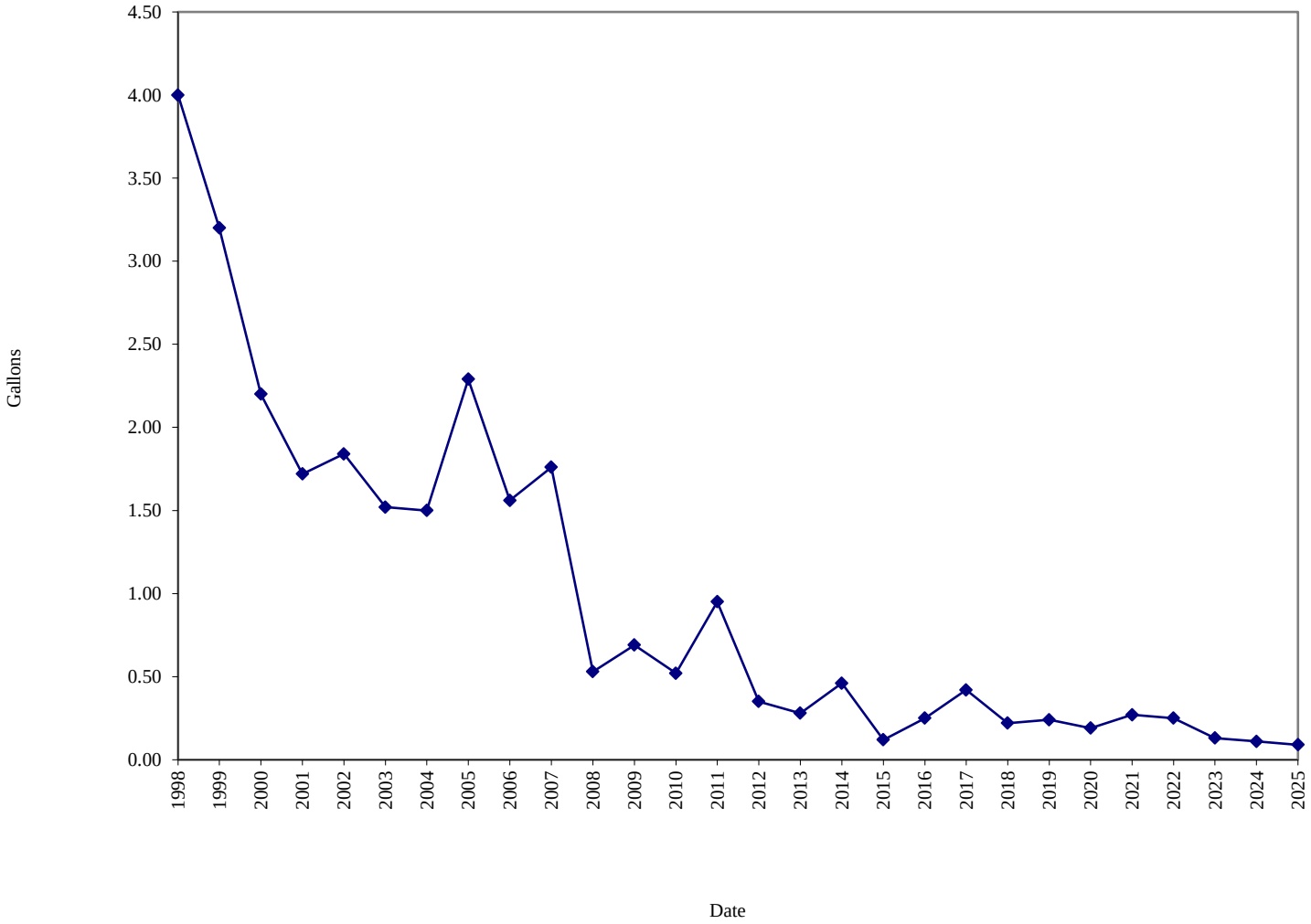


Court Street 5 Site 2025 Annual O&M Report

Figure 4

Estimated Total VOC Mass Removal – Historical

Figure 4
Estimate Total VOC Mass Removal - Historical
2025 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site



APPENDICES

Appendix A

Influent Groundwater Quality

Appendix A
Influent Groundwater Quality
2025 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

Event Identification	Date	Total Ground-water Treated (gallons)	Instant. Flow Rate (gpm)	pH (S.U.)	Total Dis. Solids (mg/l)	Vinyl Chloride (µg/L)	1,1-DCA (µg/L)	1,2-DCE (Total) (µg/L)	trans-1,2-dichloroethene (µg/L)	cis-1,2-dichloroethene (µg/L)	TCE (µg/L)	Chloroethane (µg/L)	1,4-Dioxane (µg/L)
Normal O&M Week #1416 Quarterly Sample, Influent	03/04/25	48,645,204	3.80	6.89	962	5.1	2.2	4.6	NA	NA	<1.0	<1.0	NA
Normal O&M Week #1429 Quarterly Sample, Influent	06/03/25	49,334,063	5.26	6.60	796	2.4	2.2	2.7	NA	NA	<1.0	<1.0	NA
Normal O&M Week #1442 Quarterly Sample, Influent	09/03/25	49,425,403	2.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Normal O&M Week #1455 Quarterly Sample, Influent	12/03/25	49,537,338	2.36	7.39	598	<1.0	1.2	NA	<1.0	2.3	<1.0	NA	NA
Minimum Value:					598	<1.0	1.2	2.7	<1.0	2.3	<1.0	<1.0	NA
Maximum Value:					962	5.1	2.2	4.6	<1.0	2.3	<1.0	<1.0	NA
Number of Detections/Number of Analyses :					3/3	2/3	3/3	2/2	0/1	1/1	0/3	0/2	NA

Notes:
1. Influent pH, and TDS is not required for the site O&M monitoring; however, during certain O&M events LMC may sample these parameters for system evaluation.
2. Laboratory analysis performed by TestAmerica Laboratories, Inc.
3. Per the request of Mr. Joshua Cook, (NYSDEC), chloroethane and 1,4 dioxane results are for the effluent sample only for normal operations.
4. trans-1.2-dichloroethane and cis-1,2-dichloroethane added to revised ELMR on 7/3/25. Chloroethane and 1,2 DCE (Total) removed from ELMR.
5. cis-1,2-DCE reported as 1,2-DCE (Total) for Quarters 1 and 2.
6. System was in seasonal shutdown from July 1, 2025 - October 31, 2025.

NA = Not applicable

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

B = Compound was found in the blank and sample.

Appendix B

Estimate of VOC Mass Removed

Appendix B
Estimate of VOC Mass Removed
2025 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

Quarter 2025	From Date	To Date	GW Treated during Period (gallons)	Vinyl Chloride (lb.)	1,1-DCA (lb.)	1,2-DCE (Total) (lb.)	TCE (lb.)	Chloroethane (lb.)
1st Quarter Jan - Mar.	12/13/24	03/04/25	497,519	0.021	0.009	0.019	0.000	0.000
2nd Quarter Mar. - June	03/04/25	06/03/25	688,859	0.014	0.013	0.016	0.000	0.000
3rd Quarter June - Sept.	06/03/25	09/03/25	91,340	0.000	0.000	0.000	0.000	0.000
4th Quarter Sept. - Dec.	09/03/25	12/03/25	111,935	0.000	0.001	0.002	0.000	0.000
Estimated Mass (lbs) of Individual VOCs Removed by the GCT System in 2025:				**0.035**	**0.02**	**0.037**	**0.000**	**0.000**

Estimated Mass (lbs) of Total VOCs Removed by the GCT System in 2025:	**0.09**

Sample Calculation:

Estimate of Mass of 1,1-DCA Removed Between December 13, 2024 and March 4, 2025.

$$C_1 \times \frac{1 \text{ pound}}{454 \times 10^6 \text{ ug}} \times (Q_2 - Q_1) \times \frac{3.785 \text{ liters}}{1 \text{ gallon}} = M$$

where:

M=Mass (pounds) of 1,1-DCA Removed during the period.

Q_1=Quantity (gallons) of groundwater treated as of December 13, 2024.

Q_2=Quantity (gallons) of groundwater treated as of March 4, 2025.

C_1=Concentration (ug/l) of 1,1-DCA in sample collected March 4, 2025.

Solution:

Q_1= 48,147,685 gallons

Q_2= 48,645,204 gallons

C_1= 2.2 ug/l

M= 0.009 pounds

Appendix C

Treated Groundwater Effluent Discharge Quality

Appendix C
Treated Groundwater Effluent Discharge Quality
2025 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

Event Identification	Date	Total Ground-water Treated (gallons)	Instant. Flow Rate (gpm)	pH (S.U.)	Total Dis. Solids (mg/L)	Zn Total (µg/L)	Vinyl Chloride (µg/L)	1,1-DCA (µg/L)	1,2-DCE (Total) (µg/L)	trans-1,2-dichloroethene (µg/L)	cis-1,2-dichloroethene (µg/L)	TCE (µg/L)	Chloroethane (µg/L)	1,4 Dioxane (µg/L)
Effluent Limitations :			**Monitor**	**6 - 9**	**Monitor**	**400**	**50**	**30**	**30**	**NA**	**NA**	**10**	**NA**	**NA**
Normal O&M Week #1416 Quarterly Sample, Effluent	03/04/25	48,645,204	3.80	8.22	943	< 10	< 1.0	< 1.0	< 1.0	NA	NA	< 1.0	< 1.0	3.9
Normal O&M Week #1429 Quarterly Sample, Effluent	06/03/25	49,334,063	5.26	7.91	786	<10	< 1.0	< 1.0	< 1.0	NA	NA	< 1.0	< 1.0	5.4
ELMR Extension/Modification 7/3/25 Effluent Limitations :			**Monitor**	**6 - 9**	**Monitor**	**400**	**10**	**10**	**NA**	**10**	**10**	**10**	**NA**	**Monitor**
Normal O&M Week #1442 Quarterly Sample, Effluent	09/03/25	49,425,403	2.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Normal O&M Week #1455 Quarterly Sample, Effluent	12/03/25	49,537,338	2.36	8.33	604	<10	<1.0	<1.0	NA	<1.0	<1.0	<1.0	NA	2.2

Minimum Value:	604	<10	< 1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	2.2
Maximum Value:	943	<10	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	5.4
Number of Samples :	3	3	3	3	2	1	1	3	2	3
Number of Detections/Number of Analyses:	3/3	0/3	0/3	0/3	0/2	0/1	0/1	0/3	0/2	3/3

Notes:

1. Laboratory analysis performed by TestAmerica Laboratories, Inc..
2. Per the request of Mr. Joshua Cook, (NYSDEC), chloroethane and 1,4 dioxane results are included in this summary table.
3. System was in seasonal shutdown from July 1, 2025 - October 31, 2025.
4. trans-1.2-dichloroethane and cis-1,2-dichloroethane added to revised ELMR on 7/3/25. Chloroethane and 1,2 DCE (Total) removed from ELMR.
5. cis-1,2-DCE reported as 1,2-DCE (Total) for Quarters 1 and 2.

NA = Not applicable

E = Estimate value - results exceeded calibration range

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

B = Compound was found in the blank and sample.

Appendix D

2025 South Branch of Ley Creek Outfall OF-02 Sample

Appendix D
South Branch of Ley Creek Outfall OF-02 Sample
2025 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

PARAMETER	NYSDEC Effluent Discharge Limitation	OF-02 4/2/2025 Result
1,1-Dichloroethene	--	<1.0
1,1-Dichloroethane	30	20
1,2-Dichloroethane	--	<1.0
1,1,1-Trichloroethane	--	<1.0
Trichloroethene	10	<1.0
c-1,2-Dichloroethene	30	<1.0
Chloroform	--	<1.0
Bromodichloromethane	--	<1.0

Notes:
1. NYSDEC Effluent Discharge Limitation is provided for comparison.
2. All concentrations are presented in ug/l.
3. Sample analyzed by Method 8260.
4. Laboratory analysis provided by TestAmerica Laboratories, Inc.

Appendix E

Groundwater Monitoring Well Data Summary

Appendix E
Groundwater Monitoring Well Data Summary
2025 Annual Operations and Maintenance Report - Former GE Court Street Building 5 Site

PARAMETER	NYSDEC Groundwater (GA) Standard (6 NYCRR 703)	MW-1S Sample Date 3/7/2025 Result	MW-2S Sample Date 3/7/2025 Result	MW-8S Sample Date 3/7/2025 Result	MW-10 Sample Date 3/7/2025 Result	MW-11R Sample Date 3/7/2025 Result	MW-12 Sample Date 3/7/2025 Result	MW-16AR Sample Date 3/7/2025 Result	MW-17A Sample Date 3/7/2025 Result	MW-18A Sample Date 3/7/2025 Result	MW-19S Sample Date 3/7/2025 Result
1,1,1-Trichloroethane	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloro-1,2,2-trifluoroethane	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	5	500	5.0	< 1	4.2	17	< 1	1.2	< 1	< 1	< 1
1,2-Dichloroethane	0.6	1.9	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	5	< 1	< 1	< 1	< 1	0.86 J	< 1	< 1	< 1	< 1	< 1
2-Butanone	None	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	None	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chloroethane	5	2900	< 1	< 1	< 1	23	< 1	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	5	1.5	6.9	< 1	2.1	71	< 1	1.6	< 1	< 1	< 1
Ethylbenzene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene Chloride	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	5	1.1	< 1	< 1	< 1	0.91 J	< 1	< 1	< 1	< 1	< 1
Trichloroethene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2	3.5	21	< 1	< 1	65	< 1	< 1	< 1	< 1	< 1
Xylenes (total)	5	< 2	< 2	< 2	<1	< 2	< 2	< 2	< 2	< 2	< 2

Notes:
1. Samples analyzed by EPA Method 8260.
2. Concentrations are presented in ug/l.
3. Laboratory analysis performed by Eurofins TestAmerica.
4. MW-16A replaced with MW-16AR on February 27, 2017.
5. Exceeds NYSDEC Class GA groundwater standards
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*+ - LCS and/or LCSD is outside acceptance limits, high biased.

Appendix F

Court Street Building Slab Inspection Report

MEMO

Project name	**2025 Annual Building Slab Inspection Summary – Former GE Court Street Building Site**
Project no.	**1940112129**
Client	**Lockheed Martin Corporation**
Memo no.	**1**
Version	**0.1**
To	**Jill Fonte, Lockheed Martin**
From	**Scott Scheidelman**
Copy to	**Robert Tyson – BS&K** **R. Stan Phillips – Lockheed Martin** **Matthew Traister – Ramboll**
Prepared by	**Michael Mellen – Ramboll**
Checked by	**Matthew Traister – Ramboll**
Approved by	**Matthew Traister – Ramboll**

Date January 8, 2026

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Syracuse, NY 13202
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https://ramboll.com

This Technical Memorandum (TM) presents a summary of the 2025 annual building slab inspection conducted at the former GE Court Street Building 5 Site (Site) on November 17, 2025. The purpose of the inspection was to identify slab breaches and building modifications in accordance with recommendations presented in the March 12, 2009 technical memorandum by O'Brien & Gere Engineers, Inc (OBG). Note that Ramboll Americas Engineering Solutions, Inc. (Ramboll) is formerly known as OBG, pre 2019). This TM is an update to the following:

Date / Description of Subslab Inspection	Date of Ramboll Technical Memorandum
November 2010 Baseline slab inspection	February 1, 2011
2011 slab inspection	December 8, 2011
2012 slab inspection	December 13, 2012
2013 slab inspection	December 19, 2013
2014 slab inspection	December 19, 2014
2015 slab inspection	January 8, 2016
2016 slab inspection	December 20, 2016
2017 slab inspection	December 11, 2017
2018 slab inspection	December 19, 2018
2019 slab inspection	December 3, 2019
2020 slab inspection	January 4, 2021
2021 slab inspection	January 3, 2022
2022 slab inspection	January 11, 2023
2023 slab inspection	January 18, 2024
2024 slab inspection	December 4, 2024

The 2025 inspection, documented by this TM, evaluated the potential slab breaches identified in previous inspections and inspected the slab for potential new breaches that may have occurred since the last inspection. Potential slab breaches were evaluated with respect to their ability to facilitate the vapor

intrusion (VI) pathway. This TM provides the details of the evaluations and provides recommendations for next steps.

1 Background

The Site consists of approximately 10 acres in an industrial zoned setting located in the Town of Dewitt at the intersection of Deere Road and Route 298. There is one on-Site building, Building 5, which is currently owned by B&B Family Limited Partnership. The primary occupant is Premier Hardwood Products (PHP). PHP's operations consist primarily of cutting, molding, and planing of lumber. An additional tenant, Specialty Products & Insulation Co. (SPI), is located in the northwest portion of the building. SPI is a distributor of HVAC system products such as metal ducting, piping, and insulation. SPI has constructed an enclosed office space located within the warehouse area of Building 5. The building layout is shown on **Figure 1**.

In response to a request by the New York State Department of Environmental Conservation (NYSDEC) in August 2006, Lockheed Martin Corporation (Lockheed Martin) conducted sampling at the Site to assess the potential for vapor intrusion. Lockheed Martin retained Ramboll to conduct the vapor intrusion sampling, which was performed in February 2007 for the 2006-2007 heating season. The results of the sampling were summarized in a TM in May 2007, in which further monitoring for trichloroethene (TCE), tetrachloroethene (PCE) and 1,1,1-trichloroethane (1,1,1-TCA) was recommended. Further monitoring was conducted in November 2007 for the 2007-2008 heating season, the results of which were reported by Ramboll in a TM in January 2008. Sub-slab vapor concentrations were found to be lower at one sample location and lower or the same (depending upon compound) at the other three sampling locations (comparison of November 2007 and February 2007 sample results). Therefore, additional sampling was recommended at the other three sampling locations.

Additional sampling was conducted in December 2008 for the 2008-2009 heating season and results were summarized in a TM in March 2009. Based on the sample results, and in conformance with the two New York State Department of Health (NYSDOH) soil vapor / indoor air matrices, no further action was necessary. However, Ramboll recommended that annual inspections be conducted to identify slab breaches and building modifications that could increase the potential for sub-slab vapors to intrude. NYSDEC approved the annual inspection approach in a December 9, 2009 letter from Javier Perez of NYSDEC to Myron Parkolap of Lockheed Martin. This TM presents the results of the fourteenth annual inspection.

2 Building Survey

Except as discussed in Section 4, Ramboll confirmed that the building survey information (e.g., building foundation, utilities, slab conditions and penetrations) collected during the previous annual inspection had not changed. The following information is provided as an overview.

Building 5's concrete floor (slab) is approximately 3 feet above grade. Except for some surficial cracks in the slab's surface, it is in excellent condition. Most of the building is a large open area without partitioning walls. There are three constructed office areas within the main building, and an additional office area that is an addition to the main building. The office spaces each contain their own natural gas-

fired furnace and hot water tank. SPI operates loading docks and doors along the northwest end of the building for loading and unloading of product. **Figure 1** presents a floor plan.

The warehouse is heated by four natural gas-fired forced air units located within the indoor space. The warehouse is not air conditioned. A fire protection pump is located in the northeast corner of the building.

PHP operates a wood dust/chip collection system located along the north wall. The blower units take air from inside the building via hoods located over process equipment, route it through a filter/collection system, and return the air back inside the building. This system does not materially affect the building's indoor air pressure.

Along the south wall is a partition that separates an office area and compressor room from the rest of the warehouse area. The climate control for the compressor room is maintained by manual operation of ductwork dampeners that are adjusted seasonally. In the winter months, make-up air to the compressor is pulled from the building's interior and then discharged back inside the building; therefore, the indoor air pressure is unchanged. In the summer months, make-up air is drawn from inside the building and then exhausted outside; under these conditions, the indoor air pressure within the building becomes negative.

In 2011, PHP constructed an office/break room area, slightly west of the center of the building. The location of the office/break room is shown on **Figure 1**. Similar to the other office spaces, this office/break room area has its own HVAC system.

3 Slab Inspection

The 2025 slab inspection was conducted on November 17, 2025. Accessible areas of the building's slab were inspected for slab cracks, holes, and other potential breaches through the slab (herein referred to as slab areas). Locations and measurements of the identified slab areas were recorded on checklists and each slab area was catalogued with a corresponding letter; this information can be found in **Attachment 1**. Photographs of accessible slab areas are documented in **Attachment 2**. The location of each identified slab area is identified on a floor plan, **Figure 1**. The 2025 slab inspection used findings observed during the previous inspections to aid in identifying whether changes have occurred over the past year (*e.g.,* the 2024 slab inspection).

As reported in previous annual inspections, the slab remains in excellent condition, meaning that it provides a competent (sealed) cover over the sub-slab material (*e.g.,* gravel, soil) below. Narrow surface cracks exist throughout the slab; however, they do not appear to penetrate through the slab to the sub-slab material. Due to the quantity observed, these narrow surface cracks were not catalogued as part of this inspection. Wider and deeper cracks were catalogued so that their condition could be evaluated over time as potential pathways for vapor intrusion. Note that in 2012, Mr. Mike Tradeau of PHP indicated that PHP applied an epoxy sealant to help protect the slab in some higher truck traffic areas; some of these areas where the epoxy sealant was applied were observed during this inspection. As noted below, additional epoxy sealant was applied by PHP between the 2013 and 2014 inspections.

There were several areas where the slab could not be observed due to stored product and/or process equipment. The dimensions on the field forms for the inaccessible areas are those found in the latest inspection when the area was accessible. The depths of accessible slab areas were established by digging with a utensil into the area to work away loose concrete until refusal was met. Therefore, the depths reported in the field forms are the maximum depth encountered and typically do not indicate the depth of the area on average or in appearance. These depths and technique will be used in future inspections to gauge the deterioration or stability of each slab area.

There is one identified slab area that is not necessarily a potential pathway to the sub-soil. Slab area D is a currently active floor drain connected to storm sewer lines. Although this identified area penetrates through the slab, it is not expected to provide a vapor pathway through the slab, so it is documented in this report for future reference only.

Slab areas L and M can no longer be accessed due to the permanent installation of process equipment (machinery) used to cut, mold, and/or plane lumber; therefore, slab areas L and M are no longer tracked. Slab area S (three 2-foot square holes saw-cut into the slab for the installation of footings for the new office/break room area) has been sealed by PHP (as a result of the completed construction) and has not been considered a slab area since late 2011. Greater access between slab areas V and K during the 2013 slab inspection concluded that the two slab areas are connected; therefore, slab area V is no longer tracked as a separate slab area, slab area V is considered part of slab area K.

PHP began installation of a new process line in the northeast portion of the building in September 2017. As part of this installation (to accommodate a conveyer belt system), approximately 60 feet of trenching was saw-cut into the concrete. After the concrete was removed, approximately two to four feet of soil was excavated. The trenches were back-filled with stone and were sealed with concrete. Process equipment was then installed at grade and the conveyers were installed in the sealed trenches below grade. On behalf of Lockheed Martin, Ramboll monitored for dust and volatile organic compounds while sub-slab soils were exposed, and no exceedances were observed during construction. Given that the trenches are sealed with concrete, they are not expected to provide a vapor pathway through the slab. The trenches are documented in this report for future reference only.

4 Findings and Summary

There was one slab area (N) whose width had increased approximately ½" between the 2021 and 2022 inspections; however, the area does not appear to have increased in size during subsequent years and does not penetrate through the slab. It is worth noting that PHP continues to address some of the wider areas and applies either epoxy or concrete, as needed. Due to process operating equipment and placement of pallets of lumber, slab areas G, L, M, P, T, and Z were not accessible during the 2025 inspection. Slab area U was partially covered by process operating equipment and was not fully accessible during the 2025 inspection. However, observations of the exposed portion of the slab area are summarized in **Attachment 1**.

There were no slab areas identified in which a penetration extended through the entire slab; thus, such penetrations do not represent a potential soil vapor pathway. Some of these slabs are up to 4 inches deep. The deeper slab areas, identified during this or previous inspections as slab areas J, K, N, P, Q, T

and Z, should be observed carefully during subsequent inspections as their integrity may become compromised over time.

Some of the slab areas were catalogued during the initial inspection as concrete patches or surface deterioration adjacent to concrete patches. These include slab areas I (concrete patch of a hole), M (deterioration next to a concrete patch), N (edge of large square patch), O (deterioration around a hole patch), and P (concrete patch of a hole or a hole that was not drilled through the entire slab).

Two slab areas (W and Y) are located along the interface of the concrete slab and inlayed ceramic tile. The ceramic tile has been installed such that the tile is flush with the adjacent concrete slab and tiles along the edge of the inlay have become broken or are missing. In some cases, the voids left behind by broken or missing tiles were up to six inches wide and two inches deep. On their own accord, PHP applied an epoxy sealant to portions of these areas between the 2013 and 2014 slab inspections.

A single location, located within a high traffic aisle, immediately adjacent to slab area Z was identified, during the 2023 slab inspection, as an area where the concrete has “depressed”. Due to the high traffic nature of this area, the damage had resulted in three approximately 8” x 18” depressions with a maximum observed depth of 1.5”. Following completion of the 2023 slab inspection, this area was patched with epoxy and appeared in excellent condition during the 2024 inspection. During the 2025 inspection, the damage to this area had reappeared. The property manager noted that this area was planned for repair during the December 2025 facility shutdown.

Along the edges of the concrete patch in slab area U, where process equipment is bolted to the slab floor, cracking and deterioration of some of the concrete was observed with depths up to 2-inches and portions of the slab area had cracked concrete with uneven surface. Following discussion with the property manager, and to minimize potential for further damage, the area is anticipated to be patched with either epoxy or concrete during 2026.

In addition to the slab areas described above, additional utility penetrations were identified during the 2025 inspection. These locations were not identified in previous inspections as they were blocked or covered by process equipment or storage units (e.g., parts cabinet), and/or because they are located in locked rooms which were historically inaccessible. Below is a summary of each penetration observed; the locations of these penetrations are shown on **Figure 1**.

- Penetration 1 (identified as Slab Area CC in Attachment 1) is located in a room immediately northeast of slab area Q. The room has historically been locked and inaccessible during the annual inspection. Within the room, two points were identified: (1) two approximately 2-in to 3-in pipes were cut off at or immediately above the slab floor. These pipes were not plugged or capped at the time of inspection; and, (2) an approximately 0.5-inch expansion joint was identified around the perimeter of the room. At the time of inspection, a ruler was placed in the expansion joint and the void exceeded 12-inches. Both of these areas were smoke tested, and the penetration did not appear to push or pull smoke.
- Penetration 2 (identified as Slab Area DD in Attachment 1) is located in a storage area immediately southeast of Slab area Q and Penetration 1. An approximately 2-in diameter pipe appears to have been cut flush with the slab and was located beneath existing shelving. At the

time of the inspection, a J-plug had been installed in the pipe. This location was not smoke tested due to inaccessibility and the installed J-plug.

- Penetration 3 (identified as Slab Area EE in Attachment 1) is located along Wall B, immediately southeast of the partitioned wall. An approximately 4-inch diameter pipe with a flange was observed approximately 2-inches above the slab floor. At the time of the inspection, the exposed pipe was open and not plugged. This location was smoke tested, and the penetration did not appear to push or pull smoke.
- Penetration 4 (identified as Slab Area FF in Attachment 1) is located in the northwest corner of the building where Wall A meets Wall B. Two approximately 2-in diameter pipes were observed approximately 3-ft above the slab floor. The pipes were located in an approximately 18-inch gap between the wall and a large piece of equipment. At the time of the inspection, the two pipes appeared to be open and not plugged. These pipes were not smoke tested due to inaccessibility.
- Penetration 5 (identified as Slab Area GG in Attachment 1) is located along Wall A, between slab area A and B. An approximately 6-in diameter pipe with a flange was observed approximately 4-inches above the slab floor. At the time of the inspection, the exposed pipe was open and not plugged. This location was smoke tested and the penetration did not appear to push or pull smoke.

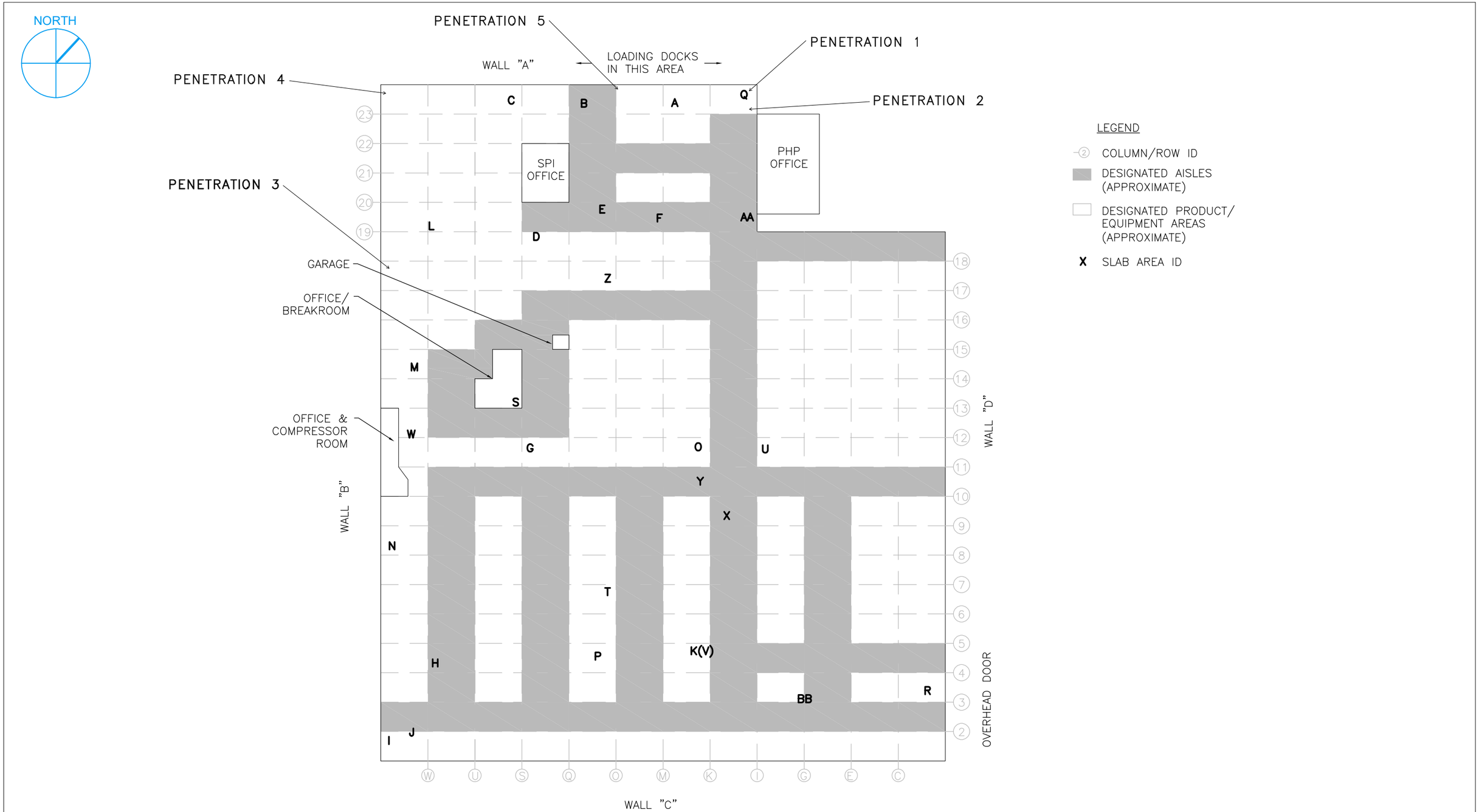
In summary, while no new slab areas were identified during the 2025 inspection, several previously unidentified pipe penetrations were observed during this inspection. It is recommended that these penetrations be capped to minimize the potential for vapor intrusion; however, as noted, the condition of these penetrations suggests that they have been in place for some time, perhaps prior to the December 2008 sampling event. Thus, Ramboll does not believe that the potential for vapor intrusion has increased as a result of the new observations documented in this report. With the exception of these penetrations, and of the slab areas identified above, we did not recommend to the building owner that additional sealing was necessary at this time. The next annual inspection is due in November 2026.

Attachments: Figure 1 – Building 5 Layout and Slab Area Identification
Attachment 1 – Field Data Forms
Attachment 2 – Photo Log

Figure 1

Building 5 Layout and Slab Area Identification

PROJECT: XXXX.XXXXX DATED: 12/16/2021 8:24 AM DESIGNER: ERIC.ALONGI \\Server\services\Ambient Monitoring\Projects\Ramboll\Vapor Intrusion\Lockheed Martin\Court Street\Court St_slab inspection-2022.dwg



NOT TO SCALE

BUILDING 5 LAYOUT AND SLAB AREA IDENTIFICATION

FIGURE 01

Site #7-34-070

Former GE Court Street 5 Site
6439 Deere Road
Dewitt, New York

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

Attachment 1

Field Data Forms

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: A

Length: Varies - Large Spider Cracks **Width:** up to 2-in **Depth:** up to 1-in

Distance from D *** wall in feet:** ~100'

Distance from A *** wall in feet:** ~20'

- Area partially covered by misc. equipment

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

- Larger cracks previously filled w/ epoxy

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: B

Length: Varies - Large Spider cracks **Width:** Up to 3-in **Depth:** up to 1-in

Distance from D *** wall in feet:** ~140'

Distance from A *** wall in feet:** ~20'

- Larger cracks previously filled w/ epoxy
- epoxy appears in good condition.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: C

Length: ~90' **Width:** up to 1.5-in **Depth:** up to 1-in

Distance from D *** wall in feet:** ~160'

Distance from A *** wall in feet:** ~20'

- No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

RAMBOLL

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: D

Length: ~8" Ø hole **Width:** - **Depth:** unknown

Distance from toward office wall to wall A *** wall in feet:** ~27'

Distance from D *** wall in feet:** ~185'

- Approx 2-ft deep before fill.
- Vertical steel pipe.
- Uncertain depth or connectivity

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: E

Length: ~33x12' concrete patch **Width:** up to 3/4" around patch **Depth:** up to 1"

Distance from A *** wall in feet:** ~102'

Distance from D *** wall in feet:** ~44'

- No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: F

Length: ~40' **Width:** up to 2'1/2" **Depth:** up to 3/4"

Distance from A *** wall in feet:** ~17'

Distance from D *** wall in feet:** ~50'

- NO apparent Change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: G

Length: ~40' **Width:** up to 1/4" **Depth:** up to 1"

Distance from C *** wall in feet:** ~200' - Not accessible due to process equipment

Distance from B *** wall in feet:** ~200'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? Unknown ☐ Yes ☐ No ☐ NA

Should it be sealed? Unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: H

Length: ~2' Sq. patch **Width:** up to 1/2" **Depth:** up to 1/2"

Distance from C *** wall in feet:** ~78'

Distance from B *** wall in feet:** ~50' - No apparent Change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: I

Length: ~4" Ø circle **Width:** — **Depth:** up to 1/2"

Distance from C *** wall in feet:** ~40'

Distance from B *** wall in feet:** ~30' - No apparent Change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: J

Length: legnt of building **Width:** up to 1 1/2" **Depth:** up to 2"

Distance from C *** wall in feet:** ~33'

Distance from NA *** wall in feet:** legnth of building

- No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: K(V)

Length: ~50' x 25' T-shaped patch **Width:** up to 2 1/4" **Depth:** up to 2"

Distance from D *** wall in feet:** ~200'

Distance from C *** wall in feet:** ~100'

- Portion of slab area inaccessible due to stored lumber

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

- No apparent change since last visit

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: L

Length: ~48' **Width:** up to 3/4" **Depth:** up to 1"

Distance from A *** wall in feet:** ~125'

Distance from B *** wall in feet:** ~41

- Area no longer accessible due racking and metal HVAC parts.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? unknown ☐ Yes ☐ No ☐ NA

Should it be sealed? unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

RAMBOLL

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: M

Length: ~4" ø hole **Width:** - **Depth:** ø to 2"

Distance from A *** wall in feet:** ~250' - Not accessible due to process equipment staging

Distance from B *** wall in feet:** ~28'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA unknown

Should it be sealed? ☐ Yes ☐ No unknown Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: N

Length: ~8' **Width:** up to 1'1/2" **Depth:** up to 4'1/2"

Distance from C *** wall in feet:** ~156' - NO apparent change since last visit

Distance from B *** wall in feet:** ~8'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: O

Length: 7 - 6" holes **Width:** - **Depth:** ~1"

Distance from B *** wall in feet:** ~280' - All holes visible

Distance from C *** wall in feet:** ~250' - Epoxy in good condition

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

- No change from last visit.

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

RAMBOLL

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: P

Length: ~6" Ø hole **Width:** - **Depth:** ~2" depth

Distance from C *** wall in feet:** ~94'

Distance from B *** wall in feet:** ~72'

- Former Sub slab utility penetration
- Not accessible due to Stored lumber

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? Unknown ☐ Yes ☐ No ☐ NA

Should it be sealed? Unknown ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: Q

Length: ~9' **Width:** **Depth:** up to 3'/4"

Distance from A *** wall in feet:** 0

Distance from D *** wall in feet:** ~3'

- NO apparent change since last visit.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: R

Length: ~20' **Width:** up to 2" **Depth:** up to 2"

Distance from D *** wall in feet:** ~24'

Distance from C *** wall in feet:** ~65'

- Slab area partially covered with lumber

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

- NO apparent change since last visit

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

RAMBOLL

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: S

Length: – **Width:** – **Depth:** –

Distance from B *** wall in feet:** ~100'

Distance from A *** wall in feet:** ~150'

- Area no longer accessible due to office space

Is the slab area new? ☐ Yes ☒ No

If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA unknown

- Area was sealed during construction

Should it be sealed? ☐ Yes ☐ No unknown

Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No

Was it identified on the drawing? ☒ Yes ☐ No

Slab Area[+] ID: T

Length: ~6" ø hole **Width:** – **Depth:** ~4"

Distance from B *** wall in feet:** ~104'

Distance from A *** wall in feet:** ~64'

- Former equipment mounts

Is the slab area new? ☐ Yes ☒ No

If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA unknown

- Not accessible due stored lumber

Should it be sealed? ☐ Yes ☐ No unknown

Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☐ Yes ☒ No

Was it identified on the drawing? ☒ Yes ☐ No

Slab Area[+] ID: V

Length: ~20' x 14' patch **Width:** up to 3" **Depth:** up to 1"

Distance from B *** wall in feet:** ~79'

Distance from C *** wall in feet:** ~130'

- Void formed at Brick and concrete interface. Should be sealed

Is the slab area new? ☐ Yes ☒ No

If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA unknown

- Other cracks were shallow.

Should it be sealed? ☒ Yes ☐ No

Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No

Was it identified on the drawing? ☒ Yes ☐ No

- Equipment is largely covering slab area.

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

RAMBOLL

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: ✓

Length: _____ **Width:** _____ **Depth:** _____

Distance from _____ *** wall in feet:** _____

Distance from _____ *** wall in feet:** _____

See Slab area K

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

Slab Area[+] ID: W

Length: ~4" **Width:** ~4 1/2" **Depth:** ~1 1/2"

Distance from office wall toward B *** wall in feet:** ~17'

Distance from C *** wall in feet:** ~225'

- Very dusty floor
- No apparent change since last visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

- Epoxy in good condition

Slab Area[+] ID: X

Length: ~2' Square **Width:** up to 1'1/4" **Depth:** up to 1/2"

Distance from D *** wall in feet:** ~220'

Distance from C *** wall in feet:** ~175'

- Sealed w/ epoxy in good condition
- No apparent change since last visit.

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

RAMBOLL

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: Y

Length: ~30' **Width:** up to 3" **Depth:** up to 1'1/2"

Distance from C *** wall in feet:** ~330' - Epoxy in good condition

Distance from D *** wall in feet:** ~230'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA - No apparent change since last visit

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: Z

Length: ~3' Square **Width:** up to 2'1/2" **Depth:** up to 3"

Distance from A *** wall in feet:** ~200' - Epoxy Seal in good condition.

Distance from D *** wall in feet:** ~240'

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA - Does not appear different from historic

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: AA

Length: ~30' **Width:** up to 1'1/2" **Depth:** up to 1'1/4"

Near overhead door next to PHP office

Distance from *** wall in feet:** - No apparent change since last visit

Distance from *** wall in feet:**

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: BB

Length: 30"Sq. Sump pit **Width:** ~1/8" around edge **Depth:** ~3/4"

Distance from D *** wall in feet:** ~120'

Distance from C *** wall in feet:** ~50'

- Sump is sealed around edges
- Sump was inundated at time of visit

Is the slab area new? ☐ Yes ☒ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☒ Yes ☐ No

---

Slab Area[+] ID: _____

Length: _____ **Width:** _____ **Depth:** _____

Distance from _____ *** wall in feet:** _____

Distance from _____ *** wall in feet:** _____

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

Slab Area[+] ID: _____

Length: _____ **Width:** _____ **Depth:** _____

Distance from _____ *** wall in feet:** _____

Distance from _____ *** wall in feet:** _____

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

RAMBOLL

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: CC

Length: 25 **Width:** 1/2" **Depth:** unknown

Distance from A *** wall in feet:** 0 ft - two pipe penetrations uncapped.

Distance from D *** wall in feet:** 0 ft

Is the slab area new? ☒ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☒ NA - Separation along perimeter wall.

Should it be sealed? ☒ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA - Smoke tested w/ no draw or push

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☐ Yes ☒ No

---

Slab Area[+] ID: DD

Length: – **Width:** – **Depth:** Unknown ~10"

Distance from A *** wall in feet:** 21' - Single pipe penetration with J-plug.

Distance from D *** wall in feet:** 0'

Is the slab area new? ☒ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☒ NA - Smoke tested w/ no draw or push.

Should it be sealed? ☒ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☐ Yes ☒ No

---

Slab Area[+] ID: EE

Length: – **Width:** – **Depth:** Unknown

Distance from A *** wall in feet:** 150' - Single pipe penetration uncapped

Distance from B *** wall in feet:** 0' - Smoke tested with no draw or push

Is the slab area new? ☒ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☒ NA

Should it be sealed? ☒ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☐ Yes ☒ No

---

[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

RAMBOLL

Slab Inspection Checklist

Structure Address: 6439 Deere Rd. **Date of Visit:** 11/17/2025

Structure ID #: #7-34-070 **Team:** M.Mellen

Slab Area[+] ID: FF

Length: – **Width:** – **Depth:** unknown

Distance from A *** wall in feet:** 0'

Distance from B *** wall in feet:** 0'

- Two vertical metal pipes with metal end caps.

Is the slab area new? ☒ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☒ No ☐ NA

Should it be sealed? ☐ Yes ☒ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☐ Yes ☒ No

---

Slab Area[+] ID: GG

Length: – **Width:** – **Depth:** unknown

Distance from A *** wall in feet:** 0'

Distance from B *** wall in feet:** 130'

Is the slab area new? ☒ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☒ NA

Should it be sealed? ☒ Yes ☐ No Was it sealed during this visit? ☐ Yes ☒ No ☐ NA

Was it documented with a photo? ☒ Yes ☐ No Was it identified on the drawing? ☐ Yes ☒ No

---

Slab Area[+] ID: _____

Length: _____ **Width:** _____ **Depth:** _____

Distance from _____ *** wall in feet:** _____

Distance from _____ *** wall in feet:** _____

Is the slab area new? ☐ Yes ☐ No If not, does it appear to be getting bigger? ☐ Yes ☐ No ☐ NA

Should it be sealed? ☐ Yes ☐ No Was it sealed during this visit? ☐ Yes ☐ No ☐ NA

Was it documented with a photo? ☐ Yes ☐ No Was it identified on the drawing? ☐ Yes ☐ No

---

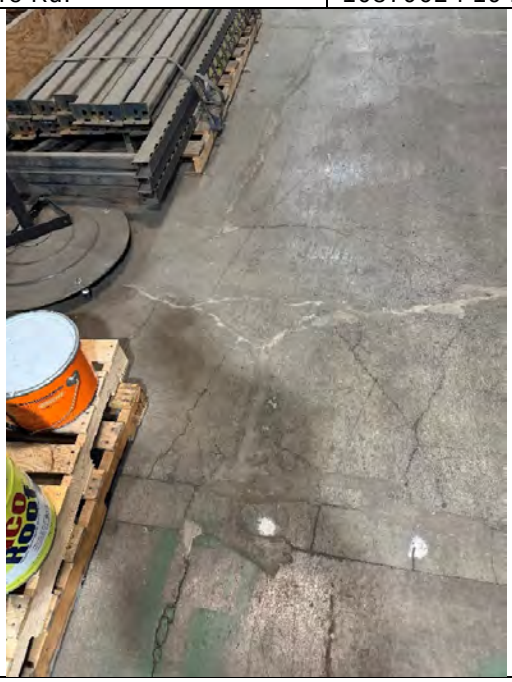
[+]Note that this can be a pentration, breach, trench, hole or other.

*Identify wall using compass direction or other identification (e.g. corresponding letter on drawing) so that the slab area can be found during subsequent visits.

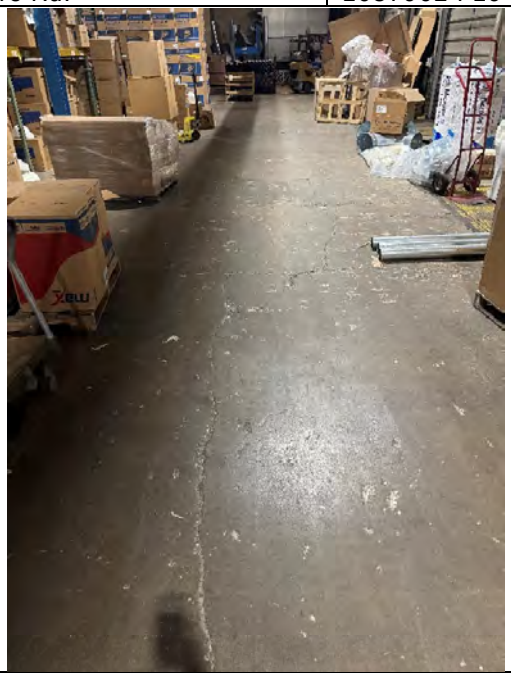
Attachment 2

Photo Log

SLAB INSPECTION – PHOTOLOG

CLIENT NAME:		**SITE LOCATION:**	**PROJECT NO.**
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 1	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area A			

CLIENT NAME:		**SITE LOCATION:**	**PROJECT NO.**
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 2	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area B			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 3	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area C			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 4	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area D with cover			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 5	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area D without cover			

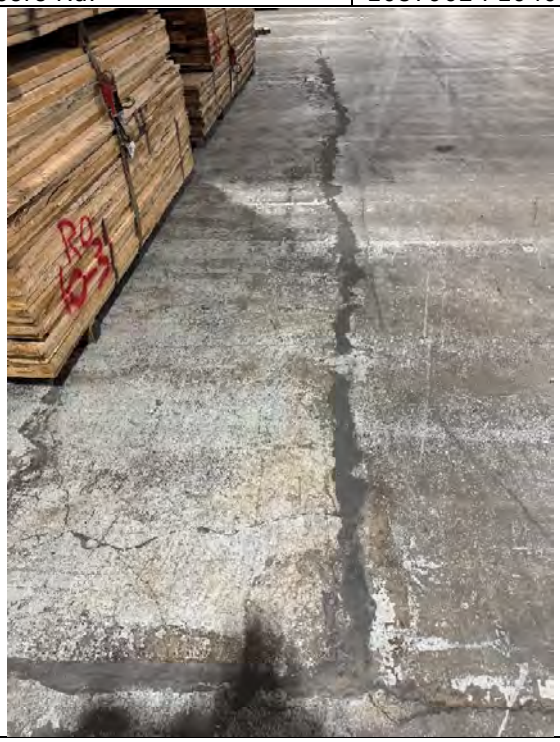
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 6	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area E			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 l 1940112129
PHOTO NO. 7	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area F			

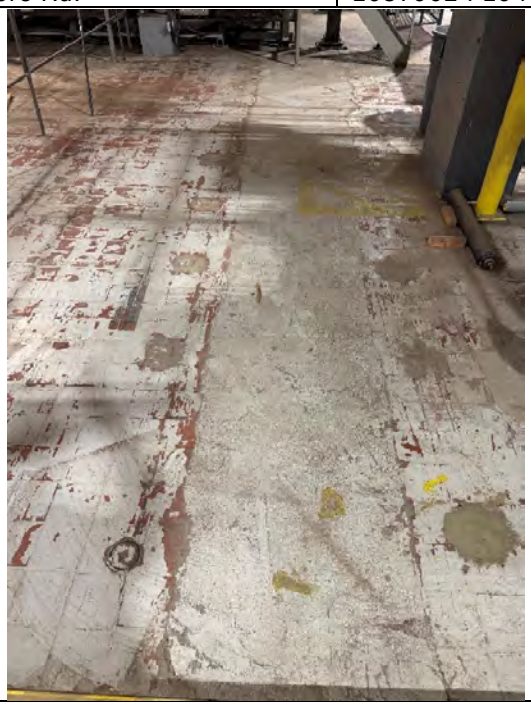
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 l 1940112129
PHOTO NO. 8	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area H			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 9	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area I			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 10	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area J			

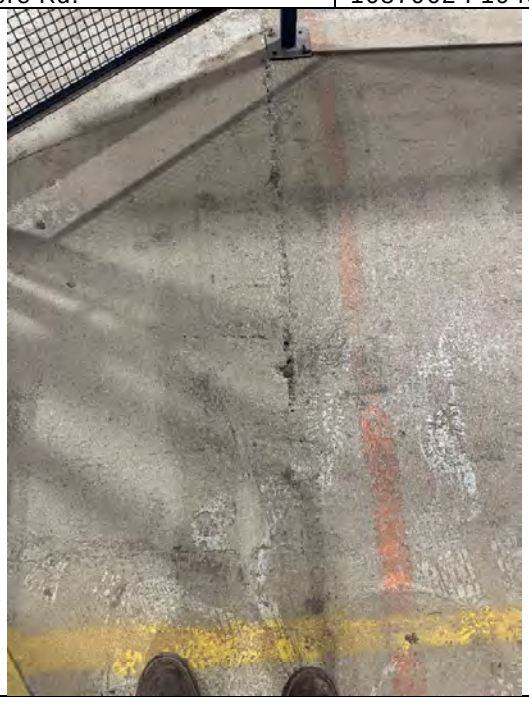
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 11	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area K (V)			

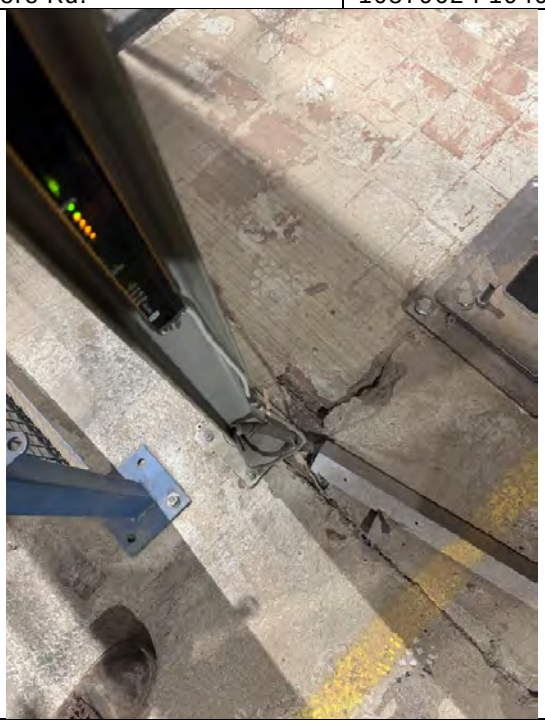
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 12	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area N			

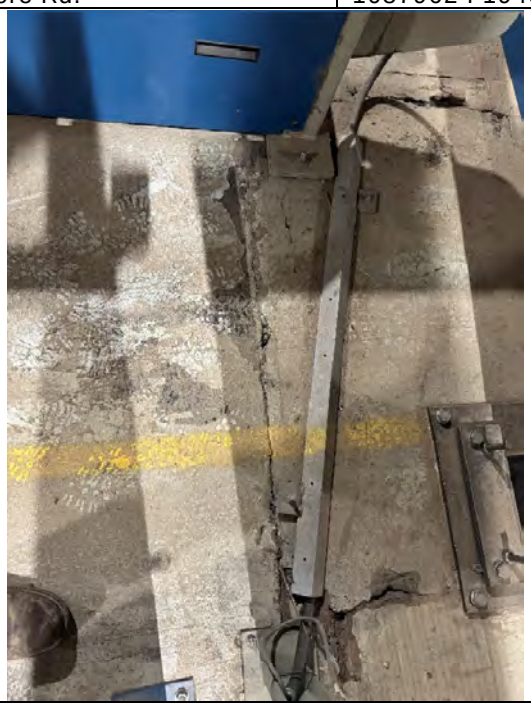
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 13	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area O			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 14	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area Q			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 15	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area R			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 16	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area U			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 17	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area U			

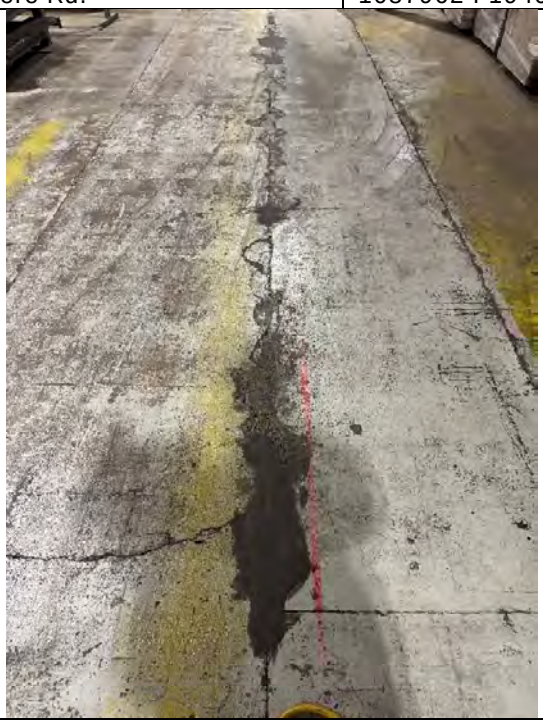
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 18	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area U			

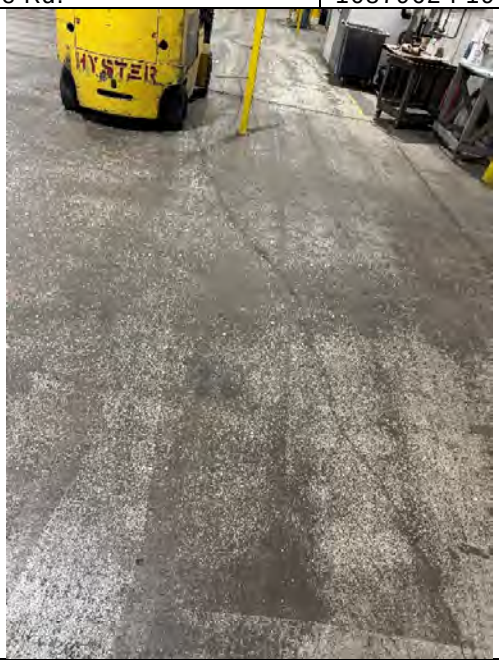
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 19	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area U			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 20	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area W			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 21	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area X			

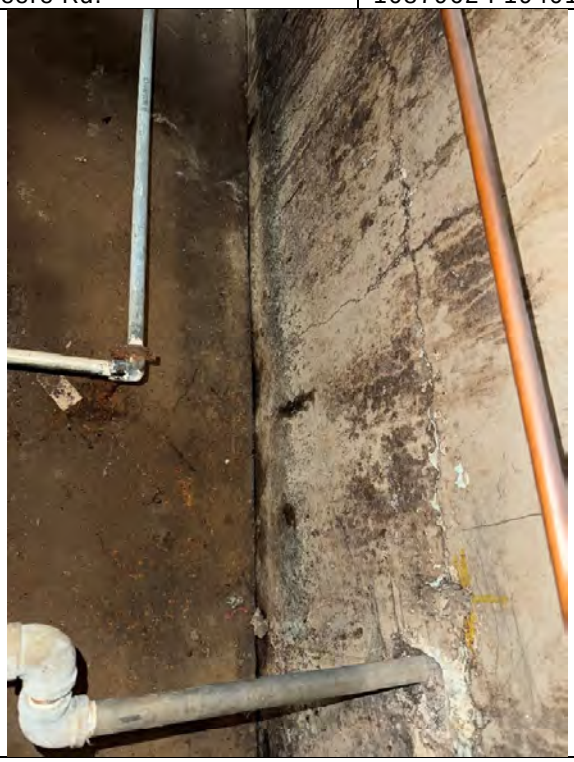
CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 22	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area Y			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 l 1940112129
PHOTO NO. 23	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area Z			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 l 1940112129
PHOTO NO. 24	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area AA			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 25	**DATE:** 11/17/2025		
DESCRIPTION: Slab Area BB			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 26	**DATE:** 11/17/2025		
DESCRIPTION: Penetration 1 pipes			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 27	**DATE:** 11/17/2025		
DESCRIPTION: Expansion joint near Penetration 1			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 28	**DATE:** 11/17/2025		
DESCRIPTION: Penetration 2			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 29	**DATE:** 11/17/2025		
DESCRIPTION: Penetration 3			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 30	**DATE:** 11/17/2025		
DESCRIPTION: Penetration 4			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 31	**DATE:** 11/17/2025		
DESCRIPTION: Penetration 5			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 32	**DATE:** 11/17/2025		
DESCRIPTION: Penetration 5			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 33	**DATE:** 11/17/2025		
DESCRIPTION: Concrete spalling near slab area Z planned to be repaired in 2026. Between columns M16 and M17.			

CLIENT NAME:		SITE LOCATION:	PROJECT NO.
Lockheed Martin		6439 Deere Rd.	1087962 I 1940112129
PHOTO NO. 34	**DATE:** 11/17/2025		
DESCRIPTION: Concrete spalling in designated aisle, immediately south of slab are G. Between columns O8 and S8.			

Appendix G

O&M Inspection Forms

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

1-7-25

System Pressure

Location	Pressure (psi)
High Flow Influent	
Low Flow Influent	3,41
Blower Discharge	1,35
Blower Discharge Differential	0,4
Air Stripper Tank	0,35 / 19"WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	60,25

System Flow Rates

Location	Flow (gpm)
High Flow Influent	
Low Flow Influent	5,10

Location	Flow (cfm)
Blower (PLC)	172
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30193914
Low Flow Influent	18142910

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

ONE DRUM of REDUX (FULL) CHANGED PUMP TO THE NEW DRUM

WET well PUMPS NOT WORKING IN HAND MODE BUT DO IN AUTO

DAVE R. IS going TO CHECK CABNIT

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site: MARTIN Koenwecke | Date: 1-7-25 | Time: 10:50 AM

Weather Data

Temp. (F): 21° Relative Humidity (%): 82% Barometric Pressure (in Hg): 29.97"

Cleanout Risers

0.40 Feet of Water (CO-N) — X Good Condition — ____ Corrected During Visit

0.33 Feet of Water (CO-S)

DTW CO-N 9.90 DTW CO-S 10.22

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment — X Good Condition — ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. — X Good Condition — ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. — X Good Condition — ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper ~~Tank & Diffusers~~

____ Inches of Sediment — X Good Condition — ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank

NA Inches of Sediment — ____ Good Condition — ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

18368 @ 10:55 Hrs.

Phone Line Function (Y or N)

Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

____ Clear of debris — X Good Condition — ____ Corrected During Visit

Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke | Date 2-4-25 | Time 945 AM

Weather Data

Temp. (F): 28° Relative Humidity (%) 77% Barometric Pressure (in Hg) 30.08

Cleanout Risers

0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

0.25 Feet of Water (CO-S)

DTW CO-N 10.10 DTW CO-S 10.30

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump ____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A ____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper Tank & [redacted]

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank NA Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

22670 @ 9:45 Hrs.

Phone Line Function (Y or N)

Y Autodialer Y Modem ____ Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet ____ Clear of debris X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

FORMER GE COURT STREET BUILDING S/SA
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

2-4-25

System Pressure

Location	Pressure (psi)
High Flow Influent	5.82
Low Flow Influent	3.40
Blower Discharge	3.10
Blower Discharge Differential	0.34
Air Stripper Tank	0.35 19"WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	65.9

System Flow Rates

Location	Flow (gpm)
High Flow Influent	14.05
Low Flow Influent	4.88
Location	Flow (cfm)
Blower (PLC)	194
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30193915
Low Flow Influent	18257105

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)
Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)
Bag Filters Changed (Y or N) NA
Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

31" Redux Left on site
Monthly Site Inspection

Personal Signature Kevin Kombe

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION AND TREATMENT SYSTEM
SUPPLEMENTAL O&M EVENT FORM

INSPECTOR: MARTIN KOENNECKE

DATE: 2-18-25 / 2-19-25

ACTIVITY:

- [X] ROUTINE
- [ ] RESPONSE TO SYSTEM SHUTDOWN
- [ ] STRIPPER CLEANING
- [ ] OTHER

PROVIDE A DESCRIPTION OF THE CAUSE OF THE SHUTDOWN, CORRECTIVE ACTIONS TAKEN, AND/OR OTHER INFORMATION NECESSARY TO UNDERSTAND THE PURPOSE OF THE VISIT.

2-18-25 - POWER OUTAGE AT 1:05 PM
POWER BACK ON AT 6:11 PM

2-19-25 - POWER OUTAGE AT 2:49 AM
POWER BACK ON AT 2:56 AM
ALARM FOR AIR STRIPPER HIGH LEVEL TRIPPED AND SHUT DOWN SYSTEM

2-19-25 - ARIVED AT SITE AT 7:30 AM CHECKED SYSTEM AND CLEARED ALARM RESTARTED SYSTEM, RUNNING NORMAL NOW.

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke | **Date** 3-4-25 | **Time** 10:00 AM

Weather Data

Temp. (F): 38° Relative Humidity (%) 75% Barometric Pressure (in Hg) 30.03"

Cleanout Risers

0.57 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

0.57 Feet of Water (CO-S)

CO-N DTW CO-N 9.73 DTW CO-S 9.98

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper Tank ~~& Diffusers~~

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank NA Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

27249 @ 10:05 Hrs.

Phone Line Function (Y or N)

Y Autodialer Y Modem ____ Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet ____ Clear of debris X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

3-4-25

System Pressure

Location	Pressure (psi)
High Flow Influent	6.02
Low Flow Influent	3.65
Blower Discharge	2.14
Blower Discharge Differential	0.35
Air Stripper Tank	0.27 , 18"wc
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	76°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	14.92
Low Flow Influent	5.20
Location	Flow (cfm)
Blower (PLC)	145
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30271633
Low Flow Influent	[redacted] 18373571

Influent Sample Collected (Y or N) Y pH (S.U.) Temp. 10:45 Time (hrs.)

Effluent Sample Collected (Y or N) Y pH (S.U.) Temp. 10:30 Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

Quarterly Samples Collected

25" Redux Left

Monthly site Inspection

Personal Signature [signature]

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke | **Date** 4-3-25 | **Time** 7:45 AM

Weather Data
Temp. (F): 50° Relative Humidity (%) 89% Barometric Pressure (in Hg) 29.83"

Cleanout Risers
0.30 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit
0.40 Feet of Water (CO-S)
DTW CO-N 10.00 DTW CO-S 10.15
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump
____ Inches of Sediment X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Catch Basin CB-20
____ clear of debris & sed. X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Outfall OF-01A
____ clear of debris & sed. X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Air Stripper Tank & [redacted]
____ Inches of Sediment X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Transfer Tank
N.A. Inches of Sediment ____ Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Electric Meter Reading
32210 @ 7:45 Hrs.

Phone Line Function (Y or N)
Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet
____ Clear of debris X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

4-3-25

System Pressure

Location	Pressure (psi)
High Flow Influent	5.86
Low Flow Influent	2.50
Blower Discharge	1.90
Blower Discharge Differential	0.2
Air Stripper Tank	0.13 / 18"wc
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	85°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	14.85
Low Flow Influent	4.98
Location	Flow (cfm)
Blower (PLC)	128
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30390962
Low Flow Influent	18501970

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

MONTHLY SITE INSPECTION

17.5" REDUX ON SITE

Personal Signature Kevin Kemke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site MARTIN Koennecke | **Date** 5-8-25 | **Time** 7:00 AM

Weather Data

Temp. (F): 48° Relative Humidity (%) 92% Barometric Pressure (in Hg) 30.06"

Cleanout Risers

1.18 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

2.03 Feet of Water (CO-S)

DTW CO-N 9.12 DTW CO-S 8.52

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper Tank ~~& Diffusers~~

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank

NA Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

38241 @ 7:00 Hrs.

Phone Line Function (Y or N)

Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

____ Clear of debris Y Good Condition ____ Corrected During Visit

Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

5-8-25

System Pressure

Location	Pressure (psi)
High Flow Influent	6.82
Low Flow Influent	3.14
Blower Discharge	2.98
Blower Discharge Differential	0.2
Air Stripper Tank	0.18 / 28"WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	86.50

System Flow Rates

Location	Flow (gpm)
High Flow Influent	16.31
Low Flow Influent	4.90
Location	**Flow (cfm)**
Blower (PLC)	120
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30436699
Low Flow Influent	18710581

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

Monthly Site Inspection

13" Redox on site

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site: MARTIN KOENNECKE | Date: 6-3-25 | Time: 9:00 (AM)

Weather Data
Temp. (F): 68° Relative Humidity (%): 55% Barometric Pressure (in Hg): 30.11"

Cleanout Risers
0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit
0.25 Feet of Water (CO-S)
DTW CO-N 10.10 DTW CO-S 10.30
CO-N TOC Elevation 10.30
CO-S TOC Elevation 10.55

Collection Sump ____ Inches of Sediment X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Catch Basin CB-20
X clear of debris & sed. ____ Good Condition ____ Corrected During Visit
Work Performed or Needed: COLD PATH AROUND GRATE NEEDED

Outfall OF-01A ____ clear of debris & sed. X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Air Stripper ~~Tank & Blower~~
____ Inches of Sediment X Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Transfer Tank NA Inches of Sediment ____ Good Condition ____ Corrected During Visit
Work Performed or Needed: ____

Electric Meter Reading
40414 @ 9:00 Hrs.

Phone Line Function (Y or N)
Y Autodialer ____ Modem Y Voice

Floor Sump: (Y or N)
Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet ____ Clear of debris X Good Condition ____ Corrected During Visit
Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

6-3-25

System Pressure

Location	Pressure (psi)
High Flow Influent	5.82
Low Flow Influent	0.4
Blower Discharge	3.96
Blower Discharge Differential	0.22
Air Stripper Tank	0.18 / 18" WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	92°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	14.90
Low Flow Influent	4.76
Location	**Flow (cfm)**
Blower (PLC)	162
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	3050127
Low Flow Influent	1883286

Influent Sample Collected (Y or N) Y pH (S.U.) Temp. Time (hrs.) 9:50

Effluent Sample Collected (Y or N) Y pH (S.U.) Temp. Time (hrs.) 10:00

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

QUARTERLY Inf./Eff SAMPLES COLLECTED

9.5" REDUX, (WILL NEED TO ORDER MORE)

MONTHLY SITE INSPECTION

THERMOSTATS BEING ORDERED FOR HEATERS

Personal Signature Monte Kombe

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site: MARTin Koenwecke | Date: 7-1-25 | Time: 8:00 AM

Weather Data

Temp. (F): 75° Relative Humidity (%): 88% Barometric Pressure (in Hg): 29.78"

Cleanout Risers

0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

0.25 Feet of Water (CO-S)

DTW CO-N 10.10 DTW CO-S 10.30

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper Tank ~~& Diffusers~~

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank

NA Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

41365 @ 8:10 Hrs.

Phone Line Function (Y orN)

X Autodialer ____ Modem X Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

____ Clear of debris X Good Condition ____ Corrected During Visit

Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

7-1-25

System Pressure

Location	Pressure (psi)
High Flow Influent	5,86
Low Flow Influent	0,05
Blower Discharge	2,02
Blower Discharge Differential	0.2" W.C.
Air Stripper Tank	.10 PSI / 18"WC
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	92,3°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15,14
Low Flow Influent	4.86
Location	**Flow (cfm) SCFM**
Blower (PLC)	120
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	30501846
Low Flow Influent	18923557

Influent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)
Effluent Sample Collected (Y or N) N pH (S.U.) Temp. Time (hrs.)
Bag Filters Changed (Y or N) NA
Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

6.5" REDUX - PLUS ONE NEW DRUM DELIVERED TODAY
CONTROL POWER LEFT ON TO PANEL
* PUMPS AND BLOWER TURNED OFF @ 9:00
- FIRE EXSINGHISER BEING INSPECTED TODAY (YEARLY)

Personal Signature Mark Komke

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

Personnel On Site: MARTin Koennecke | Date: 12-2-25 | Time: 12:30 PM

Weather Data

Temp. (F): 31° Relative Humidity (%): 89% Barometric Pressure (in Hg): 29.90

Cleanout Risers

0.20 Feet of Water (CO-N) X Good Condition ____ Corrected During Visit

0.25 Feet of Water (CO-S)

DTW CO-N 10.10 DTW CO-S 10.30

CO-N TOC Elevation 10.30

CO-S TOC Elevation 10.55

Collection Sump

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Catch Basin CB-20

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Outfall OF-01A

____ clear of debris & sed. X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Air Stripper Tank ~~& Diffusers~~

____ Inches of Sediment X Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Transfer Tank

NA Inches of Sediment ____ Good Condition ____ Corrected During Visit

Work Performed or Needed: ____

Electric Meter Reading

YTD 120235 @ 14:00 Hrs. New Meter #1-3493

Phone Line Function (Y or N)

Y Autodialer Y Modem ____ Voice

Floor Sump: (Y or N)

Floor Sump Y Clear of Excess Fluid/Sediment/debris

Blower Air Inlet

____ Clear of debris X Good Condition ____ Corrected During Visit

Work Performed or Needed:

FORMER GE COURT STREET BUILDING 5/5A
GROUNDWATER COLLECTION & TREATMENT SYSTEM
O & M INSPECTION FORM

12-2-25

System Pressure

Location	Pressure (psi)
High Flow Influent	5.80
Low Flow Influent	0.44
Blower Discharge	2.19
Blower Discharge Differential	0.2
Air Stripper Tank	0.44 / 18"wc
Filter Differential	NA

System Temperatures

Location	Temperature (F)
Blower Discharge	66°

System Flow Rates

Location	Flow (gpm)
High Flow Influent	15.50
Low Flow Influent	5.97
Location	Flow (cfm)
Blower (PLC)	194
Blower (Calculated)	

System Totalized Flows

Location	Flow (gallons)
High Flow Influent	305097150
Low Flow Influent	19027588

Influent Sample Collected (Y or N) Y pH (S.U.) Temp. Time (hrs.) 13:05

Effluent Sample Collected (Y or N) Y pH (S.U.) Temp. Time (hrs.) 12:50

Bag Filters Changed (Y or N) NA

Air Stripper Cleaned (Y or N) N

Comments/Other Work Performed

QUARTERLY Inf / Eff SAMPLES COLLECTED

REDUX - 4" PLUS ONE NEW DRUM

BLOWER AIR FILTER CHANGED ON DAY of RESTART

Personal Signature Matt Komke

Appendix H

Year 6 Phytoremediation Pilot Test Report

Intended for
Lockheed Martin Corporation

Document type
Phytoremediation Report

Date
January 2026

Year 6 Phytoremediation Pilot Test Report

Former GE Court Street Building 5 Site

RAMBOLL Bright ideas. Sustainable change.

Year 6 Phytoremediation Pilot Test Report
Former GE Court Street Building 5 Site

Project name	**Former GE Court Street Building 5 Site**
Project no.	**1940106233**
Recipient	**Lockheed Martin Corporation**
Document type	**Report**
Date	**January 19, 2026**

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1. Introduction

1.1 General

Ramboll Americas Engineering Solutions, Inc. (Ramboll, previously O'Brien & Gere Engineers, Inc. [OBG]) prepared this *Year 6 Phytoremediation Pilot Test Repor*t (PTR) on behalf of Lockheed Martin Corporation (Lockheed Martin) to summarize the operation, maintenance and monitoring (OM&M) activities performed in 2025 for the phytoremediation system installed at the Former GE Court Street Building 5 Site (Site) (Site No.734070) located at 6439 Deere Road in the Town of Dewitt, Onondaga County, New York (**Figure 1**). Construction of the phytoremediation system was completed in March and May 2020 and is summarized in the *Phytoremediation Pilot Test Construction Completion Report* (CCR) (Ramboll, 2021a), and the as-built system is shown in **Figure 2**. The phytoremediation pilot test system is being implemented in accordance with the *Phytoremediation System Pilot Test Work Plan* (PTWP) (Ramboll, 2020) that was approved by the New York State Department of Environmental Conservation (NYSDEC) on April 1, 2020.

As presented in the PTWP, the overall goal of the phytoremediation pilot test is to identify whether phytoremediation can be used to enhance the existing remedy and therefore reduce the timeframe over which the groundwater collection trench needs to be operated. As described in the PTWP, there are several specific objectives related to this goal, as follows:

- Assess the ability of phytoremediation to reduce the concentrations of chlorinated volatile organic compounds (CVOCs) and 1,4-dioxane in the influent to the treatment system
- Assess the ability of phytoremediation to reduce the flow of groundwater in the collection trench
- Assess the ability of phytoremediation to accelerate the mitigation of CVOC and 1,4-dioxane impacted groundwater between the access road on the back/west side of the building and the collection trench
- Evaluate if phytoremediation can be used to improve the environmental sustainability of the remedy

To achieve the overall goal and specific objectives, a full-scale pilot test was proposed in the PTWP to augment the existing remedy by planting a stand of hybrid poplars (retaining some of the existing large trees) that, when mature, would have the ability to "consume" water during the growing season. The PTWP also included continued monitoring of monthly trench flows, supplemental monitoring of treatment system influent concentrations, an expanded annual groundwater monitoring event, and supplemental water-level measurements in select monitoring wells. In accordance with the approved PTWP, the performance of the phytoremediation pilot test is being reported on an annual basis; this document represents the sixth report and covers the period from January through December 2025.

1.2 Site History

The Site is located at 6439 Deere Road in the Town of Dewitt, New York, as shown on **Figure 1**. The Site is currently owned by the B&B Family Limited Partnership, which manufactures hardwood flooring (including cutting, molding, and planing lumber). The Site is on NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites and is designated as a Class 4 site. This designation is used for sites that have implemented the selected remedy but still require long-term OM&M.

Based on review of available historical documents, prior activities at the Site involved former operation of nine 250-gallon solvent underground storage tanks (USTs) in the 1950s. These tanks were reportedly located on the west side of Building 5 (approximate location presented on **Figure 2**). The USTs were reportedly taken out of service in 1960 and removed from the ground in 1986 (Wehran-New York, Inc. [Wehran], 1992). Historical activities also involved dispensing paint solvents from 55-gallon drums on an outdoor concrete pad (Wehran, 1992), which was located on the west side of the building (approximate location presented on **Figure 2**).

In April and May 1992, an interim subsurface investigation (Wehran, 1992) and interim remedial measure (IRM) was implemented by Wehran that included removal of soil impacted by CVOCs from the UST and solvent drum dispensing pad areas (Wehran, 1993). In 1992, 1993 and 1997, an interim remedial measure (IRM) was completed for storm sewer rehabilitation, including replacing/relocating catch basins, repairing select clay tile piping and removal of select clay tile piping (NYSDEC, 1999). In January 1998, another IRM was implemented that involved the installation of a groundwater collection and treatment system (GCTS) (Ramboll, 2021a). The groundwater is collected using an 830-feet-long trench and is treated using air stripping before discharged to the on-site storm sewer. Operation of the GCTS began in February 1998 and has continued to the present (Ramboll, 2021a) (**Figure 2**).

1.3 Groundwater Remedy

NYSDEC issued a Record of Decision (ROD) for the Site in March 1999. The selected remedy included continued OM&M of the GCTS and groundwater monitoring. The monitoring component includes the sampling and analysis of groundwater from designated monitoring wells and storm water outfalls and the quarterly sampling and analysis of treatment system influent and effluent samples.

The groundwater collection trench is approximately 830 feet long, with a collection sump at the northwest end. Based on variations in the ground surface elevation, the depth of the collection trench ranges from 8 to 14 feet below grade. Pumps are located within the collection sump to transfer groundwater to the treatment building. The groundwater is discharged into a low-profile air stripper designed to remove CVOCs. The treated water flows by gravity from the air stripper to a catch basin (CB-2) and ultimately through storm sewer piping to Sanders Creek (outfall OF-01A) in accordance with the substantive requirements (i.e., effluent limitations and monitoring requirements) established by NYSDEC. Features of the groundwater remedy are presented in **Figure 2**.

The average monthly flow rate of the GCTS from January 2014 to April 2020 (before installation of the phytoremediation system) varied from 2.9 to 5.4 gallons per minute (gpm), with an average annual flow rate of 3.4 gpm. **Figure 3** shows the average monthly flow rate over the annual 12-month cycle based on data from January 2014 to April 2020 (before installation of the phytoremediation system). It is expected that the phytoremediation system will impact the average annual and average monthly GCTS flow rates as the hybrid poplars become established.

As discussed in the PTWP, the estimated annual mass of CVOCs removed by the GCTS decreased an order of magnitude over the two decades prior to implementation of the phytoremediation pilot test. For example, the estimated mass removed was approximately 4.0 pounds in 1998 but

was only 0.24 pounds in 2019 (the year before installation of the phytoremediation system), a reduction of approximately 94%. By decreasing the flow of impacted groundwater into the collection trench, the phytoremediation system is expected to also cause a reduction in the estimated annual mass of CVOCs removed by the GCTS.

2. Phytoremediation System Construction

Construction of the phytoremediation system began during the week of March 9, 2020, with marking the existing trees that were to be retained.[1] The brush and other trees were then cleared and mulched on-site, leaving 19 existing trees (one willow, nine cottonwoods, seven boxelders and two quacking aspen). Two hundred boreholes were advanced on an approximate 12-foot spacing to 3.5 feet below grade in preparation for planting 6-foot-long hybrid poplar poles (OP-367). The poles were inoculated overnight with endophytic bacteria culture strains PDN3 (*Enterobacter sp.*), PD1 (*P. putida*) and hormone rooting powder. The poles were then planted and boreholes backfilled with a MYKO Start® 60 fertilizer pack followed by a 50:50 mix of Sunshine Mix #4 and native soil. The remaining inoculant was utilized to inoculate the exposed roots of the 19 retained trees. Construction of the phytoremediation system was completed on May 13, 2020. Further details are included in the CCR (Ramboll, 2021a), which is Appendix I of the *2020 Annual Operations and Maintenance Report* (Ramboll, 2021b).

[1] The design of the phytoremediation system included retaining ten large phreatophytes (one willow and nine cottonwoods). NYSDEC requested that some additional large trees be retained during its review and approval of the PTWP.

3. Stand Inspections and Associated Actions

Inspections of the hybrid poplar stand were completed every two months during the growing season as outlined in Section 4.4.1 in the PTWP. During Year 6, the stand inspections were completed on May 13, July 15 and September 16, 2025, and are documented in the inspection reports that are provided in **Appendix A**. The inspection reports include observations, tree measurements and photographs documenting the tree stand development.

3.1 Tree Growth and Survival Rate

Growth of the hybrid poplars was noted during each of the three inspections. Survival was 91.5% during the final Year 1 inspection (November 9, 2020), decreased to 70% during the final Year 2 inspection (September 21, 2021), decreased to 61% during the final Year 3 inspection (September 14, 2022), decreased to 58% during the final Year 4 inspection (September 12, 2023), and decreased to 52% during the final Year 5 inspection (September 10, 2024). During Year 6, the survival decreased to 51% by the final inspection (September 16, 2025), with the loss of two additional trees. **Figure 4** shows the status of the phytoremediation system during the final Year 6 inspection, with 102 surviving poplars (101 healthy and 1 stressed). The canopy of the larger retained trees is also shown on **Figure 4**, and most of the poplars that have died are below the canopy. The majority of the dead trees (87%, or 85 of the 98 dead trees) are located under the canopy of the large retained trees; thus, as discussed in the inspection reports and prior PTRs, the stress and die-off is largely believed to be due to water competition and shading from the retained trees.

3.2 Tree Watering

In general, the 2025 growing season can be characterized as temperature ranging from warmer to normal with drier than normal conditions (i.e., the 30-year average) from June to September, and wetter than normal conditions in from March to May (**Figure 5**). Manual watering was not performed during the 2025 growing season.

3.3 Biological Stresses

Two general biological stresses were observed in 2025. There were minor observations of *Marssonina* leaf spot (a common foliage disease of cottonwoods caused from a fungus) during the 2025 inspections. In addition, aggressive growth of native vine (e.g., virginia creeper, wild grape, poison ivy), common reed and mugwort was noted. Similar to previous years, vines were observed crowding trees and threatened to overtake some of the hybrid poplars. Common reed growth was also present threatened to overtake some of the trees (see Section 4.1 below for routine vegetation management). During the final Year 6 inspection, common buckthorn (Rhamnus cathartica), an invasive woody species, was also observed growing near the planted trees and where trees previously died.

3.4 Tree Guard Replacement

During the final Year 2 inspection (September 21, 2021) and year-end pruning, the tree guards were removed, and the trees were wrapped to protect the trees from deer rubbing. Tree wrap replacement was not required during Year 6. Damaged tree wraps were removed but not replaced due to the reduced risk of damage from deer grazing and rubbing now that the hybrid poplars are taller.

4. Routine Operation and Maintenance Activities

4.1 Management of Undesirable Vegetative Growth

As a result of the vine and common reed growth observed during the first Year 1 inspection, and in accordance with the approved PTWP, Ramboll requested approval from NYSDEC to apply herbicides. Approval was granted during a July 26, 2020 telephone call to apply herbicides in compliance with regulations and any necessary permit requirements. No permits were required and Ramboll selected a licensed pesticide applicator for the effort.

RoundUP® was applied by Brightview Landscapes, LLC (Brightview) of Jamesville, New York (Bureau of Pesticides Management Registration #17582) twice during Year 1 (August 11 and 12, 2020 and September 18, 2020) and once during Year 2 (August 3, 2021) to control vines and common reed growth within the poplar stand. No pesticide application has been performed since Year 2. In Year 6, The growth of vines and common reeds were successfully managed by mowing, which was performed in July 2025.

4.2 Pruning

Consistent with the PTWP, the hybrid poplars were pruned at the end of Year 1 and Year 2 (following leaf fall). This pruning was performed by Ramboll and completed consistent with the *Poplar and Willow Tree Care Guide* (Intrinsyx, 2020). Consistent with the PTWP, pruning was not conducted at the end of Year 3, Year 4, and Year 5. During the final Year 6 inspection, several trees were observed to have damaged branches and broken tops. Pruning is scheduled to be completed in January 2026 to remove damaged portions of the trees.

4.3 Fertilization

Consistent with the PTWP, the timing of any additional fertilization will be established based on the findings of the routine inspections and leaf nutrient analyses. In accordance with the PTWP, if additional fertilization is warranted, it will be performed in accordance with the manufacturer's recommendations and using methods provided to NYSDEC in advance. No additional fertilization was performed in Year 1 through Year 6 (2020 through 2025). However, based on the observations during the Year 5 and Year 6 inspections, fertilization of the hybrid poplar stand is scheduled to be completed in Spring 2026.

4.4 Contingent Tree Replacement

The PTWP includes a contingency for tree replacement. Since the majority of the dead trees are located under the canopy of the large retained trees (one willow, nine cottonwoods, seven boxelders and two quacking aspen), replacement of dead hybrid poplars has not been performed.

5. Collection Trench and Groundwater Monitoring

Routine monitoring activities at the Site include (a) monthly flow totalizer readings (from which volumes and rates can be calculated), (b) quarterly sampling of the treatment system influent and effluent for laboratory analyses, (c) annual water level measurements and (d) annual groundwater sampling for laboratory analyses. The PTWP includes supplemental monitoring that would be performed to augment the routine monitoring and facilitate evaluation of the phytoremediation pilot test.

5.1 Seasonal Shutdown of the Collection Trench

As envisioned in the PTWP, growth of the hybrid poplar stand was expected to allow seasonal operation of the GCTS (i.e., during the winter and spring months) while relying on evapotranspiration by the large retained trees and the hybrid poplars to "consume" groundwater during the growing season. On February 6, 2024, Ramboll submitted a petition on behalf of Lockheed Martin that requested approval from NYSDEC to transition to seasonal operation of the GCTS for a two-year period (i.e., 2024 and 2025). Ramboll proposed to operate the GCTS from January through June each year, and to shut down the system from July through December. NYSDEC requested additional information to support the seasonal operation request, which was provided to NYSDEC in a July 9, 2024 letter. As request by NYSDEC, this letter revised the petition to (a) a four-month shutdown period, (b) include the sampling of two monitoring wells (MW-17A and MW-18A) before restart of the GCTS at the end of the shutdown period, and (c) include sampling of the collection trench water (i.e., influent to the air stripper) when operation of the GCTS resumes. NYSDEC subsequently approved the four-month shutdown on July 18, 2024.

Based on the results of the phytoremediation pilot test, Ramboll recommended another seasonal shutdown during Year 6, similar to the shutdown in Year 5. As approved by NYSDEC, the GCTS was shut down on July 1, 2025. During the shutdown period, the routine GCTS activities (e.g., trench flow measurements and influent/effluent sampling) could not be completed since the system was not in operation. Operation of the GCTS resumed on October 31, 2025.

5.2 Volume Rate of Groundwater Flow in the Collection Trench

Monthly flow totalizer readings are collected as part of the routine OM&M activities. **Table 1** presents the gallons of groundwater pumped and the resulting average flow rates between the monthly measurement events from January 2025 through December 2025. **Figure 3** presents the average monthly flow rate of the GCTS over the 12-month cycle based on the data for 2014 through 2019 in comparison to the data for 2020, 2021, 2022, 2023, 2024 and 2025. The average monthly flow rate of the GCTS from January 2014 to April 2020 (before installation of the phytoremediation system) varied from 2.9 to 5.4 gpm, with an average annual flow rate of 3.4 gpm. Except for the seasonal shutdowns of the GCTS from July 19 to December 13, 2024 and from July 1 to October 31, 2025 (see Section 5.1 above), the monthly post-planting flow rates varied from 0.62 gpm in November 2020 to 7.58 gpm in February 2022.

As shown in **Figure 3**, the 2025 average monthly flow rate in the GCTS for April and June were less than the monthly means from January 2014 through April 2020 (before planting the phytoremediation system in May 2020). Average monthly flow rate in the GCTS for May 2025 were significantly higher than previous years due to above normal rainfall (5.29 inches). The

seasonal shutdown ended on October 31, 2025, so the average monthly flow rate in the GCTS in October 2025 represents the beginning of November 2025 since the reading was recorded on November 6, 2025. Reduced flow was observed in November and December 2025 when compared to the monthly means from January 2014 through April 2020 (before planting the phytoremediation system in May 2020). As shown in **Figure 3**, the flow in December 2024 was unusually high, which was attributed to restart of the GCTS and drawdown of the water level in the collection trench. However, this unusually high flow was not observed when the system was restarted on October 31, 2025.

5.3 Treatment System Influent and Effluent Data

The routine OM&M of the GCTS includes quarterly sampling of the treatment system influent and effluent in March, June, September and December. The influent and effluent are analyzed for volatile organic compounds (VOCs), total dissolved solids (TDS), pH, and zinc and the results are presented in the *2025 Annual Operations and Maintenance Report* (Ramboll, 2026). At the request of NYSDEC, the effluent is also analyzed for 1,4-dioxane on a quarterly basis.

As outlined in the PTWP, additional influent samples are being collected during the other eight months and analyzed for VOCs and 1,4-dioxane. In anticipation of the phytoremediation pilot test, this supplemental influent sampling began in October 2019 (the hybrid poplar stand was planted in May 2020) to collect additional baseline information.

Table 2 presents the monthly influent concentrations for select CVOCs,[2] the monthly influent 1,4-dioxane concentrations and quarterly effluent 1,4-dioxane concentrations from January through December 2025. However, as a result of the seasonal shutdown of the GCTS from July 1 through October 31, 2025, the influent/effluent sampling could not be performed in July, August, September and October 2025. The substantive requirements for the discharge from the treatment system to the storm sewer are also shown on **Table 2**. None of the CVOC concentrations in the treatment system influent (collection trench effluent) exceeded their associated discharge limits.

In accordance with NYSDEC's approval of the seasonal shutdown, an influent (collection trench effluent) sample was collected on October 31, 2025 upon restart of the GCTS. The results are summarized in **Table 2**. For completeness, **Appendix B** includes the analytical results for influent samples collected during the months when the GTCS was operating and also the October 31, 2025 sampling of monitoring wells MW-17A and MW-18A.

As discussed in the PTWP, the estimated annual mass of CVOCs removed by the GCTS decreased an order of magnitude over the two decades prior to implementation of the phytoremediation pilot test, from approximately 4.0 pounds in 1998 to only 0.24 pounds in 2019 (the year before installation of the phytoremediation system), a reduction of approximately 94%. The annual CVOC mass removals by the GCTS in 2020, 2021, 2022 and 2023 were approximately 0.19, 0.27, 0.25 and 0.13 pounds. Due to the approved seasonal shutdown, the GTCS was not operated from July 19 through December 13, 2024, but the mass removal in 2024 was approximately 0.11 pounds. Similarly, the GCTS was not operated from July 1 through October 31, 2025, but the mass removal in 2025 was approximately 0.09 pounds.

[2] The CVOCs shown on **Table 2** were the only VOCs detected in the influent samples collected during 2025.

5.4 Groundwater Monitoring

The routine OM&M activities at the Site include the annual sampling of 10 monitoring wells (MW-1S, MW-2S, MW-8S, MW-10, MW-11R, MW-12, MW-16AR, MW-17A, MW-18A and MW-19S) for laboratory analysis of VOCs. These analytical results are presented in the *2025 Annual Operations and Maintenance Report* (Ramboll, 2026).

In accordance with the PTWP, the annual groundwater monitoring events have been expanded during the phytoremediation pilot test to include nine additional monitoring wells for VOC analysis (MW-06S, MW-07S, MW-21, MW-22, MW-23, MW-24, PTMW-01, TMW-02, and TMW-20). In addition, seven monitoring wells (MW-06S, MW-07S, MW-09, MW-10, MW-11R, MW-22, and MW-23) are being sampled annually for 1,4-dioxane analysis. For completeness, the analytical results for the expanded groundwater monitoring performed in 2025 are presented in **Appendix B** and summarized in **Table 4**. Analytical results from the ten monitoring wells that are routinely sampled are presented in the *2025 Annual Operations and Maintenance Report* (Ramboll, 2026).

In accordance with NYSDEC's approval of the seasonal shutdown of the GCTS (which was from July 1 through October 31, 2025), groundwater samples were collected from monitoring wells MW-17A and MW-18A on October 31, 2025[3]. The analytical results are summarized in **Table 4** and the analytical results are presented in **Appendix B**.

Water level measurements are also collected annually as part of the routine OM&M activities. At the request of NYSDEC, monthly water levels are being measured during the phytoremediation pilot test in 17 monitoring wells and two clean-outs along the collection trench. The monthly water level measurements from January to December 2025 are presented in **Table 3**. Although not required by the PTWP, water level measurements are occasionally also collected from the three surface water staff gages (SG-3R, SG-5R and SG-7R) located along Saunders Creek; these data are also presented in **Table 3**.

[3] . Due to the drought like conditions, MW-18A only had approximately 1.4 feet of water column and recovery was insufficient to complete sampling. Therefore, the VOC sample was collected at MW-18 on October 31, 2025 (Friday) and the 1,4-dioxane sample was collected on November 3, 2025 (Monday).

6. Planned Year 7 Phytoremediation Pilot Test Activities

Routine OM&M activities for the phytoremediation pilot test will continue in 2026. These activities will include bimonthly tree stand inspections during the growing season, augmented influent sampling for laboratory analysis, monthly water level measurements in select monitoring wells, augmented groundwater sampling for laboratory analysis, spring fertilizing, and weed mat installation. Another mowing event is also likely to be performed. Contingent activities may include tree pruning, pesticide application, manual watering, and leaf analyses.

The data collected to date demonstrate that the concentrations of CVOCs in the treatment system influent (collection trench effluent) are reliably below the substantive requirements established by NYSDEC for discharge to the storm sewer. The hybrid poplar stand continues to mature (the maximum diameter and height of the hybrid poplars are now 10.5 inches and 60.0 feet, respectively). Although 98 of the 200 planted trees have died, most of the die-off occurred under the canopy of the large retained trees due to competition for water and sun. The 19 retained trees (including 10 phreatophytes, one willow and nine cottonwoods) are serving the same purpose as the hybrid poplars in these portions of the pilot test area.

After the restart of the GCTS on October 31, 2025, it does not appear that the seasonal shutdowns of the system in Years 5 and 6 had any negative effect(s). Based on review of the data collected thus far during the phytoremediation pilot test, Lockheed Martin requests that NYSDEC approve a five-month seasonal shutdown this year, from July 1 through November 30, 2026. This is similar to the actual seasonal shutdown in 2024 (which was from July 19 through December 13, 2024) and is consistent with the two-year seasonal shutdown petition that Ramboll submitted to NYSDEC on February 6, 2024 and the request to extend the seasonal shutdown period in the *2024 Annual Operations and Maintenance Report* (Ramboll, 2025). While NYSDEC denied the request to extend in the *2024 Annual Operations and Maintenance Report*, it was suggested that the extension could be revisited with more data from the second shutdown period. Consistent with NYSDEC's prior approval, Lockheed Martin will (a) sample monitoring wells MW-17A and MW-18A for analyses of VOCs and 1,4-dioxane before restart of the GCTS at the end of the 2026 shutdown period and (b) sample the collection trench water (i.e., influent to the air stripper) when operation of the GCTS resumes.

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TABLES

Table 1

Year 6 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

Groundwater Collection and Treatment System Flow Rates

Totalizer Reading (gallons)	Total Pumped (gallons)	Date Recorded	Number of Days	Average Monthly Flow Rate (gpm)	Monthly Rainfall/Snowfall (inches)[1]	Representative Month
48,307,286	176,136	1/3/2025	21	3.8	3.62/6.8	December 2024
48,476,178	168,892	2/11/2025	39	5.7	2.36/42.3	January 2025
48,703,464	227,286	3/7/2025	24	3.7	3.47/41.7	February 2025
48,947,799	244,335	4/11/2025	35	5.1	1.2/7.1	March 2025
49,109,476	161,677	5/6/2025	25	5.1	3.91/3.3	April 2025
49,342,927	233,451	6/6/2025	31	2.0	5.29/--	May 2025
49,425,403	82,476	7/1/2025	25	1.2	2.77/--	June 2025
49,425,403	0	8/8/2025	38	0.0	4.26/--	July 2025[2]
49,425,403	0	9/9/2025	32	0.0	3.08/--	August 2025[2]
49,425,403	0	10/2/2025	23	0.0	4.04/--	September 2025[2]
49,450,641	25,238	11/6/2025	35	0.5	3.42/--	October 2025[2]
49,541,777	91,136	12/2/2025	26	2.4	5.23/17.7	November 2025
49,709,457	284,054	1/5/2026	34	5.8	4.80/60.8	December 2025

Notes:

1 - Data source: NOAA National Weather Service, Syracuse Hancock International Airport (KSYR).

2 - NYSDEC authorized groundwater treatment system shutdown from July 1, 2025 to October 31, 2025.

-- = No precipitation in this form

gpm = gallons per minute

Table 2

Year 6 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

CVOC and 1,4-Dioxane Data for Collection Trench

	CVOC Data for Influent						**1,4-Dioxane**	
Sample Date	Total CVOCs*	Trichloroethene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Vinyl Chloride	Chloroethane	Concentration	Sampling Location
01/03/25	13.6	<1.0	1.9	6.2	5.5	<1.0	3.8	influent
02/11/25	12.2	<1.0	2.4	5.9	3.9	<1.0	5.3	influent
03/04/25	11.9	<1.0	2.2	4.6	5.1	<1.0	3.9	effluent
04/11/25	9.2	<1.0	1.8	4.0	3.4	<1.0	4.1	influent
05/06/25	14.4	<1.0	2.2	4.3	7.9	<1.0	4.7	influent
06/03/25	7.3	<1.0	2.2	2.7	2.4	<1.0	5.4	effluent
July 2025	NA	NA	NA	NA	NA	NA	NA	NA
August 2025	NA	NA	NA	NA	NA	NA	NA	NA
September 2025	NA	NA	NA	NA	NA	NA	NA	NA
October 2025	NA	NA	NA	NA	NA	NA	NA	NA
10/31/2025	2.62	<1.0	0.82 J	1.8	<1.0	<1.0	0.8	influent
11/06/25	4.5	<1.0	1.0	2.5	1.0	<1.0	1.7	influent
12/02/25	3.5	<1.0	1.2	2.3	<1.0	<1.0	2.2	effluent
Effluent Limitations:	NA	10	30	30	50	NA	NA	

Notes:

* Non-fluorinated chlorinated voltilate organic compounds.

B - Compound was found in the blank and sample.

Concentrations in micrograms per liter (µg/L).

J - Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

NA - not applicable

NYSDEC authorized groundwater treatment system shutdown from July 1, 2025 to October 31, 2025.

Table 3

Year 6 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

Monthly Groundwater Level Data

Well ID	Measuring Point Elevation	1/3/2025		2/11/2025		3/7/2025		4/11/2024		5/7/2025		6/6/2025		7/9/2025		8/8/2025		9/9/2025		10/2/2025		11/6/2025		12/2/2025	
		DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation	DTW (ft bmp)	Elevation
MW-01S	381.20	0.39	380.81	1.13	380.07	0.11	381.09	0.57	380.63	0.46	380.74	1.60	379.60	2.32	378.88	1.56	379.64	2.69	378.51	3.02	378.18	0.88	380.32	0.82	380.38
MW-02S	381.83	1.84	379.99	3.32	378.51	0.96	380.87	2.38	379.45	2.24	379.59	4.55	377.28	5.94	375.89	5.42	376.41	7.01	374.82	7.39	374.44	5.67	376.16	3.64	378.19
MW-06S	385.81	3.63	382.18	6.41	379.40	3.13	382.68	4.94	380.87	4.73	381.08	8.08	377.73	10.08	375.73	12.44	373.37	13.01	372.80	13.25	372.56	11.29	374.52	8.22	377.59
MW-07S	384.45	4.32	380.13	6.78	377.67	3.18	381.27	5.51	378.94	5.29	379.16	7.96	376.49	9.84	374.61	10.76	373.69	10.99	373.46	11.22	373.23	10.25	374.20	9.57	374.88
MW-09	385.11	6.44	378.67	9.64	375.47	4.50	380.61	4.83	380.28	7.50	377.61	9.60	375.51	11.11	374.00	11.89	373.22	12.02	373.09	12.28	372.83	11.45	373.66	7.40	377.71
MW-10	386.11	7.94	378.17	10.78	375.33	5.60	380.51	9.85	376.26	9.85	376.26	11.74	374.37	DRY		DRY		DRY		DRY		DRY		DRY	
MW-11R	385.71	5.38	380.33	7.96	377.75	4.49	381.22	6.96	378.75	6.89	378.82	9.34	376.37	10.89	374.82	13.23	372.48	13.76	371.95	13.89	371.82	12.63	373.08	10.69	375.02
MW-12	384.99	7.76	377.23	8.91	376.08	4.99	380.00	8.49	376.50	8.48	376.51	9.29	375.70	9.89	375.10	12.80	372.19	13.42	371.57	13.09	371.90	10.60	374.39	9.58	375.41
MW-17A	384.11	8.06	376.05	10.01	374.10	6.06	378.05	9.11	375.00	9.08	375.03	10.02	374.09	10.34	373.77	11.42	372.69	11.79	372.32	11.96	372.15	11.31	372.80	10.95	373.16
MW-17B	383.41	6.48	376.93	7.79	375.62	5.02	378.39	7.06	376.35	6.94	376.47	7.90	375.51	9.32	374.09	10.61	372.80	10.91	372.50	11.16	372.25	10.26	373.15	9.53	373.88
MW-18A	385.18	8.31	376.87	10.45	374.73	6.32	378.86	10.12	375.06	9.63	375.55	10.54	374.64	10.55	374.63	10.97	374.21	11.28	373.90	11.52	373.66	11.36	373.82	8.72	376.46
MW-18B	384.04	7.68	376.36	9.11	374.93	6.23	377.81	9.15	374.89	8.80	375.24	9.65	374.39	9.49	374.55	9.90	374.14	10.01	374.03	10.18	373.86	9.72	374.32	8.42	375.62
MW-21	383.55	2.53	381.02	4.20	379.35	2.22	381.33	3.12	380.43	2.99	380.56	5.44	378.11	7.05	376.50	6.15	377.40	8.30	375.25	8.77	374.78	6.02	377.53	4.21	379.34
MW-22	381.15	0.31	380.84	1.01	380.14	0.01	381.14	0.38	380.77	0.23	380.92	1.59	379.56	2.56	378.59	1.97	379.18	3.08	378.07	3.41	377.74	0.68	380.47	0.64	380.51
MW-23	384.83	3.37	381.46	6.09	378.74	3.03	381.80	4.50	380.33	4.23	380.60	7.61	377.22	9.54	375.29	10.52	374.31	11.09	373.74	11.47	373.36	10.10	374.73	6.76	378.07
MW-24	385.05	4.65	380.40	6.44	378.61	2.34	382.71	5.55	379.50	5.79	379.26	8.04	377.01	10.00	375.05	12.15	372.90	13.00	372.05	13.08	371.97	11.42	373.63	9.33	375.72
MW-20	380.82	0.16	380.66	0.69	380.13	0.00	380.82	0.44	380.38	0.38	380.44	0.94	379.88	1.88	378.94	0.78	380.04	2.53	378.29	3.09	377.73	0.65	380.17	0.46	380.36
CO-N	382.59	9.80	372.79	9.83	372.76	8.31	374.28	10.08	372.51	9.92	372.67	9.95	372.64	7.89	374.70	8.24	374.35	8.55	374.04	8.87	373.72	10.03	372.56	9.96	372.63
CO-S	383.40	10.16	373.24	10.13	373.27	7.63	375.77	9.96	373.44	9.92	373.48	10.15	373.25	8.66	374.74	8.98	374.42	9.30	374.10	9.64	373.76	10.39	373.01	10.21	373.19
SG-3R	377.04	4.36	372.68	Frozen		4.11	372.93	4.35	372.69	4.22	372.82	4.61	372.43	4.63	372.41	4.72	372.32	4.76	372.28	4.72	372.32	4.14	372.90	4.37	372.67
SG-5R	383.96	9.36	374.60	9.50	374.46	9.10	374.86	9.18	374.78	9.13	374.83	9.36	374.60	9.35	374.61	9.42	374.54	9.70	374.26	9.65	374.31	9.27	374.69	9.46	374.50
SG-7R	379.81	5.76	374.05	Frozen		5.39	374.42	5.78	374.03	5.71	374.10	Dry		DRY		DRY		DRY		DRY		5.81	374.00	6.04	373.77

Notes:

DTW = depth to water

ft bmp = feet below measuring point

NA = not applicable

NC = not collected

NYSDEC authorized groundwater treatment system shutdown from July 1, 2025 to October 31, 2025.

Table 4

Year 6 Phytoremediation Pilot Test Report

Former GE Court Street Building 5

Dewitt, New York

Site No. 734070

Expanded Groundwater Sampling Results

														Pre-Startup[2]	
	Location ID:	**MW-06S**	**MW-07S**	**MW-9**	**MW-10**	**MW-11R**	**MW-21**	**MW-22**	**MW-23**	**MW-24**	**PTMW-01**	**TMW-02**	**TMW-20**	**MW-17A**	**MW-18A**
	Sample Date:	**3/7/2025**	**3/7/2025**	**3/7/2025**	**3/7/2025**	**3/7/2025**	**3/7/2025**	**3/7/2025**	**3/7/2025**	**3/7/2025**	**3/7/2025**	**3/7/2025**	**3/7/2025**	**10/30/2025**	**10/30/2025**
ANALYTE	**TOGS[1]**														
1,4-Dioxane by USEPA Method 8270D SIM															
1,4 Dioxane	0.35	**15 B**	**19 B**	**4.6 B**	**5.5 B**	**6 B**	NA	**860 B**	**24 B**	NA	NA	NA	NA	0.79	ND
VOCs by USEPA Method 8260C															
1,1,1-Trichloroethane	5	ND	ND	NA	NA	NA	ND	**94 J**	ND	ND	ND	**17 J**	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	**36**	**23**	NA	NA	NA	**2400**	**4100**	**34**	1.6	**1900**	**630**	**54000**	ND	ND
1,1-Dichloroethene	5	ND	ND	NA	NA	NA	ND	ND	3.6 J	ND	ND	**12 J**	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.0006	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	ND	NA	NA	NA	ND	**90 J**	**2.5 J**	ND	ND	**7.5 J**	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND
Carbon tetrachloride	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	**81**	ND	NA	NA	NA	**880**	**6100**	**42**	ND	**5300**	**160**	**14000**	ND	ND
Chloroform	7	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	**7.8**	**87**	NA	NA	NA	**5300**	ND	**1100**	ND	ND	**1400**	ND	ND	ND
cis-1,3-Dichloropropene	0.4	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	NA	NA	NA	**170 J**	ND	ND	ND	ND	**19 J**	ND	ND	ND
Isopropylbenzene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NC	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	NA	NA	NA	**130 J**	ND	ND	ND	ND	**30**	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	NA	NA	NA	ND	ND	**5.5**	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	**5.5**	**130**	NA	NA	NA	**4000**	ND	**400**	ND	ND	**1500**	ND	ND	ND
Xylenes, Total	5	ND	ND	NA	NA	NA	**200 J**	ND	ND	ND	ND	**34 J**	ND	ND	ND

Notes:

All units in micrograms per liter (µg/L).

[1] New York State Department of Environmental Conservation, Technical and Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.

[2] NYSDEC authorized groundwater treatment system shutdown from July 1, 2025 to October 31, 2025.

Bold = Indicates result exceeds criteria

J = Estimated value above the laboratory's detection limit but below the laboratory's reporting limit

B = Compound was found in the blank and sample.

ND = Not detected above the laboratory's detection limit

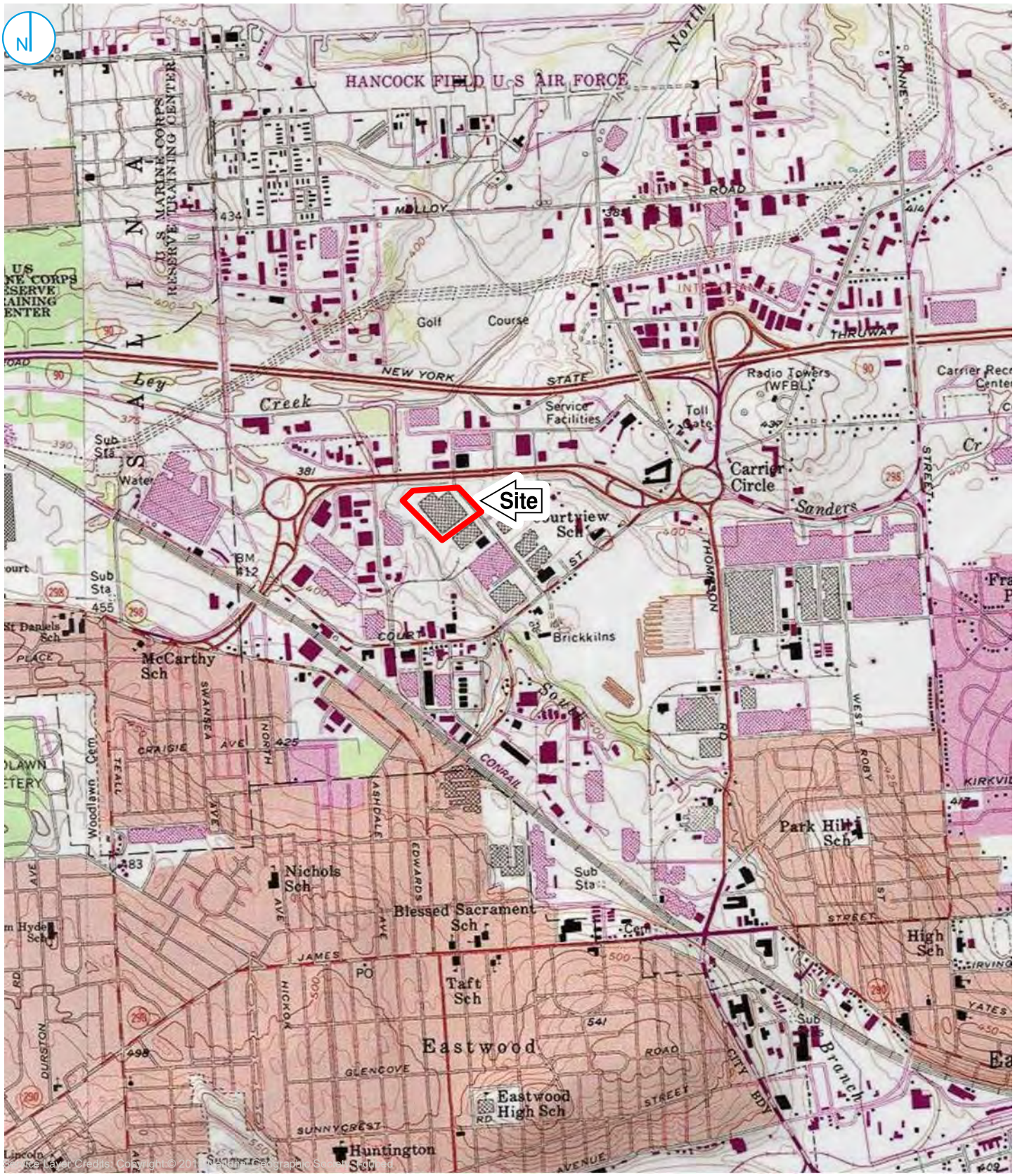
NC = No criteria

NA = Not analyzed

FIGURES

I:\Lockheed-Mar-Fs.5851\74232.Lockheed-Court\Docs\DWG\MXD\Phyto\Site_Location.mxd

PROJECT: 5851.74232 | DATED: 2/7/2020 | DESIGNER: NEWTONJM



Service Layer Credits: Copyright © 2013 National Geographic Society, i-cubed



KEY MAP

Map Scale: 1:1:24,000;
Map Center: 76°6'4"W 43°5'1"N

0 1,000 2,000 Feet

SITE LOCATION

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

I:\Lockheed-Mar-Fs.585\174292.Lockheed-CourtDost\DWG\MXD\Phyto

PROJECT: 585.174292 | DATED: 1/12/2021 | DESIGNER: MONETANT



- NEW POPLAR
- REMOVED TREE LOCATIONS
- REMAINING TREE LOCATIONS
- MONITORING WELL
- GROUNDWATER COLLECTION TRENCH

HISTORICAL CHEMICAL STORAGE LOCATIONS

- FORMER UST LOCATION
- FORMER SOLVENT PAD

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES AS-BUILT 5/13/2020

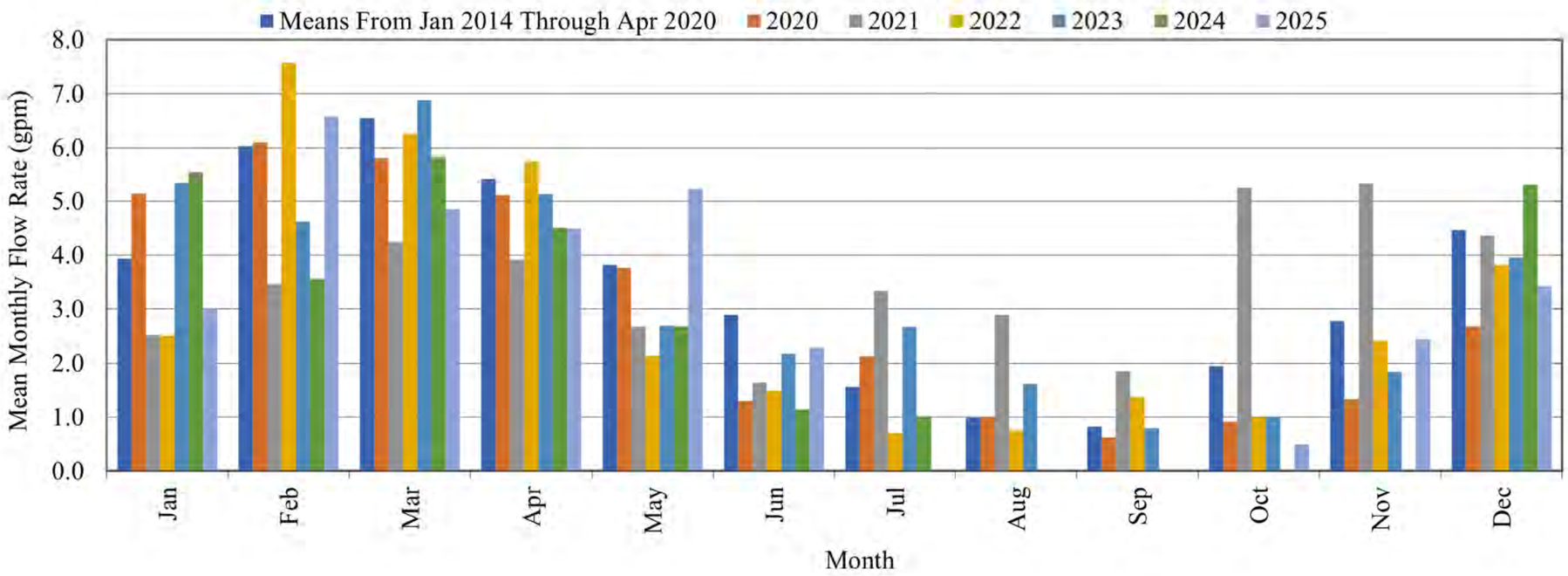
LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 02

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

A RAMBOLL COMPANY

\\syracuseewr\projects\Lockheed-Mar-Fs.5851\STDS\GIS\COURT STREET BLDG 5\PRO



Note: Little to no collection trench flow in August through November 2024 and July through October 2025 due to approved shutdown. Higher than normal collection trench flow in December 2024 and December 2025 due to resumption of pumping and associated drawdown in the collection trench.

MEAN MONTHLY FLOW RATES IN GROUNDWATER COLLECTION TRENCH

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5
TOWN OF DEWIT, NEW YORK

FIGURE 03

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 1940112129 | DATED: 1/12/2026 | DESIGNER: NEWTONAM

\\syracuseenv\projects\Lockheed-Martin-Fs-6851\STDS\GIS\COURT STREET BLDG 5\PRO

- STRESSED TREE
- HEALTHY POPLAR
- DEAD POPLAR
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)
- RIVER

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
9/16/2025

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

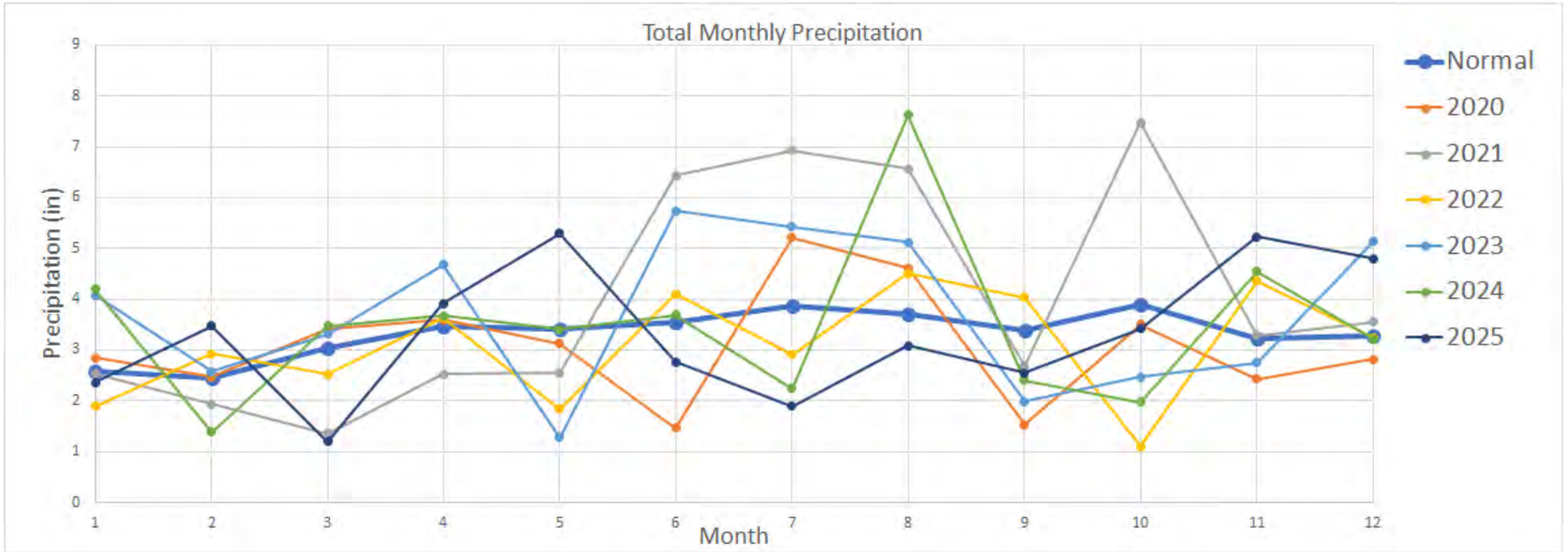
RAMBOLL

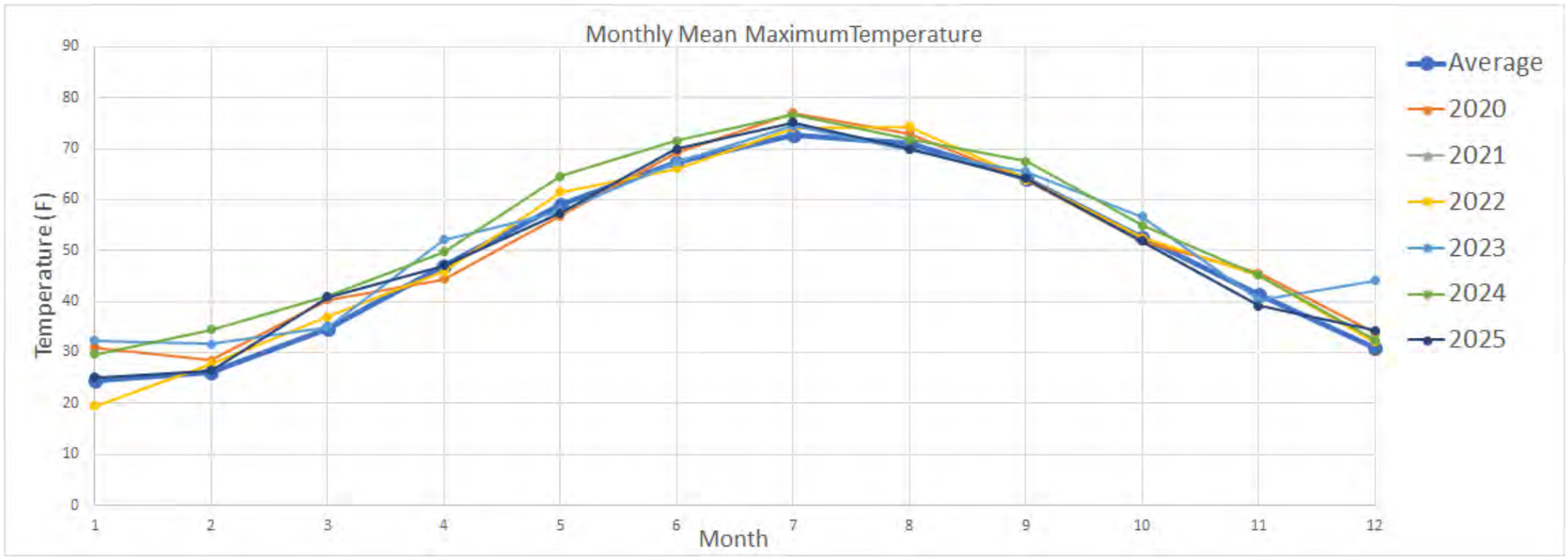
PROJECT: 6851.74232 | DATED: 8/6/2025 | DESIGNER: NEWTONJM

Service Layer Credits: World Imagery, New York State, Maxar, Microsoft

0 100 200 Feet

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Data Source: https://www.weather.gov/wrh/climate?wfo=bgm

PROJECT: 5851.74232 | DATED: 1/12/2022 | DESIGNER: NEWTON.JM

MEAN MONTHLY MAXIMUM TEMPURATURE AND MONTHLY TOTAL PRECIPITATION

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5
TOWN OF DEWIT, NEW YORK

FIGURE 5

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

A RAMBOLL COMPANY

APPENDICES

APPENDIX A

YEAR 6 INSPECTION REPORTS

RAMBOLL

ENVIRONMENT
& HEALTH

PHYTOREMEDIATION PILOT TEST
YEAR 6 INSPECTION REPORT 1

Project name	**FORMER GE COURT STREET BUILDING 5 PHYTOREMEDIATION PILOT TEST**
Project no.	**5851/74232**
Recipient	**Jill Fonte, Lockheed Martin Corporation**
Date	**June 30, 2025**
Prepared by	**Christopher C. Nack**
CC:	**Paul Hare**
	Scott Scheidelman
	Scott Tucker

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2. Weather and Site Watering **3**

3. Inspection Summary **3**

Tables

Table 1 – Weather and Site Watering Data (embedded in text)
Table 2 – Tree Data (embedded in text)
Table 3 – Phytoremediation Pilot Test Year 6 Inspection 1

Attachments

Attachment 1 – Site Plan
Attachment 2 – Photo Log

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1. Introduction

This report presents the summary of activities and results related to the first Year 6 inspection conducted on May 13, 2025 at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, New York. A total of 200 hybrid poplars were planted at the site on May 11, 12 and 13, 2020 as part of the Phytoremediation Pilot Test approved by the New York State Department of Environmental Conservation (NYSDEC). To evaluate the health of the trees and guide maintenance activities, an inspection is performed on a bimonthly basis during the growing season and includes the evaluation of 20 randomly selected trees; trees that were previously identified as dead were not included in the random selection of trees for the evaluation. In addition to tree height and diameter at breast height (DBH), the trees are inspected for the following:

- Wilting leaves
- Yellowing leaves (chlorosis)
- Blackened leaves (necrosis)
- Leaf defoliation
- Leaf loss
- Trunk damage
- Branch damage
- Bore holes
- Pathogens

These conditions are associated with common stresses (e.g., excessive heat and diseases) and are used to indicate overall tree health.

Each tree in the stand was assigned a grid number which is provided in **Figure 1** included in **Attachment 1**. These grid numbers were used to randomly select trees for the first Year 6 inspection from the list of living trees during the third/final Year 5 inspection. Photos are provided in **Attachment 2** for the 20 trees that were randomly selected for this inspection.

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2. Weather and Site Watering

Early spring 2025 conditions during March and April can be generally characterized as being warmer in terms of temperature and wetter in terms of precipitation when compared to historic conditions (see **Table 1** below). Temperatures in May were generally lower and precipitation continued to be higher than historic conditions. No watering had occurred in 2025.

Table 1. Average monthly mean high temperatures (°F) and total monthly precipitation (inches) for the 2025 growing season and the approximate additional watering (inches) that was performed. Historic data is provided for comparison.

Month	Mean High Temp. (°F)		Precipitation (Inches)		Watering (Inches)	Total Water (inches)
	Historic	2025	Historic	2025		
March	42.4	51.9	3.04	3.04[1]	0	3..04
April	56.4	57.6	3.48	3.91	0	3.91
May	69.2	66.0	3.42	5.29	0	5.29
June	77.3	--	3.56	--	0	--
July	81.7	--	3.86	--	0	--
August	80.3	--	3.70	--	0	--
September	73.1	--	3.38	--	0	--

Historic data source: https://www.weather.gov/wrh/climate?wfo=bgm

1. In addition to rain, 19.8 inches of snow occurred in March

3. Inspection Summary

Inspection of the trees on May 13, 2025 identified a total of 98 trees (49%) dead and no trees in poor condition, as shown in Figure 1 in **Attachment 1**. Two additional trees died when compared to the third/final Year 5 inspection on September 10, 2024.

During the May 13, 2025 inspection there was no evidence of bore holes. Minor *Marssonina* leaf spot, a common foliage disease of cottonwoods caused from a fungus, was present at the time of the inspection and was evident on trees inspected. This fungus is not expected to impact tree condition.

Similar to prior inspections, with a lack of signs of observed major disease or pest damage, it is believed that tree die-off and stress is related to the competition with the large retained trees (including water competition and shading due to the large retained phreatophytic trees [one black willow and nine cottonwoods]). **Figure 1** in **Attachment 1** shows the extent of the canopy from the retained trees based on observations made on August 9, 2021. This figure shows that 83 of the 98 dead trees (85%) are under the canopy of the retained trees.

Mean tree height during the first Year 6 inspection was approximately 37.1 feet (444.9 inches), ranging from 14.1 to 55.6 feet (169 to 667 inches), and mean DBH was 5.6 inches (ranging from 3.0 to 8.5 inches), as shown in **Table 2** below. These statistics are based on measurements for the 20 trees selected randomly for the first Year 6 inspection (see **Table 3**).

Table 2. Tree height and DBH summary for the final Year 1 inspection, final Year 2 inspection, final Year 3 inspection, final Year 4 inspection, final Year 5 inspection and Year 6 inspection 1. These statistics are based on measurements for the 20 trees that were randomly selected during each inspection. Therefore, the same trees were not likely measured during each event.

	Planted Stake	Year 1 Final		Year 2 Final		Year 3 Final		Year 4 Final		Year 5 Final		Year 6 Inspection 1	
	Height (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)
Mean	41.1	109.1	0.5	203	1.4	208	1.7	280	4.0	391.2	5.7	444.9	5.6
Max	47	169	1.3	292	2.8	361	3.75	396	8.0	468	8.5	667	8.5
Min	35.5	76	0.3	92	0.4	112	0.75	132	2.0	132	1.5	169	3.0

During the first Year 6 inspection on May 13, 2025, two species of concern (common reed [*Phragmites australis*], mugwort [*Artemisia vulgaris*]), as well as wingstem (*Verbesina alternifolia*), and milk thistle (*Silybum marianum*) were observed to be crowding smaller trees in addition to the three vines (wild grape [*Vitis vinifera*], Virginia creeper [*Parthenocissus quinquefolia*], and poison ivy [*Toxicodendron radicans*]). Common buckthorn (*Rhamnus cathartica*), an invasive wood species, was observed growing near the planted trees, including locations of where trees have previously died. Mowing of the site is scheduled to be completed in July 2025 to reduce vegetation crowding and prevent the growth of competing woody species.

Based on the observations during the Year 5 and first Year 6 inspections, fertilization of hybrid poplars and the placement of vegetation mats around the hybrid poplars are recommended to reduce impacts from understory vegetation.

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Table 3

Lockheed Martin Corporation
Former GE Court Street
Town of Dewitt, NY

Phytoremediaion Pilot Test
Year 6, Inspection 1
Inspection Date: May 13, 2025

Tree ID:	B03	E01	G04	H11	I12	J12	J13	K14	L09	L14	M09	M16	N07	N14	O12	Q14	Q16	S13	EE25	GG26
Wilting Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Yellowing Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Blackening Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Defoliation:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Loss:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Trunk Damage:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Branch Damage:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bore Holes:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Pathogen[1]:	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Photograph:	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached
Diameter Breast Height (inches):	4.0	8.0	3.0	5.5	3.0	5.5	8.5	8.0	3.5	7.5	5.0	8.0	3.0	6.5	3	6.0	7.5	6.5	4.0	6.0
Height (inches):	283	666	168	348	265	456	564	444	223	552	354	652	186	654	404	558	667	571	420	462
Height (feet):	24	56	14	29	22	38	47	37	19	46	30	54	16	55	34	47	56	48	35	39

Notes:
1 - Minor *Marssonina* leaf spot, a common foliage disease of cottonwoods caused from a fungus.

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ATTACHMENT 1
SITE PLAN

\\syracuseenv\projects\Lockheed-Mar-Fs_6861\STDS\GIS\COURT STREET BLDG 5\PRO



- STRESSED TREE
- HEALTHY POPLAR
- DEAD POPLAR
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)
- RIVER

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
5/13/2025

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 6861.74232 | DATED: 6/5/2025 | DESIGNER: NEWTONJM

ATTACHMENT 2
PHOTO LOG

The following photos document the hybrid poplar stand at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, NY during the inspection on 05/13/2025 (Year 6, Inspection 1). The photos shown were selected to be representative of the conditions observed during the inspection.



Description: 05/13/2025 - Tree stand facing Northwest standing near the treatment building.



Description: 05/13/2025 - General view of the site from the South side looking North.

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Description: 05/13/2025 - General view of the site from the East side looking West.



Description: 05/13/2025 - Tree B03.



Description: 05/13/2025 - Tree E01.

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Description: 05/13/2025- Tree G04.



Description: 05/13/2025 - Tree H11.



Description: 05/13/2025 - Tree I12.



Description: 05/13/2025 - Tree J12.

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Description: 05/13/2025 - Tree J13.



Description: 05/13/2025 - Tree K14.



Description: 05/13/2025 - Tree L09.



Description: 05/13/2025 - Tree L14.

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Description: 05/13/2025 - Tree M09.



Description: 05/13/2025 - Tree M16.



Description: 05/13/2025 - Tree N07.



Description: 05/13/2025 - Tree N14.

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Description: 05/13/2025 - Tree O12.



Description: 05/13/2025 - Tree Q14.



Description: 05/13/2025 - Tree Q16.



Description: 05/13/2025 - Tree S13.

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Description: 05/13/2025 - Tree EE25.



Description: 05/13/2025 - Tree GG26.

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RAMBOLL

ENVIRONMENT
& HEALTH

PHYTOREMEDIATION PILOT TEST
YEAR 6 INSPECTION REPORT 2

Project name	**FORMER GE COURT STREET BUILDING 5 PHYTOREMEDIATION PILOT TEST**
Project no.	**5851/74232**
Recipient	**Jill Fonte, Lockheed Martin Corporation**
Date	**August 8, 2025**
Prepared by	**Christopher C. Nack**
CC:	**Paul Hare** **Scott Scheidelman** **Scott Tucker**

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1. Introduction **2**

2. Weather and Site Watering **3**

3. Inspection Summary **3**

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Table 1 – Weather and Site Watering Data (embedded in text)
Table 2 – Tree Data (embedded in text)
Table 3 – Phytoremediation Pilot Test Year 6 Inspection 2

Attachments

Attachment 1 – Site Plan
Attachment 2 – Photo Log

Confidential

1. Introduction

This report presents the summary of activities and results related to the second Year 6 inspection conducted on July 15, 2025 at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, New York. A total of 200 hybrid poplars were planted at the site on May 11, 12 and 13, 2020 as part of the Phytoremediation Pilot Test approved by the New York State Department of Environmental Conservation (NYSDEC). To evaluate the health of the trees and guide maintenance activities, an inspection is performed on a bimonthly basis during the growing season and includes the evaluation of 20 randomly selected trees; trees that were previously identified as dead were not included in the random selection of trees for the evaluation. In addition to tree height and diameter at breast height (DBH), the trees are inspected for the following:

- Wilting leaves
- Yellowing leaves (chlorosis)
- Blackened leaves (necrosis)
- Leaf defoliation
- Leaf loss
- Trunk damage
- Branch damage
- Bore holes
- Pathogens

These conditions are associated with common stresses (e.g., excessive heat and diseases) and are used to indicate overall tree health.

Each tree in the stand was assigned a grid number which is provided in **Figure 1** included in **Attachment 1**. These grid numbers were used to randomly select trees for the second Year 6 inspection from the list of living trees during the first Year 6 inspection. Photos are provided in **Attachment 2** for the 20 trees that were randomly selected for this inspection.

2. Weather and Site Watering

Early spring 2025 conditions during March and April can be generally characterized as being warmer in terms of temperature and wetter in terms of precipitation when compared to historic conditions (see **Table 1** below). Temperatures in May were generally lower and precipitation continued to be higher than historic conditions. June and July were generally warmer in terms of temperature and dryer in terms of precipitation when compared to historical conditions (see **Table 1** below). No watering has occurred in 2025.

Table 1. Average monthly mean high temperatures (°F) and total monthly precipitation (inches) for the 2025 growing season and the approximate additional watering (inches) that was performed. Historic data is provided for comparison.

Month	Mean High Temp. (°F)		Precipitation (Inches)		Watering (Inches)	Total Water (inches)
	Historic	2025	Historic	2025		
March	42.4	51.9	3.04	3.04[1]	0	3..04
April	56.4	57.6	3.48	3.91	0	3.91
May	69.2	66.0	3.42	5.29	0	5.29
June	77.3	79.7	3.56	2.77	0	2.77
July	81.7	85.3	3.86	1.90	0	1.90
August	80.3	--	3.70	--	0	--
September	73.1	--	3.38	--	0	--

Historic data source: https://www.weather.gov/wrh/climate?wfo=bgm

1. In addition to rain, 19.8 inches of snow occurred in March

3. Inspection Summary

Inspection of the trees on July 15, 2025 identified a total of 98 trees (49%) dead and one tree in poor (stressed) condition, as shown in Figure 1 in **Attachment 1**. No additional trees died when compared to the first Year 6 inspection on May 13, 2025.

During the July 15, 2025 inspection there was no evidence of bore holes. Minor *Marssonina* leaf spot, a common foliage disease of cottonwoods caused from a fungus, was present at the time of the inspection and was evident on trees inspected. This fungus is not expected to impact tree condition. Some yellowing of the leaves was observed, which is common in trees during warmer summer months.

Mean tree height during the second Year 6 inspection was approximately 37.4 feet (448.5 inches), ranging from 16.0 to 54.0 feet (192 to 648 inches), and mean DBH was 5.8 inches (ranging from 3.0 to 9.5 inches), as shown in **Table 2** below. These statistics are based on measurements for the 20 trees selected randomly for the second Year 6 inspection (see **Table 3**).

Table 2. Tree height and DBH summary for the final Year 1 inspection, final Year 2 inspection, final Year 3 inspection, final Year 4 inspection, final Year 5 inspection and Year 6 inspection 2. These statistics are based on measurements for the 20 trees that were randomly selected during each inspection. Therefore, the same trees were not likely measured during each event.

	Planted Stake	Year 1 Final		Year 2 Final		Year 3 Final		Year 4 Final		Year 5 Final		Year 6 Inspection 2	
	Height (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)
Mean	41.1	109.1	0.5	203	1.4	208	1.7	280	4.0	391.2	5.7	448.5	5.8
Max	47	169	1.3	292	2.8	361	3.75	396	8.0	468	8.5	648	9.5
Min	35.5	76	0.3	92	0.4	112	0.75	132	2.0	132	1.5	192	3.0

During the second Year 6 inspection on July 15, 2025, two species of concern (common reed [*Phragmites australis*] and mugwort [*Artemisia vulgaris*]), as well as wingstem (*Verbesina alternifolia*), and milk thistle (*Silybum marianum*) were observed to be crowding smaller trees. In addition three vines (wild grape [*Vitis vinifera*], Virginia creeper [*Parthenocissus quinquefolia*], and poison ivy [*Toxicodendron radicans*]) were observed at the site. Mowing was conducted in July 2025, which reduced crowding significantly at the site. Common buckthorn (*Rhamnus cathartica*), an invasive wood species, was observed growing near the planted trees, including some locations where trees have previously died.

Based on the observations during the Year 5 and Year 6 inspections, fertilization of hybrid poplars and the placement of vegetation mats around the hybrid poplars are recommended to reduce impacts from understory vegetation. Vegetation mat installation, in conjunction with fertilization, is recommended in the spring (i.e., late May to early June) to take advantage of dormant plant conditions to provide better and more efficient placement of mats. Although mowing has reduced crowding of the planted trees, mowing is not able to be conducted immediately around the trees and hand clearing may be necessary prior to the installation of vegetation mats.

Confidential

Table 3

Lockheed Martin Corporation
Former GE Court Street
Town of Dewitt, NY

Phytoremediaion Pilot Test
Year 6, Inspection 2
Inspection Date: July 15, 2025

Tree ID:	A03	E01	G03	H12	M09	M15	N08	N14	O09	O12	P10	P18	R15	R16	S12	S15	DD26	EE24	FF26	GG26
Wilting Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Yellowing Leaves:	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Blackening Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Defoliation:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Loss:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Trunk Damage:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Branch Damage:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bore Holes:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Pathogen[1]:	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Photograph:	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached
Diameter Breast Height (inches):	3.0	8.5	7.0	8.0	5.0	9.0	3.5	7.5	6.5	3.5	8.0	5.5	3.5	4	4.5	6.0	3.5	4.5	9.5	6.0
Height (inches):	192	522	480	564	354	618	252	576	492	264	540	504	384	396	444	540	288	420	648	492
Height (feet):	16.0	43.5	40.0	47.0	29.5	51.5	21.0	48.0	41.0	22.0	45.0	42.0	32.0	33.0	37.0	45.0	24.0	35.0	54.0	41.0

Notes:
1 - Minor *Marssonina* leaf spot, a common foliage disease of cottonwoods caused from a fungus.

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ATTACHMENT 1
SITE PLAN

\\syracuseenv\projects\Lockheed-Mar-Fs_6861\STDS\GIS\COURT STREET BLDG 5\PRO



- STRESSED TREE
- HEALTHY POPLAR
- DEAD POPLAR
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)
- RIVER

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
7/15/2025

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 6861.74232 | DATED: 8/6/2025 | DESIGNER: NEWTONJM

ATTACHMENT 2
PHOTO LOG

The following photos document the hybrid poplar stand at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, NY during the inspection on 07/15/2025 (Year 6, Inspection 2). The photos shown were selected to be representative of the conditions observed during the inspection.



Description: 07/15/2025 - Tree stand facing Northwest standing near the treatment building.



Description: 07/15/2025 - General view of the site from the South side looking North.



Description: 07/15/2025 - General view of the site from the East side looking West.



Description: 07/15/2025 - Tree A03.



Description: 07/15/2025 - Tree E01.

Confidential



Description: 07/15/2025- Tree G03.



Description: 07/15/2025 - Tree H12.



Description: 07/15/2025 - Tree M09.



Description: 07/15/2025 - Tree M15.

Confidential



Description: 07/15/2025 - Tree N08.



Description: 07/15/2025 - Tree N14.



Description: 07/15/2025 - Tree O09.



Description: 07/15/2025 - Tree O12.

Confidential



Description: 07/15/2025 - Tree P10.



Description: 07/15/2025 - Tree P18.



Description: 07/15/2025 - Tree R15.



Description: 07/15/2025 - Tree R16.

Confidential



Description: 07/15/2025 - Tree S12.



Description: 07/15/2025 - Tree S15.



Description: 07/15/2025 - Tree DD26.



Description: 07/15/2025 - Tree EE24.

Confidential



Description: 07/15/2025 - Tree FF26.



Description: 07/15/2025 - Tree GG26.

Confidential

RAMBOLL

ENVIRONMENT
& HEALTH

PHYTOREMEDIATION PILOT TEST
YEAR 6 INSPECTION REPORT 3

Project name	**FORMER GE COURT STREET BUILDING 5 PHYTOREMEDIATION PILOT TEST**
Project no.	**5851/74232**
Recipient	**Jill Fonte, Lockheed Martin Corporation**
Date	**October 1, 2025**
Prepared by	**Christopher C. Nack**
CC:	**Paul Hare**
	Scott Scheidelman
	Scott Tucker

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Table 2 – Tree Data (embedded in text)
Table 3 – Phytoremediation Pilot Test Year 6 Inspection 3

Attachments

Attachment 1 – Site Plan
Attachment 2 – Photo Log

1. Introduction

This report presents the summary of activities and results related to the second Year 6 inspection conducted on September 16, 2025 at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, New York. A total of 200 hybrid poplars were planted at the site on May 11, 12 and 13, 2020 as part of the Phytoremediation Pilot Test approved by the New York State Department of Environmental Conservation (NYSDEC). To evaluate the health of the trees and guide maintenance activities, an inspection is performed on a bimonthly basis during the growing season and includes the evaluation of 20 randomly selected trees; trees that were previously identified as dead were not included in the random selection of trees for the evaluation. In addition to tree height and diameter at breast height (DBH), the trees are inspected for the following:

- Wilting leaves
- Yellowing leaves (chlorosis)
- Blackened leaves (necrosis)
- Leaf defoliation
- Leaf loss
- Trunk damage
- Branch damage
- Bore holes
- Pathogens

These conditions are associated with common stresses (e.g., excessive heat and diseases) and are used to indicate overall tree health.

Each tree in the stand was assigned a grid number which is provided in **Figure 1** included in **Attachment 1**. These grid numbers were used to randomly select trees for the final Year 6 inspection from the list of living trees during the second Year 6 inspection. Photos are provided in **Attachment 2** for the 20 trees that were randomly selected for this inspection.

2. Weather and Site Watering

Early spring 2025 conditions during March and April can be generally characterized as being warmer in terms of temperature and wetter in terms of precipitation when compared to normal conditions (see **Table 1** below). Temperatures in May were generally lower and precipitation continued to be higher than normal conditions. June, July, August and September were generally warmer in terms of temperature and dryer in terms of precipitation when compared to normal conditions (see **Table 1** below). No manual watering was performed in 2025.

Table 1. Average monthly mean high temperatures (°F) and total monthly precipitation (inches) for the 2025 growing season and the approximate additional watering (inches) that was performed. Normal data is provided for comparison.

Month	Mean High Temp. (°F)		Precipitation (Inches)		Watering (Inches)	Total Water (inches)
	Normal	2025	Normal	2025		
March	42.4	51.9	3.04	3.04[1]	0	3.04
April	56.4	57.6	3.48	3.91	0	3.91
May	69.2	66.0	3.42	5.29	0	5.29
June	77.3	79.7	3.56	2.77	0	2.77
July	81.7	85.3	3.86	1.90	0	1.90
August	80.3	81.7	3.70	3.08	0	3.08
September	73.1	76.3	3.38	2.55	0	2.55

Historic data source: https://www.weather.gov/wrh/climate?wfo=bgm

1. In addition to rain, 19.8 inches of snow occurred in March.

3. Inspection Summary

Inspection of the trees on September 16, 2025 identified a total of 98 trees (49%) dead and one tree in poor (stressed) condition, as shown in **Figure 1** in **Attachment 1**. No additional trees died when compared to the second Year 6 inspection on July 15, 2025.

During the September 16, 2025 inspection there was no evidence of bore holes. Minor *Marssonina* leaf spot, a common foliage disease of cottonwoods caused from a fungus, was present at the time of the inspection and was evident on trees inspected. This fungus is not expected to impact tree condition. Some yellowing of the leaves was observed, which is common in trees. The tops of four trees (M09, M14, P15 and P11) were broken (see picture for tree M09) and some branch damage was observed. This tree damage is likely due to high wind events during July and August.

Mean tree height during the final Year 6 inspection was approximately 41.4 feet (496.8 inches), ranging from 19.0 to 60.0 feet (228 to 720 inches), and mean DBH was 6.9 inches (ranging from 3.0 to 10.5 inches), as shown in **Table 2** below. These statistics are based on measurements for the 20 trees selected randomly for the second Year 6 inspection (see **Table 3**).

Table 2. Tree height and DBH summary for the final inspections of Year 1, Year 2, Year 3, Year 4, Year 5, and Year 6. These statistics are based on measurements for the 20 trees that were randomly selected during each inspection. Therefore, the same trees were not likely measured during each event.

	Planted Stake	Year 1 Final		Year 2 Final		Year 3 Final		Year 4 Final		Year 5 Final		Year 6 Final	
	Height (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)	Height (in)	DBH (in)
Mean	41.1	109.1	0.5	203	1.4	208	1.7	280	4.0	391.2	5.7	496.8	6.9
Max	47	169	1.3	292	2.8	361	3.75	396	8.0	468	8.5	720	10.5
Min	35.5	76	0.3	92	0.4	112	0.75	132	2.0	132	1.5	228	3.0

During the first Year 6 inspection on May 13, 2025, two species of concern (common reed [*Phragmites australis*] and mugwort [*Artemisia vulgaris*]), as well as wingstem (*Verbesina alternifolia*) and milk thistle (*Silybum marianum*), were observed to be crowding smaller trees. In addition, three vines (wild grape [*Vitis vinifera*], Virginia creeper [*Parthenocissus quinquefolia*], and poison ivy [*Toxicodendron radicans*]) were observed at the site. Mowing was conducted in July 2025, which reduced crowding significantly. During the final Year 6 inspection, common buckthorn (*Rhamnus cathartica*), an invasive woody species, was observed growing near the planted trees and where trees previously died.

Based on the observations during the Year 5 and Year 6 inspections, fertilization of hybrid poplars and the placement of vegetation mats around the hybrid poplars are recommended to reduce impacts from understory vegetation. Vegetation mat installation, in conjunction with fertilization, is recommended in the spring of 2026 (i.e., late May to early June 2026) to take advantage of dormant plant conditions to provide better and more efficient placement of mats. Although mowing has reduced crowding of the planted trees, mowing is not able to be conducted immediately around the trees and hand clearing may be necessary prior to the installation of vegetation mats. Trimming the tops of the four trees that were broken (i.e., M09, M14, P15 and P11) is recommended in late fall 2025 or winter 2026 to limit potential development of disease and encourage healthy growth patterns.

Table 3

Lockheed Martin Corporation
Former GE Court Street
Town of Dewitt, NY

Phytoremediaion Pilot Test
Year 6, Inspection 3
Inspection Date: September 16, 2025

Tree ID:	E01	E02	G03	G04	H11	I13	K12	L11	L12	M09	M10	M11	N07	N15	O08	O09	P17	P18	AA21	FF25
Wilting Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Yellowing Leaves:	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Blackening Leaves:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Defoliation:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Leaf Loss:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Trunk Damage:	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N
Branch Damage:	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bore Holes:	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Pathogen[1]:	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Photograph:	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached
Diameter Breast Height (inches):	9.5	6.0	7.5	3.5	5.5	7.0	8.0	9.0	8.5	4.5	5.0	9.5	3.5	10.5	4.5	7.0	8.5	7.5	3.0	10.0
Height (inches):	612	468	492	228	444	540	588	624	636	276	492	648	300	720	300	516	612	516	264	660
Height (feet):	51.0	39.0	41.0	19.0	37.0	45.0	49.0	52.0	53.0	23.0	41.0	54.0	25.0	60.0	25.0	43.0	51.0	43.0	22.0	55.0

Notes:
1 - Minor *Marssonina* leaf spot, a common foliage disease of cottonwoods caused from a fungus.

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ATTACHMENT 1
SITE PLAN

\\syracuseenv\projects\Lockheed-Martin-Fs-6851\STDS\GIS\COURT STREET BLDG 5\PRO

- STRESSED TREE
- HEALTHY POPLAR
- DEAD POPLAR
- RETAINED TREE LOCATION
- SURFACE WATER STAFF GAUGE
- MONITORING WELLS
- GROUNDWATER COLLECTION TRENCH
- APPROXIMATE CANOPY OF RETAINED TREES (BASED ON OBERVATIONS ON 8/9/2021)
- RIVER

Notes
Row TT purposely out of order to avoid confusion with retained tree IDs.

0 10 20 Feet

NEW AND RETAINED TREES
9/16/2025

LOCKHEED MARTIN CORPORATION
FORMER GE COURT STREET BLDG 5
TOWN OF DEWITT, NEW YORK

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 6851.74232 | DATED: 8/6/2025 | DESIGNER: NEWTONJM

Service Layer Credits: World Imagery, New York State, Maxar, Microsoft

0 100 200 Feet

ATTACHMENT 2
PHOTO LOG

The following photos document the hybrid poplar stand at the Former GE Court Street Building 5 Site located at 6439 Deere Road in Syracuse, NY during the inspection on 09/16/2025 (Year 6, Inspection 3). The photos shown were selected to be representative of the conditions observed during the inspection.



Description: 09/16/2025 - Tree stand facing Northwest standing near the treatment building.



Description: 09/16/2025 - General view of the site from the South side looking North.



Description: 09/16/2025 - General view of the site from the West side looking East.



Description: 09/16/2025 - Tree E01.



Description: 09/16/2025 - Tree E02.



Description: 09/16/2025- Tree G03.



Description: 09/16/2025 - Tree G04.



Description: 09/16/2025 - Tree H11.



Description: 09/16/2025 - Tree I13.



Description: 09/16/2025 - Tree K12.



Description: 09/16/2025 - Tree L11.



Description: 09/16/2025 - Tree L12.



Description: 09/16/2025 - Tree M09.



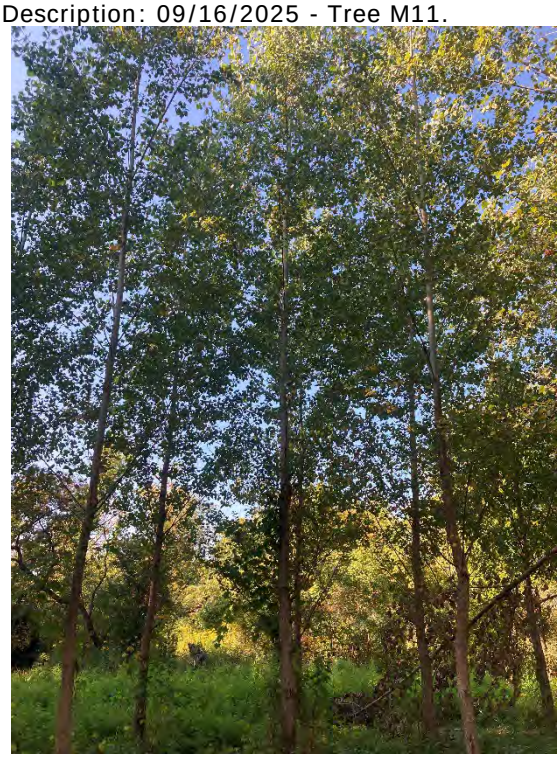
Description: 09/16/2025 - Tree M10.



Description: 09/16/2025 - Tree M11.



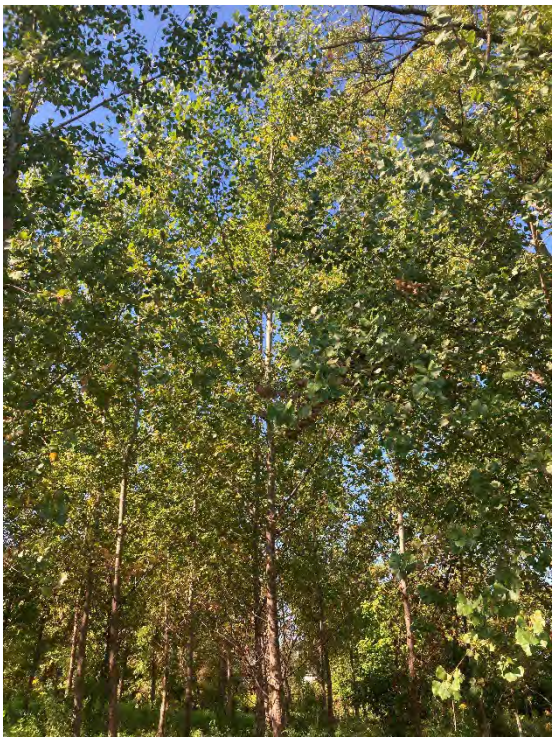
Description: 09/16/2025 - Tree N07.



Description: 09/16/2025 - Tree N15.



Description: 09/16/2025 - Tree O08.



Description: 09/16/2025 - Tree O09.



Description: 09/16/2025 - Tree P17.



Description: 09/16/2025 - Tree P18.



Description: 09/16/2025 - Tree AA21.



Description: 09/16/2025 - Tree FF25.

APPENDIX B
LABORATORY ANALYTICAL REPORTS

Appendix I

Laboratory Analysis Results (not included within electronic submittal)

APPENDIX D
INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 734070

Site Name Former G.E. Court Street Plant 5

Site Address: 6437 Deere Road Zip Code: 13206
City/Town: Dewitt
County: Onondaga
Site Acreage: 10.000

Reporting Period: December 10, 2022 to December 10, 2025

	YES	NO
1. Is the information above correct?	☑	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☑	☐
7. Are all ICs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 734070 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
23-06-02	B&B Family Limited Partnership	Monitoring Plan O&M Plan Ground Water Use Restriction Soil Management Plan Landuse Restriction Surface Water Use Restriction Site Management Plan IC/EC Plan

A declaration of covenants and restrictions was filed for the site in the Onondaga County Clerk's office June 28, 1996. The site currently has an O&M plan that is utilized for site monitoring. The treatment system discharge is subject to a SPDES permit-equivalent.

The site is subject to an Order on Consent, Index No. D7-0001-96-05, between Lockheed Martin Corporation and the NYSDEC.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
23-06-02	Groundwater Treatment System Groundwater Containment

Engineering control at site consist of a groundwater collection trench and treatment system.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☑	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS
SITE NO. 734070

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Jill Fonte (print name) at Lockheed Martin Corporation, 497 Electronics Parkway, Liverpool, NY, (print business address)

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Jill Fonte

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

01/19/2026

Date

EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Bradley A. Kubiak (print name) at Ramboll Americas Engineering Solutions, Inc. 333 W. Washington Street, Syracuse, NY (print business address),

am certifying as a Professional Engineer for the Lockheed Martin Corporation (Owner or Remedial Party)



Digitally signed by Bradley A Kubiak
DN: C=US, E=brad.kubiak@ramboll.com, O="Ramboll Americas Engineering Solutions, Inc.", CN=Bradley A Kubiak

January 21, 2026

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

Date

Expires 4/30/2027