



Stantec Consulting Services Inc.
11311 Aurora Avenue
Des Moines, IA 50322-7908

February 26, 2025

Mr. Jake Bucklin, Environmental Specialist
Iowa Department of Natural Resources
Solid Waste and Contaminated Sites Section
6200 Park Avenue, Suite 200
Des Moines, IA 50321

**Reference: Post-Remediation Groundwater Sampling Activities Summary
Rockwell Collins Main Plant
855 35th Street NE, Cedar Rapids, Iowa
Land Recycling Program Site #2683**

Dear Mr. Bucklin:

On behalf of Rockwell Collins, please find enclosed one copy of the Post-Remediation Groundwater Sampling Activities Summary Report (Report) for the above-referenced site. The purpose of this Report is to document the results of groundwater sampling conducted in accordance with the June 2023 Voluntary Corrective Action Activities Work Plan (Work Plan).

Additionally, Rockwell Collins proposes to advance six temporary wells (see attached figure) for groundwater sample collection and further assessment for additional corrective action activities. Temporary well installation and groundwater sampling activities will conform with methods previously completed at the site. Sampling results will be presented in the next groundwater sampling letter report, or as an addendum to the Work Plan for submittal to the Iowa Department of Natural Resources.

Please feel free to contact me if you have any questions or require additional information.

Sincerely,

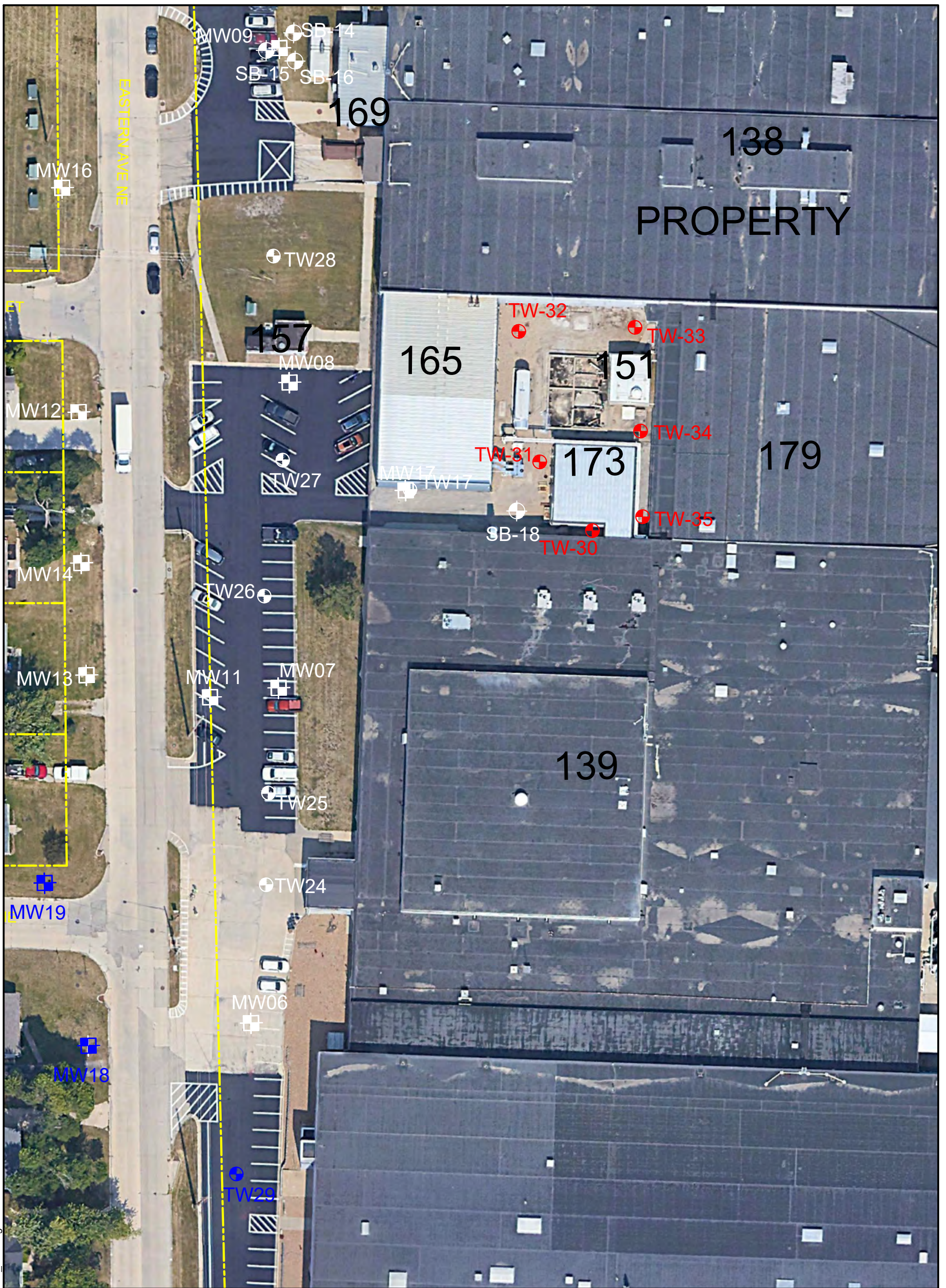
STANTEC CONSULTING SERVICES INC.

A handwritten signature in blue ink, appearing to read 'Steve Varsa', written over a horizontal line.








Stephen R. Varsa, P.G.
Principal Geologist/Project Manager
Phone: (515) 251-1020
steve.varsa@stantec.com

Attachment – Figure 1
Enclosure – Post-Remediation Groundwater Sampling Activities Summary Report

cc: Kristen Musgrove, RTX



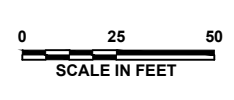
LEGEND:

-  MONITORING WELL LOCATION
-  SOIL BORING LOCATION
-  TEMPORARY MONITORING WELL
-  PROPERTY BOUNDARY
-  MONITORING WELL INSTALLED IN SEPTEMBER 2023
-  TEMPORARY WELL INSTALLED IN SEPTEMBER 2023
-  PROPOSED TEMPORARY WELL

C:\pwworkdir\10028\Fig 1 Main Plant 35th St_TW_Pro.dwg 1/30/2025 1:36:16 PM



DESIGNED BY	EMMA BRADY	1/30/2025
DRAWN BY	SCOTT HANSEN	1/30/2025
CHECKED BY	EMMA BRADY	1/30/2025
APPROVED BY	STEVE VARSA	1/30/2025
PROJECT MANAGER	STEVE VARSA	1/30/2025
CLIENT APPROVAL		
CLIENT REFERENCE NO.		



PROJECT LOCATION	855 35TH STREET NE CEDAR RAPIDS, IA 52498	
PROJECT	ROCKWELL COLLINS	
TITLE	PROPOSED TEMPORARY WELL LOCATION	



FIGURE	1	REVISION	A
FILE NAME			



Stantec Consulting Services Inc.
11311 Aurora Avenue
Des Moines, IA 50322-7908

Submitted via Electronic Mail

February 26, 2025

Mr. Jake Bucklin, Environmental Specialist
Iowa Department of Natural Resources
Solid Waste and Contaminated Sites Section
6200 Park Avenue, Suite 200
Des Moines, IA 50321

**Reference: Post-Remediation Groundwater Sampling Activities Summary
Rockwell Collins Main Plant
855 35th Street NE, Cedar Rapids, Iowa
Land Recycling Program Site #2683**

Dear Mr. Bucklin:

On behalf of Rockwell Collins, Inc. (Rockwell Collins), Stantec Consulting Services Inc. (Stantec) has prepared this Post-Remediation Groundwater Sampling Activities Summary for the Main Plant site, located at 855 35th Street NE in Cedar Rapids, Iowa (site). This summary documents the groundwater sampling activities and associated results from quarterly groundwater sampling events conducted in December 2023, March 2024, June 2024, and September 2024.

Unless otherwise noted, the groundwater sampling activities were conducted in accordance with the June 2023 Voluntary Corrective Action Activities Work Plan (Work Plan), approved by the Iowa Department of Natural Resources on July 5, 2023. Groundwater remediation activities were conducted at the site in August and September 2023, as documented in the Voluntary Corrective Action Work Plan Implementation Report (Report), dated January 17, 2024. Site activities were conducted by Stantec personnel in accordance with the existing site-specific health and safety plan for the site.

The quarterly groundwater monitoring events included the collection of groundwater samples from selected monitoring wells for the analysis of volatile organic compounds (VOCs) from select wells pursuant to the schedule outlined in the Work Plan. The location of site monitoring wells is presented as **Figure 1**. Pursuant to the Work Plan, groundwater samples collected from monitoring wells MW-1, MW-7, MW-12, and MW-17 were also analyzed for geochemical indicators (methane, ethane, ethene, total organic carbon [TOC], sulfate, sulfide, carbon dioxide [CO₂], nitrate, dissolved iron, and dissolved manganese) to help evaluate the effectiveness of the groundwater remediation activities. Monitoring wells MW-6 and MW-7 were additionally analyzed for per- and polyfluoroalkyl substances (PFAS) during the September 2024 sampling event to evaluate the effectiveness of the pilot test conducted around MW-6, as detailed in the Report.

Quarterly Groundwater Monitoring Activities

Prior to conducting groundwater purging and sampling for each sampling event, the 19 site monitoring wells were opened, allowed to stabilize for at least one hour, and gauged to the nearest 0.01 foot from the top of the well casing with an electronic water level probe. Groundwater gauging data collected during each quarterly sampling event are presented in **Table 1**.

Groundwater sampling consisted of low-flow purging using a submersible bladder pump while monitoring groundwater stabilization parameters to demonstrate stability prior to sample collection. Final monitoring well stabilization parameters are summarized in **Table 2**. During the December 2023, March 2024, June 2024,

Reference: Post-Remediation Groundwater Sampling Activities Summary

and September 2024 sampling events, groundwater samples were collected from 14 monitoring wells: MW-1, MW-6, MW-7, MW-8, MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, and MW-19. During the September 2024 sampling event, groundwater samples were also collected from monitoring wells MW-6 and MW-7, and separately analyzed for PFAS. During each of the four quarterly sampling events, monitoring wells MW-1, MW-7, MW-12, and MW-17 groundwater samples were also analyzed for additional parameters to evaluate the effectiveness of the groundwater remediation activities.

The groundwater samples collected at each monitoring well were placed in laboratory-provided bottles, sealed, labeled, placed on wet ice in an insulated cooler, and submitted to Eurofins Environment Testing North Central, LLC, in Cedar Falls, Iowa (Eurofins). Each groundwater sample was analyzed for VOCs using United States Environmental Protection Agency (EPA) Method 8260D. Groundwater samples collected for geochemical indicators were analyzed for the following parameters: dissolved iron and dissolved manganese using EPA Method SW-846 6020B, TOC using EPA Method 9060, chloride, nitrate, and sulfate using EPA Method 9060, sulfide using EPA Method SM4500, and CO₂, methane, ethane, and ethene using Method R. S. Kerr (RSK) 175. During the December 2023, March 2024, and June 2024 events, one field duplicate for VOCs and geochemical indicators were collected from MW-12. During the September 2024 groundwater sampling event, the VOCs field duplicate was collected from MW-13 and the geochemical indicators field duplicate was collected from MW-7. One trip blank and at least one equipment blank were also submitted with the groundwater samples for laboratory analysis of VOCs.

During the September 2024 sampling event, groundwater samples collected from monitoring wells MW-6 and MW-7 were submitted to Eurofins Lancaster Laboratories Environment Testing, LLC, in Lancaster, Pennsylvania (Lancaster) for analysis of PFAS constituents using EPA Method 1633. During this sampling event, one duplicate sample was also collected from MW-7 and submitted for the analysis of PFAS constituents. Groundwater sample collection records are included as **Attachment A**.

Wastewater generated during each groundwater purging and sampling event was containerized in United States Department of Transportation-rated steel drums and staged on site. Following each event, Stantec coordinated with site staff for the drums to be transported off site and disposed of by Heritage Environmental within 90 days of wastewater generation.

Results

Groundwater Flow Direction

Water level measurements and calculated groundwater elevations are summarized in **Table 1**. The groundwater elevation data from each event are presented in **Figures 2, 4, 6, and 8**. As presented in **Table 1**, depth to groundwater ranged from 3.98 feet (MW-4, June 2024) to 13.91 feet (MW-3, March 2024) below the top of casing. As depicted in **Figures 2, 4, 6, and 8**, the general shallow groundwater flow direction during each event based on the groundwater elevation data was to the west. In general, groundwater flow directions determined during each of the four gauging events were similar to those previously determined at the site.

Analytical Results

Groundwater analytical VOC data from samples collected during the four post-remediation quarterly sampling events are presented in **Table 4**, with historical sample data summarized in **Table 3**. Groundwater analytical results provided in **Tables 3 and 4** are compared against applicable Iowa Statewide Standards (SWSs). The geochemical indicators analytical data is presented in **Table 5**. PFAS analytical data is presented in **Table 6**. The groundwater concentrations for VOCs from each of the four post-remediation sampling events are

Reference: Post-Remediation Groundwater Sampling Activities Summary

presented in **Figures 3, 5, 7, and 9**. The analytical laboratory reports and completed chain-of-custody records are included as **Attachment B**.

Field duplicate results are presented alongside the primary sample results in the above-referenced tables. VOCs were not detected in the trip blanks transported and analyzed with the groundwater samples in the four quarterly sampling events. VOCs were also not detected in the equipment blanks collected off the submersible bladder pumps used during sampling.

Overall, the August/September 2023 remediation activities were effective in reducing overall VOC concentrations in a majority of the treatment area. As summarized in **Tables 3 and 4**, VOC concentrations in groundwater samples collected from monitoring wells MW-6, MW-7, MW-8, and MW-9, previously having VOC concentrations that exceeded applicable Iowa SWSs, have decreased to below applicable Iowa SWSs and/or are non-detect. VOC concentrations in upgradient monitoring well MW-1, and the off-site down-gradient monitoring wells (MW-12, MW-13, MW-14, MW-16, and MW-19) have remained non-detect or below applicable Iowa SWSs, indicating the VOC plume has not moved and/or is being treated prior to reaching these monitoring locations.

As summarized in **Tables 3 and 4**, monitoring wells MW-11 and MW-17, located in the treatment area, have some VOC constituents that have had significant declines in concentrations since the August/September 2023 remediation activities, but have one or more VOC constituents that continue to exceed applicable Iowa SWSs for Nonprotected Groundwater. Concentrations of cis-1,2-Dichloroethene (cis-1,2 DCE), Trichloroethene (TCE), and Trans-1,2-Dichloroethene (Trans – 1,2 DCE) in MW-11 and MW-17 declined to below Iowa SWSs for Protected Groundwater by the September 2024 sampling event. Groundwater samples collected from MW-11 also remained below applicable Iowa SWSs for Protected Groundwater for Vinyl Chloride (VC). Concentrations of VC in groundwater samples collected from MW-17 during the March 2024, June 2024, and September 2024 sampling events remained above applicable Iowa SWSs for Non-Protected Groundwater. Monitoring wells MW-15 and MW-18 had cis-1,2 DCE concentrations rebound in the final two groundwater sampling events; these concentrations continue to remain below applicable Iowa SWSs.

The August/September 2023 remediation activities were effective in reducing overall PFAS concentrations in the pilot treatment area. PFAS concentrations in the treatment area surrounding monitoring well MW-6 have decreased to below applicable Iowa SWSs and/or are non-detect. Concentrations of Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic Acid (PFOA) in monitoring well MW-7, which was not subject to the PlumeStop™ treatment, have remained above the applicable Iowa SWSs for Protected Groundwater in comparison to the August 2023 baseline sampling event.

To evaluate the temporal changes in the VOC concentrations on site, hydrographs depicting VOC groundwater concentrations for monitoring wells and constituents that exceeded Iowa SWSs are presented in **Attachment C**. A discussion of the results for each VOC constituent is presented below.

Cis-1,2 DCE

Prior to groundwater remediation activities, the August 2023 background sampling results for MW-17 had detections of cis-1,2 DCE exceeding the Iowa SWSs for Nonprotected Groundwater, and MW-6 had concentrations of cis-1,2 DCE exceeding SWSs for Protected Groundwater. Following the remediation activities in August/September 2023, cis-1,2 DCE concentrations in MW-6 and MW-7 declined to below Iowa SWSs for Protected Groundwater by the December 2023 sampling event. Concentrations of cis-1,2 DCE in groundwater samples collected during the March 2024, June 2024, and September 2024 also remained below applicable Iowa SWSs for Protected Groundwater.

Reference: Post-Remediation Groundwater Sampling Activities Summary

TCE

Prior to groundwater remediation activities, the August 2023 background sampling results for MW-6, MW-7, MW-11, and MW-17 had detections of TCE exceeding the Iowa SWSs for Protected Groundwater. Following the remediation activities in August/September 2023, TCE concentrations declined to below applicable Iowa SWSs by the December 2023 sampling event. Concentrations of TCE in groundwater samples collected during March 2024, June 2024, and September 2024 also remained below applicable Iowa SWSs for Protected Groundwater.

VC

Prior to groundwater remediation activities, the August 2023 background sampling results for MW-6 and MW-11 had detections of VC exceeding the Iowa SWSs for Protected Groundwater, and MW-17 had detections of VC exceeding SWSs for Non-Protected Groundwater. Following the remediation activities in August/September 2023, VC concentrations in MW-11 declined to below applicable Iowa SWSs during the March 2023 sampling event. Concentrations of VC in groundwater samples collected from MW-17 during the March 2024, June 2024, and September 2024 sampling events remained above applicable Iowa SWSs for Non-Protected Groundwater.

Geochemical Indicators

Results from the geochemical analysis of select monitoring wells provided further evidence of an environment advantageous to ongoing reductive dechlorination. The results for each individual constituent are summarized as follows:

- Detectable concentrations of methane were present in the groundwater samples collected from MW-7 and MW-17, with lesser amounts detected in MW-12. The presence of methane is an indicator of metabolic activity associated with reductive dechlorination.
- Detectable concentrations of ethane were present in the groundwater samples collected from MW-7 and MW-17. Ethane is a byproduct of VC dehalogenation.
- Detectable concentrations of ethene were present in the groundwater samples collected from MW-7 and MW-17. Ethene is a byproduct of VC dehalogenation.
- Concentrations of dissolved iron ranged from less than (<) 0.100 milligrams per liter (mg/L) in MW-1 to 578 mg/L in MW-17. Reduced concentrations of dissolved iron in the VOC plume can indicate reductive conditions and facilitate anaerobic oxidation of VC to CO₂.
- Concentrations of dissolved manganese ranged from <0.0100 mg/L in MW-1 to 4.79 mg/L in MW-17. Concentrations of dissolved manganese were also greater than 1 mg/L in the groundwater samples collected from MW-7. Concentrations of dissolved manganese greater than 1 milligram per liter indicates anaerobic oxidation of cis-1,2-DCE may be possible.
- Detectable concentrations of TOC were present in monitoring wells MW-1, MW-7, MW-12, and MW-17. The VOC dechlorination process requires a degradable carbon source as a primary growth substrate.
- Nitrate as nitrogen concentrations ranged from <0.200 mg/L in MW-7, MW-12, and MW-17 to 1.09 mg/L in MW-1. Nitrate is an electron acceptor, and its depletion may indicate a greater propensity for more reducing conditions conducive to reductive dechlorination.

Reference: Post-Remediation Groundwater Sampling Activities Summary

- Sulfate concentrations ranged from <1.00 mg/L in MW-7 and MW-17 to 169 mg/L in MW-1. Sulfate is an electron acceptor, and its depletion may indicate a greater propensity for more reducing conditions conducive to reductive dechlorination.
- Detectable concentrations of chloride were present in monitoring wells MW-1, MW-7, MW-12, and MW-17. Chloride concentrations ranged from 12.8 mg/L in MW-17 to 316 mg/L in MW-7.
- Detectable concentrations of CO₂ were present in monitoring wells MW-1, MW-7, MW-12, and MW-17. CO₂ concentrations ranged from 4,250 µg/L in MW-12 to 90,800 µg/L in MW-7.
- Detectable concentrations of sulfide were not present in monitoring wells MW-1, MW-7, MW-12, and MW-17.

During groundwater purging activities, field parameters dissolved oxygen (DO), oxidation-reduction potential (ORP), and pH were collected to evaluate geochemical stability of the purged water prior to sampling, but also can provide information of the viability of microbial degradation processes. A summary of groundwater purging parameters collected at the site is presented in **Table 2**. The following summarizes DO, ORP, and pH data in monitoring wells sampled during the December 2023, March 2024, June 2024, and September 2024 sampling events:

- Groundwater DO concentrations less than 1 mg/L generally typify anaerobic groundwater conditions. In the four groundwater sampling events completed since the August/September 2023 groundwater remediation activities, DO ranged from <0.01 mg/L in MW-11 and MW-18, to 5.29 mg/L in MW-1.
- Groundwater ORP is a significant indicator of microbial respiration and biotransformation conditions. Generally, ORP levels less than approximately +200 millivolts (mV) suggest anaerobic conditions, and levels below +100 mV signal the utilization of electron receptors other than oxygen. In the four groundwater sampling events completed since the August/September 2023 groundwater remediation activities, ORP ranged from -200 mV in MW-11, to 233.6 mV in MW-9.
- Groundwater pH can affect the presence and activity of microbial populations. The optimal pH range to support reductive dechlorination is 5 to 9 standard units. In the four groundwater sampling events completed since the August/September 2023 groundwater remediation activities, pH ranged from 6.35 to 7.53 standard units.

Summary

The results of the quarterly groundwater sampling activities completed since the August/September 2023 groundwater remediation activities at the site indicate the groundwater remediation activities have been effective in reducing VOC concentrations across much of the treatment area. Concentrations of TCE, and daughter product cis-1,2-DCE, have fallen below applicable Iowa SWSs. VC concentrations in monitoring wells MW-11 and MW-17, while initially declining but remaining above applicable Iowa SWSs for Protected groundwater, continue to rebound during the post-remediation groundwater sampling period. The extent of the VOC plume continues to be delineated to Iowa SWSs, with the extent of the VOC plume exceeding applicable Iowa SWSs reduced to areas around MW-11 and MW-17. The results of geochemical sampling and a review of DO, ORP, and pH field parameters indicate conditions are generally favorable for continued reductive dechlorination of remaining VOCs.

Recommendations

Based on results of the post-treatment groundwater monitoring activities conducted since groundwater remediation was completed through September 2024, Rockwell Collins plans to conduct additional quarterly

Reference: Post-Remediation Groundwater Sampling Activities Summary

groundwater monitoring and sampling to confirm the effectiveness of the additional groundwater remediation activities for an additional four calendar quarters. Groundwater sampling will continue on the same schedule as outlined in the Work Plan, with the expanded list of monitoring wells and analytes conducted in the fourth quarter. In the interim, Rockwell Collins continues to evaluate the feasibility of identifying and remediating the source area(s) underneath the facility buildings. If additional voluntary groundwater remediation activities are planned, the details of the assessment and remediation scope will be outlined in a Groundwater Remediation Work Plan Addendum (Addendum), to be submitted separately. If it is determined additional groundwater remediation is not feasible, Rockwell Collins will provide written notice of such to the Iowa Department of Natural Resources and propose a schedule for completing a risk assessment pursuant to the Land Recycling Program.

Please feel free to contact me if you have any questions or require additional information.

Sincerely,

STANTEC CONSULTING SERVICES INC.



Emma R. Brady
Earth Scientist
Phone: (515) 444-8363
emma.brady@stantec.com



Stephen R. Varsa, P.G.
Principal Geologist/Project Manager
Phone: (515) 251-1020
steve.varsa@stantec.com

Enclosures:

- Table 1 Groundwater Elevation Data
- Table 2 Well Purging Data Summary
- Table 3 Historical Groundwater Analytical Results – VOCs
- Table 4 Groundwater Analytical Results - VOCs
- Table 5 Groundwater Analytical Results – Geochemical Indicators
- Table 6 Groundwater Analytical Results – PFAS

- Figure 1 Site Plan Map
- Figure 2 Groundwater Potentiometric Surface Map – December 13, 2023
- Figure 3 Groundwater Concentration Map – December 2023
- Figure 4 Groundwater Potentiometric Surface Map – March 4, 2024
- Figure 5 Groundwater Concentration Map – March 2024
- Figure 6 Groundwater Potentiometric Surface Map – June 3, 2024
- Figure 7 Groundwater Concentration Map – June 2024
- Figure 8 Groundwater Potentiometric Surface Map – September 3, 2024
- Figure 9 Groundwater Concentration Map – September 2024

- Attachment A Groundwater Sample Forms
- Attachment B Groundwater Analytical Laboratory Reports
- Attachment C Groundwater Hydrographs

cc: Ben Meissner, USEPA Region VII UIC Program
Kristen Musgrove, RTX

TABLES

**TABLE 1
GROUNDWATER ELEVATION DATA
ROCKWELL COLLINS
855 35TH STREET NE - CEDAR RAPIDS, IOWA**

Well Identification	Date	Ground Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Water (feet)	Groundwater Elevation (feet amsl)
MW-01	6/24/2019	790.15	789.83	4.10	785.73
	2/7/2020	790.15	789.83	NM	NM
	5/7/2020	790.15	789.83	6.18	783.65
	9/9/2020	790.15	789.83	2.88	786.95
	1/4/2022	790.15	789.83	7.85	781.98
	4/11/2022	790.15	789.83	4.85	784.98
	7/11/2022	790.15	789.83	3.80	786.03
	9/6/2022	790.15	789.83	6.45	783.38
	8/15/2023	790.15	789.83	5.35	784.48
	12/13/2023	790.15	789.83	8.81	781.02
	3/4/2024	790.15	789.83	7.27	782.56
	6/4/2024	790.15	789.83	5.71	784.12
	9/3/2024	790.15	789.83	6.24	783.59
MW-02	6/24/2019	780.12	779.77	7.43	772.34
	2/7/2020	780.12	779.77	10.70	769.07
	5/7/2020	780.12	779.77	10.40	769.37
	9/9/2020	780.12	779.77	11.32	768.45
	1/4/2022	780.12	779.77	12.44	767.33
	4/11/2022	780.12	779.77	12.87	766.90
	5/10/2022	780.12	779.77	11.96	767.81
	7/11/2022	780.12	779.77	10.95	768.82
	9/6/2022	780.12	779.77	11.72	768.05
	8/15/2023	780.12	779.77	13.49	766.28
	12/13/2023	780.12	779.77	13.83	765.94
	3/4/2024	780.12	779.77	13.80	765.97
	6/4/2024	780.12	779.77	13.13	766.64
9/3/2024	780.12	779.77	11.42	768.35	
MW-03	6/24/2019	780.33	779.92	7.20	772.72
	2/7/2020	780.33	779.92	10.67	769.25
	5/7/2020	780.33	779.92	NM	NM
	9/9/2020	780.33	779.92	11.15	768.77
	1/4/2022	780.33	779.92	12.39	767.53
	4/11/2022	780.33	779.92	13.08	766.84
	5/10/2022	780.33	779.92	12.12	767.80
	7/11/2022	780.33	779.92	10.84	769.08
	9/6/2022	780.33	779.92	11.69	768.23
	8/15/2023	780.33	779.92	NM	NM
	12/13/2023	780.33	779.92	13.88	766.04
	3/4/2024	780.33	779.92	13.91	766.01
	6/4/2024	780.33	779.92	13.21	766.71
9/3/2024	780.33	779.92	11.32	768.60	

**TABLE 1
GROUNDWATER ELEVATION DATA
ROCKWELL COLLINS
855 35TH STREET NE - CEDAR RAPIDS, IOWA**

Well Identification	Date	Ground Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Water (feet)	Groundwater Elevation (feet amsl)
MW-04	6/24/2019	780.08	779.66	3.77	775.89
	2/7/2020	780.08	779.66	4.30	775.36
	5/7/2020	780.08	779.66	NM	NM
	9/9/2020	780.08	779.66	4.31	775.35
	1/4/2022	780.08	779.66	4.83	774.83
	4/11/2022	780.08	779.66	4.26	775.40
	5/10/2022	780.08	779.66	3.92	775.74
	7/11/2022	780.08	779.66	4.05	775.61
	9/6/2022	780.08	779.66	4.73	774.93
	8/15/2023	780.08	779.66	4.57	775.09
	12/13/2023	780.08	779.66	5.45	774.21
	3/4/2024	780.08	779.66	4.95	774.71
	6/4/2024	780.08	779.66	3.98	775.68
	9/3/2024	780.08	779.66	4.30	775.36
MW-05	6/24/2019	777.98	777.57	6.17	771.40
	2/7/2020	777.98	777.57	7.67	769.90
	5/7/2020	777.98	777.57	7.41	770.16
	9/9/2020	777.98	777.57	8.43	769.14
	1/4/2022	777.98	777.57	9.24	768.33
	4/11/2022	777.98	777.57	8.15	769.42
	5/10/2022	777.98	777.57	7.32	770.25
	7/11/2022	777.98	777.57	7.56	770.01
	9/6/2022	777.98	777.57	8.75	768.82
	8/15/2023	777.98	777.57	9.76	767.81
	12/13/2023	777.98	777.57	10.70	766.87
	3/4/2024	777.98	777.57	9.89	767.68
	6/4/2024	777.98	777.57	8.27	769.30
	9/3/2024	777.98	777.57	8.46	769.11
MW-06	6/24/2019	774.88	774.55	6.44	768.11
	2/7/2020	774.88	774.55	6.57	767.98
	5/7/2020	774.88	774.55	6.42	768.13
	9/9/2020	774.88	774.55	6.39	768.16
	1/4/2022	774.88	774.55	6.93	767.62
	4/11/2022	774.88	774.55	6.36	768.19
	5/10/2022	774.88	774.55	6.19	768.36
	7/11/2022	774.88	774.55	6.25	768.30
	9/6/2022	774.88	774.55	6.86	767.69
	8/15/2023	774.88	774.55	6.71	767.84
	12/13/2023	774.88	774.55	7.27	767.28
	3/4/2024	774.88	774.55	6.80	767.75
	6/4/2024	774.88	774.55	6.14	768.41
	9/3/2024	774.88	774.55	6.53	768.02

**TABLE 1
GROUNDWATER ELEVATION DATA
ROCKWELL COLLINS
855 35TH STREET NE - CEDAR RAPIDS, IOWA**

Well Identification	Date	Ground Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Water (feet)	Groundwater Elevation (feet amsl)
MW-07	6/24/2019	776.31	775.89	6.72	769.17
	2/7/2020	776.31	775.89	7.17	768.72
	5/4/2020	776.31	775.89	7.51	768.38
	5/7/2020	776.31	775.89	NM	NM
	9/9/2020	776.31	775.89	7.61	768.28
	1/4/2022	776.31	775.89	8.08	767.81
	4/11/2022	776.31	775.89	7.44	768.45
	5/10/2022	776.31	775.89	7.21	768.68
	7/11/2022	776.31	775.89	7.38	768.51
	9/6/2022	776.31	775.89	7.88	768.01
	8/15/2023	776.31	775.89	8.03	767.86
	12/13/2023	776.31	775.89	8.23	767.66
	3/4/2024	776.31	775.89	7.74	768.15
	6/4/2024	776.31	775.89	7.19	768.70
MW-08	9/3/2024	776.31	775.89	7.33	768.56
	6/24/2019	776.03	775.60	5.61	769.99
	2/7/2020	776.03	775.60	6.26	769.34
	5/7/2020	776.03	775.60	6.55	769.05
	9/9/2020	776.03	775.60	6.60	769.00
	1/4/2022	776.03	775.60	7.17	768.43
	4/11/2022	776.03	775.60	6.51	769.09
	5/10/2022	776.03	775.60	6.21	769.39
	7/11/2022	776.03	775.60	6.12	769.48
	9/6/2022	776.03	775.60	6.81	768.79
	8/15/2023	776.03	775.60	7.10	768.50
	12/13/2023	776.03	775.60	7.37	768.23
	3/4/2024	776.03	775.60	7.05	768.55
	6/4/2024	776.03	775.60	6.33	769.27
MW-09	9/3/2024	776.03	775.60	6.21	769.39
	6/24/2019	777.85	777.41	7.95	769.46
	2/7/2020	777.85	777.41	8.87	768.54
	5/7/2020	777.85	777.41	8.87	768.54
	9/9/2020	777.85	777.41	8.98	768.43
	1/4/2022	777.85	777.41	9.69	767.72
	4/11/2022	777.85	777.41	9.12	768.29
	5/10/2022	777.85	777.41	8.61	768.80
	7/11/2022	777.85	777.41	8.51	768.90
	9/6/2022	777.85	777.41	9.32	768.09
	8/15/2023	777.85	777.41	9.50	767.91
	12/13/2023	777.85	777.41	10.43	766.98
	3/4/2024	777.85	777.41	9.99	767.42
	6/4/2024	777.85	777.41	8.62	768.79
9/3/2024	777.85	777.41	8.50	768.91	

**TABLE 1
GROUNDWATER ELEVATION DATA
ROCKWELL COLLINS
855 35TH STREET NE - CEDAR RAPIDS, IOWA**

Well Identification	Date	Ground Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Water (feet)	Groundwater Elevation (feet amsl)
MW-10	6/24/2019	776.73	776.45	5.81	770.64
	2/7/2020	776.73	776.45	7.04	769.41
	5/7/2020	776.73	776.45	7.01	769.44
	9/9/2020	776.73	776.45	6.90	769.55
	1/4/2022	776.73	776.45	7.99	768.46
	4/11/2022	776.73	776.45	7.38	769.07
	5/10/2022	776.73	776.45	6.84	769.61
	7/11/2022	776.73	776.45	6.51	769.94
	9/6/2022	776.73	776.45	7.50	768.95
	8/15/2023	776.73	776.45	7.44	769.01
	12/13/2023	776.73	776.45	8.84	767.61
	3/4/2024	776.73	776.45	8.45	768.00
	6/4/2024	776.73	776.45	7.06	769.39
	9/3/2024	776.73	776.45	6.73	769.72
MW-11	5/7/2020	775.52	775.25	7.46	767.79
	9/9/2020	775.52	775.25	7.52	767.73
	1/4/2022	775.52	775.25	7.87	767.38
	4/11/2022	775.52	775.25	7.48	767.77
	7/11/2022	775.52	775.25	7.38	767.87
	9/6/2022	775.52	775.25	7.86	767.39
	8/15/2023	775.52	775.25	7.78	767.47
	12/13/2023	775.52	775.25	8.17	767.08
	3/4/2024	775.52	775.25	7.75	767.50
	6/4/2024	775.52	775.25	7.17	768.08
MW-12	9/3/2024	775.52	775.25	7.35	767.90
	1/4/2022	774.75	774.40	7.25	767.15
	4/11/2022	774.75	774.40	6.84	767.56
	7/11/2022	774.75	774.40	6.79	767.61
	9/6/2022	774.75	774.40	7.25	767.15
	8/15/2023	774.75	774.40	7.20	767.20
	12/13/2023	774.75	774.40	7.47	766.93
	3/4/2024	774.75	774.40	7.02	767.38
MW-13	6/4/2024	774.75	774.40	6.44	767.96
	9/3/2024	774.75	774.40	6.81	767.59
	1/4/2022	774.69	774.40	7.12	767.28
	4/11/2022	774.69	774.40	6.68	767.72
	7/11/2022	774.69	774.40	6.62	767.78
	9/6/2022	774.69	774.40	7.13	767.27
	8/15/2023	774.69	774.40	6.97	767.43
	12/13/2023	774.69	774.40	7.22	767.18
	3/4/2024	774.69	774.40	6.75	767.65
	6/4/2024	774.69	774.40	6.21	768.19
9/3/2024	774.69	774.40	6.48	767.92	

**TABLE 1
GROUNDWATER ELEVATION DATA
ROCKWELL COLLINS
855 35TH STREET NE - CEDAR RAPIDS, IOWA**

Well Identification	Date	Ground Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Water (feet)	Groundwater Elevation (feet amsl)
MW-14	9/6/2022	775.22	774.87	7.62	767.25
	8/15/2023	775.22	774.87	7.48	767.39
	12/13/2023	775.22	774.87	7.79	767.08
	3/4/2024	775.22	774.87	7.32	767.55
	6/4/2024	775.22	774.87	6.79	768.08
MW-15	9/3/2024	775.22	774.87	6.99	767.88
	9/6/2022	774.34	773.91	6.73	767.18
	8/15/2023	774.34	773.91	6.78	767.13
	12/13/2023	774.34	773.91	7.23	766.68
	3/4/2024	774.34	773.91	6.69	767.22
MW-16	6/4/2024	774.34	773.91	6.15	767.76
	9/3/2024	774.34	773.91	6.25	767.66
	9/6/2022	775.18	774.84	7.74	767.10
	8/15/2023	775.18	774.84	7.68	767.16
	12/13/2023	775.18	774.84	8.16	766.68
MW-17	3/4/2024	775.18	774.84	7.65	767.19
	6/4/2024	775.18	774.84	6.94	767.90
	9/3/2024	775.18	774.84	7.02	767.82
	9/6/2022	778.00	774.84	8.80	766.04
	8/15/2023	778.00	774.84	9.17	765.67
MW-18	12/13/2023	778.00	774.84	9.54	765.30
	3/4/2024	778.00	774.84	8.10	766.74
	6/4/2024	778.00	774.84	8.14	766.70
	9/3/2024	778.00	774.84	8.14	766.70
	9/27/2023	774.73	774.34	7.71	766.63
MW-19	12/13/2023	774.73	774.34	7.65	766.69
	3/4/2024	774.73	774.34	7.29	767.05
	6/4/2024	774.73	774.34	6.83	767.51
	9/3/2024	774.73	774.34	6.92	767.42
	9/27/2023	774.17	773.83	7.10	766.73
MW-19	12/13/2023	774.17	773.83	6.91	766.92
	3/4/2024	774.17	773.83	6.47	767.36
	6/4/2024	774.17	773.83	5.84	767.99
MW-19	9/3/2024	774.17	773.83	6.18	767.65

Notes:

NM = Not Measured (Well Not Assessible)

Depth measured from top of well casing (TOC).

Elevation is measured in feet above mean sea level (amsl)

TABLE 2
WELL PURGING DATA SUMMARY
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA

Well ID	Sampling Date	Stabilized Parameter Values					
		Temperature (°C)	pH (s.u.)	Specific Conductance (μΩ/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)
MW-1	8/16/2023	29.58	6.63	1195.0	0.75	-22.6	27.0
	12/15/2023	13.62	6.64	1239.8	1.94	54.9	47.8
	3/6/2024	5.99	6.80	1122.9	5.29	11.5	0.0
	6/5/2024	18.20	6.80	934.70	3.30	48.4	5.1
	9/5/2024	19.71	6.53	1314.8	0.07	109.9	6.12
MW-2	NS	NS	NS	NS	NS	NS	NS
MW-3	NS	NS	NS	NS	NS	NS	NS
MW-4	NS	NS	NS	NS	NS	NS	NS
MW-5	NS	NS	NS	NS	NS	NS	NS
MW-6	8/15/2023	19.44	6.77	968.12	0.37	96.8	48.5
	12/14/2023	14.09	6.68	976.20	0.24	-107.2	36.7
	3/5/2024	10.67	7.03	1871.9	1.28	-119.4	2.34
	6/5/2024	15.97	6.99	2652.6	0.24	-131.7	21.5
	9/4/2024	21.35	6.75	1650.2	0.03	-145.1	36.1
MW-7	2/7/2019	7.68	6.67	740.44	2.63	166.3	9.76
	1/13/2022	11.02	6.51	1481.1	2.35	104.9	26.7
	7/2/2022	18.36	6.35	1190.1	3.58	153.0	2.1
	8/17/2023	22.70	6.16	1760.0	1.16	82.6	25.4
	12/15/2023	15.79	6.73	1855.0	0.62	-107.0	8.5
	3/5/2024	12.43	6.79	1364.4	1.62	-103.2	26.7
	6/5/2024	19.40	6.61	1692.6	3.10	-96.2	18.4
	9/5/2024	22.23	6.56	2006.9	1.89	-78.4	26.4
MW-8	2/7/2019	8.72	7.07	892.68	2.84	68.9	4.10
	1/13/2022	11.59	6.96	749.92	2.42	118.9	1.31
	7/2/2022	19.97	7.09	1132.0	4.03	72.2	1.50
	8.15.2023	23.59	6.98	1349.0	1.26	-131.6	0.00
	12/14/2023	14.61	6.88	941.30	1.20	87.8	3.54
	3/4/2024	11.73	7.02	1485.5	0.99	3.6	9.04
	6/4/2024	18.41	7.30	1212.8	1.28	213.7	2.24
	9/4/2024	23.47	6.95	1544.0	1.90	176.1	2.57
MW-9	8/16/2023	18.19	6.74	1553.0	0.20	1.3	72.5
	12/13/2023	14.56	6.57	1508.0	0.09	127.0	43.6
	3/4/2024	11.34	6.57	668.70	1.42	37.9	46.7
	6/4/2024	15.87	6.53	440.90	4.94	233.6	27.7
	9/4/2024	18.93	6.35	410.11	1.81	182.9	226.0
MW-10	NS	NS	NS	NS	NS	NS	NS

TABLE 2
WELL PURGING DATA SUMMARY
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA

Well ID	Sampling Date	Stabilized Parameter Values					
		Temperature (°C)	pH (s.u.)	Specific Conductance (μΩ/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)
MW-11	5/7/2020	12.71	6.49	1939.2	0.29	-89.2	225.2
	1/13/2022	13.63	6.63	2295.6	0.12	-68.7	59.6
	7/12/2022	11.15	6.53	2510.1	0.01	-72.8	50.0
	8/16/2023	18.00	6.48	3044.0	0.00	-184.0	30.0
	12/13/2023	15.55	6.74	2809.0	0.00	-190.5	23.5
	3/4/2024	11.99	6.79	2207.2	0.00	-199.8	104.8
	6/5/2024	15.33	6.75	2154.7	0.00	-122.0	36.2
	9/4/2024	20.31	6.76	2830.6	0.00	-120.2	155.0
MW-12	1/13/2022	10.97	6.88	1539.70	0.19	2.0	98.7
	7/12/2022	15.98	6.60	1180.30	0.07	-77.1	65.0
	8/16/2023	21.60	6.93	8.60	4.42	-101.0	17.8
	12/15/2023	13.68	7.27	956.32	0.03	-30.6	10.1
	3/5/2024	9.42	7.19	1029.70	0.22	1.5	19.6
	6/6/2024	15.48	7.12	1347.20	0.38	-13.6	18.4
	9/5/2024	20.59	6.95	1252.70	0.08	17.9	34.7
MW-13	1/13/2022	11.63	7.00	1420.9	0.98	-19.4	22.3
	7/12/2022	17.57	6.78	1682.2	0.81	-8.1	21.0
	8/16/2023	20.11	6.87	2093.0	0.17	49.2	8.8
	12/14/2023	14.11	6.95	1485.8	0.21	13.8	14.9
	3/5/2024	9.41	7.21	1272.1	0.64	32.4	32.4
	6/5/2024	15.47	7.00	1278.2	1.12	-15.4	37.4
	9/5/2024	20.00	6.75	1265.0	0.48	54.7	49.1
MW-14	8/15/2023	20.14	7.13	879.00	6.62	-138.2	7.5
	12/14/2023	13.62	7.00	685.00	1.05	49.2	20.7
	3/5/2024	8.72	6.77	1785.7	0.84	43.5	0.08
	6/4/2024	16.50	6.99	1748.0	0.49	19.9	19.1
	9/5/2024	20.40	6.80	1276.2	0.24	74.9	29.0
MW-15	8/15/2023	18.59	6.78	925.00	0.36	105.3	98.0
	12/14/2023	14.15	6.45	881.58	0.33	97.2	13.8
	3/4/2024	10.30	6.78	1354.9	1.56	71.1	16.2
	6/4/2024	15.68	6.94	735.11	0.08	161.3	29.7
	9/4/2024	12.96	6.86	1165.2	0.11	9.0	90.9
MW-16	8/16/2023	17.57	6.72	1429.0	0.07	-55.0	8.0
	12/14/2023	14.40	6.60	1678.9	0.03	109.7	18.7
	3/4/2024	10.15	7.53	740.40	2.82	49.3	13.7
	6/4/2024	15.57	6.78	1989.5	0.08	191.4	9.77
	9/4/2024	17.91	6.59	2695.2	0.13	112.6	95.7
MW-17	8/17/2023	19.55	6.96	1039.0	0.04	-200.0	4.76
	12/15/2023	13.77	5.87	2777.0	0.01	-63.3	16.3
	3/5/2024	12.52	6.36	1352.1	0.02	-61.0	10.1
	6/5/2024	19.74	6.63	1214.0	0.10	-111.7	32.5
	9/5/2024	20.78	6.59	2183.7	0.01	-96.7	17.5

TABLE 2
WELL PURGING DATA SUMMARY
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA

Well ID	Sampling Date	Stabilized Parameter Values					
		Temperature (°C)	pH (s.u.)	Specific Conductance (μΩ/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)
MW-18	12/14/2023	14.33	6.41	2923.4	0.00	-80.2	32.7
	3/5/2024	10.50	6.69	3061.7	0.00	-85.3	33.3
	6/4/2024	15.87	6.92	1910.4	0.00	-127.7	35.1
	9/5/2024	18.24	6.76	1907.7	0.01	-59.0	45.3
MW-19	12/14/2023	11.41	6.94	511.35	1.41	63.2	18.7
	3/4/2024	10.06	7.53	440.40	2.81	73.0	48.7
	6/4/2024	16.38	7.19	436.72	2.39	178.9	5.1
	9/5/2024	19.88	6.99	505.92	1.61	82.0	26.6

Notes:

- °C = Degrees Celsius.
- (μΩ/cm) = Microohms per centimeter.
- mg/L = Milligrams per liter.
- mV = Millivolts.
- NS = Not sampled.
- NTU = Nephelometric turbidity units.
- s.u. = Standard units.

**TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS - VOCs
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**

Parameters	Iowa Statewide Standards	Iowa Statewide Standards	Sample ID:	MW-01	MW-01	MW-01	MW-01	MW-01	MW-01	MW-02	MW-03	MW-03	MW-03	MW-04	MW-05	MW-05	MW-06	MW-06	MW-06	DUP-01 (MW-06)
	Protected Source	Non-Protected Source	Sample Date:	6/26/19	8/16/23	12/15/23	3/6/24	6/5/24	9/5/24	6/26/19	6/26/19	2/7/2020	9/9/2020	6/26/2019	6/25/2019	9/5/2023	6/27/2019	8/15/2023	9/5/2023	9/5/2023
Volatile Organic Compounds (µg/L)																				
Acetone	6300	32000		13.6	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	64		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	80	400		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromotorm	80	440		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromomethane	10	50		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-Butanone (MEK)	400	21000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5	50		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chlorobenzene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	80	400		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	2800	14000		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chloroform	80	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Chloromethane	NA	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75	650		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	140	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5	38		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7	180		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene	70	350		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5	60		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	NA	NA		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
(MIBK)	560	2800		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	1800		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl tert-butyl ether	210	1000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	100	700		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	0.3	18		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	1700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	1000	5000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	70000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	61		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	76		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	2	10		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, Total	10000	50000		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3

Notes:
 Results and comparison criteria are in micrograms per liter (µg/L).
 Iowa Statewide Standards reference:
<https://programs.iowadnr.gov/riskcalc/Home/statewidestandards>.
 VOCs = Volatile Organic Compounds.
 < = The analyte did not exceed the reporting limit.
 NA = No established criteria for the selected analyte/category.
 Detected results are **bold**.
 Shaded results exceed Iowa Statewide Standards for Protected Source.
 Shaded results with underline exceed Iowa Statewide Standards for Non-Protected Source.

**TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS - VOCs
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**

Parameters	Iowa Statewide Standards	Iowa Statewide Standards	Sample ID:	MW-06	MW-06	MW-06	MW-06	MW-07	DUP-01 (MW-07)	MW-07	MW-07	DUP-01 (MW-07)	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	
	Protected Source	Non-Protected Source	Sample Date:	12/14/2023	3/5/2024	6/5/2024	9/4/2024	6/27/2019	6/27/2019	2/7/2020	9/9/2020	9/9/2020	1/13/2022	4/11/2022	7/12/2022	9/7/2022	8/17/2023	12/15/2023	3/5/2024	
Volatile Organic Compounds (µg/L)																				
Acetone	6300	32000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10.3	<10
Benzene	5	64		<0.5	<0.5	<0.5	0.502	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
Bromodichloromethane	80	400		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromotorm	80	440		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromomethane	10	50		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-Butanone (MEK)	400	21000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.23	<1
Carbon tetrachloride	5	50		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chlorobenzene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	80	400		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	2800	14000		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chloroform	80	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Chloromethane	NA	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75	650		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	140	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5	38		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7	180		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene	70	350		<1	<1	<1	<1	74	64.1	24.2	53.0	50.3	61.5	15.7	98.7	115	66.1	<1	<1	<1
trans-1,2-Dichloroethene	100	700		<1	<1	<1	<1	4.37	3.79	9.69	9.46	9.89	6.53	5.52	6.18	7.37	6.92	2.02	2.02	2.02
1,2-Dichloropropane	5	60		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone (MIBK)	NA	NA		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	1800		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl tert-butyl ether	210	1000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	100	700		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	0.3	18		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	1700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	1000	5000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	70000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	61		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	76		<1	<1	<1	<1	16.5	13.7	15.4	16.3	15.8	12.6	9.61	20.6	20.6	13.3	<1	<1	<1
Vinyl chloride	2	10		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.17	<1
Xylenes, Total	10000	50000		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3

Notes:
 Results and comparison criteria are in micrograms per liter (µg/L).
 Iowa Statewide Standards reference:
<https://programs.iowadnr.gov/riskcalc/Home/statewidestandards>.
 VOCs = Volatile Organic Compounds.
 < = The analyte did not exceed the reporting limit.
 NA = No established criteria for the selected analyte/category.
 Detected results are **bold**.

Shaded results exceed Iowa Statewide Standards for Protected Source.
 Shaded results with underline exceed Iowa Statewide Standards for Non-Protected Source.

**TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS - VOCs
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**

Parameters	Iowa Statewide Standards	Iowa Statewide Standards	Sample ID:	MW-07	MW-07	DUP-01 (MW-07)	MW-08	MW-08	MW-08	DUP-01 (MW-08)	MW-08	MW-08	MW-08	MW-08	MW-08	MW-08	MW-08	MW-08	MW-08
	Protected Source	Non-Protected Source	Sample Date:	6/5/2024	9/5/2024	9/5/2024	6/25/2019	2/7/2020	9/9/2020	2/7/2020	1/13/2022	4/11/2022	7/12/2022	9/7/2022	8/15/2023	12/14/2023	3/4/2024	6/4/2024	9/4/2024
Volatile Organic Compounds (µg/L)																			
Acetone	6300	32000		17.8	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	64		0.52	0.765	0.947	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	80	400		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromotorm	80	440		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromomethane	10	50		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-Butanone (MEK)	400	21000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	700	3500		<1	<1	1.93	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5	50		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chlorobenzene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	80	400		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	2800	14000		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chloroform	80	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Chloromethane	NA	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75	650		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	140	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5	38		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7	180		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene	70	350		<1	<1	<1	<u>85.9</u>	11.8	22.0	11.7	13.3	9.78	21.8	38.8	12.5	44.2	39.5	25.0	15.3
trans-1,2-Dichloroethene	100	700		2.02	1.21	1.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5	60		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	NA	NA		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
(MIBK)	560	2800		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	1800		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl tert-butyl ether	210	1000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	100	700		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1,2,2-Tetrachloroethane	0.3	18		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	1700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	1000	5000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	70000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	61		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	76		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	2	10		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	10000	50000		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3

Notes:
 Results and comparison criteria are in micrograms per liter (µg/L).
 Iowa Statewide Standards reference:
<https://programs.iowadnr.gov/riskcalc/Home/statewidestandards>.
 VOCs = Volatile Organic Compounds.
 < = The analyte did not exceed the reporting limit.
 NA = No established criteria for the selected analyte/category.
 Detected results are **bold**.

Shaded results exceed Iowa Statewide Standards for Protected Source.
 Shaded results with underline exceed Iowa Statewide Standards for Non-Protected Source.

**TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS - VOCs
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**

Parameters	Iowa Statewide Standards	Iowa Statewide Standards	Sample ID:	MW-09	MW-09	MW-09	MW-09	MW-09	MW-09	MW-10	MW-11	MW-11	MW-11	MW-11	DUP01 (MW-11)	MW-11	DUP01 (MW-11)	MW-11	DUP01 (MW-11)
	Protected Source	Non-Protected Source	Sample Date:	6/25/2019	8/16/2023	12/13/2023	3/4/2024	6/4/2024	9/4/2024	6/25/2019	5/7/2020	9/9/2020	1/13/22	4/12/2022	4/12/2022	7/12/2022	7/12/2022	9/7/2022	9/7/2022
Volatile Organic Compounds (µg/L)																			
Acetone	6300	32000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	64		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	80	400		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromotorm	80	440		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromomethane	10	50		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-Butanone (MEK)	400	21000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5	50		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chlorobenzene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	80	400		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	2800	14000		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chloroform	80	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Chloromethane	NA	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75	650		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	140	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5	38		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7	180		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene	70	350		<1	<1	<1	<1	<1	<1	<1	109	125	109	107	110	101	103	108	106
trans-1,2-Dichloroethene	100	700		<1	<1	<1	<1	<1	<1	<1	2.36	3.44	3.91	4.47	4.22	5.59	5.2	5.06	4.98
1,2-Dichloropropane	5	60		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	NA	NA		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
(MIBK)	560	2800		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	1800		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl tert-butyl ether	210	1000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	100	700		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	0.3	18		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	1700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	1000	5000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	70000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	61		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	76		<1	<1	<1	<1	<1	<1	<1	5.03	15.4	6.85	9.87	10.6	14.1	14.5	9.25	8.54
Vinyl chloride	2	10		<1	<1	<1	<1	<1	<1	<1	2.5	1.61	1.13	3.00	2.92	<1	<1	1.71	1.87
Xylenes, total	10000	50000		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3

Notes:
 Results and comparison criteria are in micrograms per liter (µg/L).
 Iowa Statewide Standards reference:
<https://programs.iowadnr.gov/riskcalc/Home/statewidestandards>.
 VOCs = Volatile Organic Compounds.
 < = The analyte did not exceed the reporting limit.
 NA = No established criteria for the selected analyte/category.
 Detected results are **bold**.
 Shaded results exceed Iowa Statewide Standards for Protected Source.
 Shaded results with underline exceed Iowa Statewide Standards for Non-Protected Source.

**TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS - VOCs
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**

Parameters	Iowa Statewide Standards Protected Source	Iowa Statewide Standards Non-Protected Source	Sample ID:	MW-11	MW-11	MW-11	MW-11	MW-11	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	DUP01 (MW-12)	MW-12	DUP01 (MW-12)	MW-12	DUP01 (MW-12)	MW-12
			Sample Date:	8/16/2023	12/13/2023	3/4/2024	6/5/2024	9/4/2024	1/13/22	4/12/2022	7/12/2022	9/7/2022	8/16/2023	8/16/2023	12/15/2023	12/15/2023	3/5/2023	3/5/2024	6/6/2024	
Volatile Organic Compounds (µg/L)																				
Acetone	6300	32000		<10	16.5	32.5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	64		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	80	400		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromotorm	80	440		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromomethane	10	50		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-Butanone (MEK)	400	21000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5	50		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chlorobenzene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	80	400		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	2800	14000		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chloroform	80	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Chloromethane	NA	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75	650		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	140	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5	38		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7	180		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene	70	350		63.1	51.9	22.0	32.1	19.4	5.20	55.2	109	24.6	2.06	2.15	<1	<1	<1	<1	<1	8.39
trans-1,2-Dichloroethene	100	700		3.14	2.02	1.13	1.27	<1	<1	5.11	10.5	2.08	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5	60		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone (MIBK)	NA 560	NA 2800		<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10
Methylene Chloride	5	1800		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl tert-butyl ether	210	1000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	100	700		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	0.3	18		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	1700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	1000	5000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	70000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	61		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	76		6.77	1.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	2	10		2.48	3.48	<1	2.10	2.65	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, Total	10000	50000		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3

Notes:
 Results and comparison criteria are in micrograms per liter (µg/L).
 Iowa Statewide Standards reference:
<https://programs.iowadnr.gov/riskcalc/Home/statewidestandards>.
 VOCs = Volatile Organic Compounds.
 < = The analyte did not exceed the reporting limit.
 NA = No established criteria for the selected analyte/category.
 Detected results are **bold**.
 Shaded results exceed Iowa Statewide Standards for Protected Source.
 Shaded results with underline exceed Iowa Statewide Standards for Non-Protected Source.

**TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS - VOCs
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**

Parameters	Iowa Statewide Standards	Iowa Statewide Standards	Sample ID:	DUP01 (MW-12)	MW-12	MW-13	DUP01 (MW-13)	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	DUP-02 (MW-13)	MW-14	MW-14	MW-14
	Protected Source	Non-Protected Source	Sample Date:	6/6/2024	9/5/2024	1/13/22	1/13/22	4/12/2022	7/12/2022	9/7/2022	8/16/2023	12/14/2023	3/5/2024	6/5/2024	9/5/2024	9/5/2024	9/7/2022	8/15/2023	12/14/2023
Volatile Organic Compounds (µg/L)																			
Acetone	6300	32000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	64		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	80	400		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromotorm	80	440		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromomethane	10	50		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-Butanone (MEK)	400	21000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5	50		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chlorobenzene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	80	400		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	2800	14000		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chloroform	80	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Chloromethane	NA	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75	650		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	140	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5	38		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7	180		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene	70	350		8.80	1.85	10.7	9.24	6.76	11.8	8.28	1.36	1.07	1.99	6.50	2.20	2.10	<1	<1	<1
trans-1,2-Dichloroethene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5	60		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone (MIBK)	NA	NA		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	560	2800		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl tert-butyl ether	5	1800		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	210	1000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	100	700		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	0.3	18		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	5	1700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	1000	5000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	200	70000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	61		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	5	76		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	2	10		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, Total	10000	50000		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3

Notes:
 Results and comparison criteria are in micrograms per liter (µg/L).
 Iowa Statewide Standards reference:
<https://programs.iowadnr.gov/riskcalc/Home/statewidestandards>.
 VOCs = Volatile Organic Compounds.
 < = The analyte did not exceed the reporting limit.
 NA = No established criteria for the selected analyte/category.
 Detected results are **bold**.
 Shaded results exceed Iowa Statewide Standards for Protected Source.
 Shaded results with underline exceed Iowa Statewide Standards for Non-Protected Source.

**TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS - VOCs
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**

Parameters	Iowa Statewide Standards Protected Source	Iowa Statewide Standards Non-Protected Source	Sample ID:	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-17
			Sample Date:	3/5/2024	6/4/2024	9/5/2024	9/7/2022	8/15/2023	12/15/2023	3/4/2024	6/4/2024	9/4/2024	9/7/2022	8/15/2023	12/14/2023	3/4/2024	6/4/2024	9/4/2024	9/7/2022	
Volatile Organic Compounds (µg/L)																				
Acetone	6300	32000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	64		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	80	400		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromotorm	80	440		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromomethane	10	50		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-Butanone (MEK)	400	21000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5	50		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chlorobenzene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	80	400		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	2800	14000		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chloroform	80	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Chloromethane	NA	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75	650		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	140	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5	38		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7	180		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene	70	350		<1	<1	<1	4.87	1.62	<1	<1	6.73	26.1	19.5	7.45	2.23	2.23	1.26	<1	<1	<u>1310</u>
trans-1,2-Dichloroethene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	1.36	<1	<1	<1	<1	<1	<1	<1	8.02
1,2-Dichloropropane	5	60		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone (MIBK)	NA	NA		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	560	2800		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl tert-butyl ether	5	1800		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl tert-butyl ether	210	1000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	100	700		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	0.3	18		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	1700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	1000	5000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	70000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	61		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	76		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	60.2
Vinyl chloride	2	10		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	6.62
Xylenes, Total	10000	50000		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3

Notes:
 Results and comparison criteria are in micrograms per liter (µg/L).
 Iowa Statewide Standards reference:
<https://programs.iowadnr.gov/riskcalc/Home/statewidestandards>.
 VOCs = Volatile Organic Compounds.
 < = The analyte did not exceed the reporting limit.
 NA = No established criteria for the selected analyte/category.
 Detected results are **bold**.
 Shaded results exceed Iowa Statewide Standards for Protected Source.
 Shaded results with underline exceed Iowa Statewide Standards for Non-Protected Source.

**TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS - VOCs
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**

Parameters	Iowa Statewide Standards	Iowa Statewide Standards	Sample ID:	MW-17	MW-17	MW-17	MW-17	MW-17	MW-18	DUP01 (MW-18)	MW-18	MW-18	MW-18	MW-19	MW-19	MW-19	MW-19
	Protected Source	Non-Protected Source	Sample Date:	8/17/2023	12/15/2023	3/5/2024	6/5/2024	9/5/2024	9/27/2023	9/27/2023	12/14/2023	6/4/2024	9/5/2024	9/27/2023	12/14/2023	6/4/2024	9/5/2024
Volatile Organic Compounds (µg/L)																	
Acetone	6300	32000		<10	39.5	29.4	65.4	54.2	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	64		<0.5	9.72	7.18	1.63	7.26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	80	400		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromotorm	80	440		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromomethane	10	50		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-Butanone (MEK)	400	21000		<10	110	81.1	90.8	98.5	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	700	3500		<1	2.31	1.41	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5	50		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chlorobenzene	100	700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	80	400		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	2800	14000		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chloroform	80	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Chloromethane	NA	NA		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	600	3200		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75	650		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	140	700		4.03	2.31	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5	38		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	7	180		2.94	2.94	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene	70	350		2410	1270	435	72.4	20.9	1.30	1.48	5.58	8.39	10.5	<1	<1	<1	<1
trans-1,2-Dichloroethene	100	700		21.5	12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5	60		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	NA	NA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	700	3500		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	NA	NA		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
(MIBK)	560	2800		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	1800		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl tert-butyl ether	210	1000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	100	700		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	0.3	18		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	1700		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	1000	5000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	70000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	61		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	76		41.6	<1	<1	<1	<1	<1	<1	1.13	<1	<1	<1	<1	<1	<1
Vinyl chloride	2	10		16.1	69.0	47.0	12.0	14.8	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	10000	50000		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3

Notes:
 Results and comparison criteria are in micrograms per liter (µg/L).
 Iowa Statewide Standards reference:
<https://programs.iowadnr.gov/riskcalc/Home/statewidestandards>.
 VOCs = Volatile Organic Compounds.
 < = The analyte did not exceed the reporting limit.
 NA = No established criteria for the selected analyte/category.
 Detected results are **bold**.
 Shaded results exceed Iowa Statewide Standards for Protected Source.
 Shaded results with underline exceed Iowa Statewide Standards for Non-Protected Source.

**TABLE 4
GROUNDWATER ANALYTICAL RESULTS - VOCs
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**

Well ID	Date	Acetone	cis-1,2-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Iowa Statewide Standard	Protected Source	6300	70	140	7	100	5	2
	Non-Protected Source	32000	350	700	180	700	76	10
Residential Target Groundwater Concentration (MCL)		NE	250	7.64	195	109	1.19	0.147
MW-01	8/16/2023	<10	<1	<1	<2	<1	<1	<1
	12/15/2023	<10	<1	<1	<2	<1	<1	<1
	3/6/2024	<10	<1	<1	<2	<1	<1	<1
	6/5/2024	<10	<1	<1	<2	<1	<1	<1
	9/5/2024	<10	<1	<1	<2	<1	<1	<1
MW-05	9/5/2023	<10	<1	<1	<2	<1	<1	<1
MW-06	8/15/2023	<10	155	<1	<2	6.4	14	2.61
	9/5/2023	<10	59.5	<1	<2	2.35	4.49	<1
	9/5/2023 (dup)	<10	53.1	<1	<2	2.1	4.28	<1
	12/14/2023	<10	<1	<1	<2	<1	<1	<1
	3/5/2024	<10	<1	<1	<2	<1	<1	<1
	6/5/2024	<10	<1	<1	<2	<1	<1	<1
	9/4/2024	<10	<1	<1	<2	<1	<1	<1
	8/17/2023	<10	66.1	<1	<2	6.92	13.3	<1
MW-07	12/15/2023	10.3	<1	<1	<2	2.02	<1	1.17
	3/5/2024	<10	<1	<1	<2	<1	<1	<1
	6/5/2024	17.8	<1	<1	<2	<1	<1	<1
	9/5/2024	<10	<1	<1	<2	1.21	<1	<1
	8/15/2023	<10	12.5	<1	<2	<1	<1	<1
MW-08	12/14/2023	<10	44.2	<1	<2	<1	<1	<1
	3/4/2024	<10	39.5	<1	<2	<1	<1	<1
	6/4/2024	<10	25.0	<1	<2	<1	<1	<1
	9/4/2024	<10	15.3	<1	<2	<1	<1	<1
	8/16/2023	<10	<1	<1	<2	<1	<1	<1
MW-09	12/13/2023	<10	<1	<1	<2	<1	<1	<1
	3/4/2024	<10	<1	<1	<2	<1	<1	<1
	6/4/2024	<10	<1	<1	<2	<1	<1	<1
	9/4/2024	<10	<1	<1	<2	<1	<1	<1
	8/16/2023	<10	63.1	<1	<2	3.14	6.77	2.48
MW-11	12/13/2023	<10	51.9	<1	<2	2.02	1.34	3.48
	3/4/2024	32.5	22.0	<1	<2	1.13	<1	<1
	6/5/2024	<10	32.1	<1	<2	1.27	<1	2.10
	9/4/2024	<10	19.4	<1	<2	<1	<1	2.65
	8/16/2023 (dup)	<10	2.15	<1	<2	<1	<1	<1
MW-12	12/15/2023	<10	<1	<1	<2	<1	<1	<1
	12/15/2023 (dup)	<10	<1	<1	<2	<1	<1	<1
	3/5/2024	<10	<1	<1	<2	<1	<1	<1
	3/5/2024 (dup)	<10	<1	<1	<2	<1	<1	<1
	6/6/2024	<10	8.39	<1	<2	<1	<1	<1
	6/6/2024 (dup)	<10	8.80	<1	<2	<1	<1	<1
	9/5/2024	<10	1.85	<1	<2	<1	<1	<1
	8/16/2023	<10	1.36	<1	<2	<1	<1	<1
MW-13	12/14/2023	<10	1.07	<1	<2	<1	<1	<1
	3/5/2024	<10	1.99	<1	<2	<1	<1	<1
	6/5/2024	<10	6.50	<1	<2	<1	<1	<1
	9/5/2024	<10	2.20	<1	<2	<1	<1	<1
	9/5/2024 (dup-02)	<10	2.10	<1	<2	<1	<1	<1
	8/15/2023	<10	<1	<1	<2	<1	<1	<1
MW-14	12/14/2023	<10	<1	<1	<2	<1	<1	<1
	3/5/2024	<10	<1	<1	<2	<1	<1	<1
	6/4/2024	<10	<1	<1	<2	<1	<1	<1
	9/5/2024	<10	<1	<1	<2	<1	<1	<1
	8/15/2023	<10	1.62	<1	<2	<1	<1	<1
MW-15	12/14/2023	<10	<1	<1	<2	<1	<1	<1
	3/4/2024	<10	<1	<1	<2	<1	<1	<1
	6/4/2024	<10	6.73	<1	<2	<1	<1	<1
	9/4/2024	<10	26.1	<1	<2	1.36	<1	<1
	8/15/2023	<10	7.45	<1	<2	<1	<1	<1
MW-16	12/14/2023	<10	2.23	<1	<2	<1	<1	<1
	3/4/2024	<10	<1	<1	<2	<1	<1	<1
	6/4/2024	<10	1.26	<1	<2	<1	<1	<1
	9/4/2024	<10	<1	<1	<2	<1	<1	<1

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - VOCs
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA

Well ID	Date	Acetone	cis-1,2-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Iowa Statewide Standard	Protected Source	6300	70	140	7	100	5	2
	Non-Protected Source	32000	350	700	180	700	76	10
Residential Target Groundwater Concentration (VISL)		NE	250	7.64	195	109	1.19	0.147
MW-17	8/17/2023	<10	<u>2410</u>	4.03	2.94	21.5	41.6	<u>16.1</u>
	12/15/2023	39.5	<u>1270</u>	2.31	<2	12	<1	<u>69.0</u>
	3/5/2024	29.4	<u>435</u>	<1	<2	<1	<1	<u>47.0</u>
	6/5/2024	65.4	<u>72.4</u>	<1	<2	<1	<1	<u>12.0</u>
	9/5/2024	54.2	20.9	<1	<2	<1	<1	<u>14.8</u>
MW-18	9/27/2023	<10	1.30	<1	<2	<1	<1	<1
	9/27/2023 (dup)	<10	1.48	<1	<2	<1	<1	<1
	12/14/2023	<10	5.58	<1	<2	<1	1.13	<1
	3/5/2024	<10	6.98	<1	<2	<1	<1	<1
	6/4/2024	<10	8.39	<1	<2	<1	<1	<1
MW-19	9/5/2024	<10	10.5	<1	<2	<1	<1	<1
	9/27/2023	<10	<1	<1	<2	<1	<1	<1
	12/14/2023	<10	<1	<1	<2	<1	<1	<1
	3/4/2024	<10	<1	<1	<2	<1	<1	<1
	6/4/2024	<10	<1	<1	<2	<1	<1	<1
	9/5/2024	<10	<1	<1	<2	<1	<1	<1

Groundwater Vapor Intrusion Screening Levels (VISLs) calculated 8/31/2023 with U.S. EPA VISL Calculator using hazard index of 1, residential exposure scenario, and remaining conservative default inputs.

Results and comparison criteria are in micrograms per liter (µg/L).

VOCs - Volatile Organic Compounds

< - The analyte did not exceed the reporting limit.

Shaded results exceed Iowa Statewide Standards for Protected Source.

Underlined results exceed Iowa Statewide Standards for Non-Protected Source.

"NE" - Not Established

**TABLE 5
GROUNDWATER ANALYTICAL RESULTS - GEOCHEMICAL INDICATORS
ROCKWELL COLLINS
855 35TH STREET NE - CEDAR RAPIDS, IOWA**

Parameter		ORP	DO	Nitrate as N	Dissolved Manganese	Dissolved Iron	Chloride	Sulfate	Sulfide	Methane	Carbon Dioxide	TOC	Ethene	Ethane
		mV	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L
MW-01	8/16/2023	-22.6	0.75	4.8	0.014	<0.100	97.6	142	<2.00	<1.00	22,200	7.13	<1.00	<1.00
	12/15/2023	54.9	1.94	<0.200	NS	NS	139	146	<2.00	<1.00	15,400	6.47	<1.00	<1.00
	3/6/2024	11.5	5.29	0.509	<0.0100	<0.100	125	154	<2.00	<1.00	15,900	4.50	<1.00	<1.00
	6/5/2024	48	3.3	1.090	<0.0100	<0.100	74.2	112	<2.00	<1.00	20,200	6.11	<1.00	<1.00
	9/5/2024	-109.9	2.4	<0.200	1.59	4.18	116	169	<2.00	2.09	32,500	8.82	<1.00	<1.00
MW-07	8/17/2023	82.6	1.16	7.58	<0.0100	<0.100	333	78.8	<2.00	<1.00	47,400	1.45	<1.00	<1.00
	12/15/2023	-107	0.62	<0.200	1.09	92.2	316	<1.00	<2.00	19,100	41,900	136	20.6	13.6
	3/5/2024	-103.2	1.62	<0.200	1.18	120.0	144	<1.00	<2.00	14,900	43,600	97.1	5.09	2.74
	6/5/2024	-96.2	3.1	<0.200	1.19	130.0	152	<1.00	<2.00	13,400	62,600	21.2	1.41	2.25
	9/5/2024	-78.4	1.89	<0.200	1.09	89.5	244	<1.00	<2.00	12,300	90,800	12.1	1.91	1.05
MW-07*	9/5/2024	-78.4	1.89	<0.200	1.04	87.9	244	<1.00	<2.00	12,600	72,800	4.23	1.80	1.07
MW-12	8/16/2023	-101	4.42	<0.200	0.316	0.187	448	70.3	<2.00	52.2	11,600	2.39	<1.00	<1.00
	12/15/2023	-30.6	0.03	<0.200	0.200	0.185	163	41.5	<2.00	26.8	4,870	2.09	<1.00	<1.00
	3/5/2024	1.5	0.22	<0.200	0.153	0.157	203	53.9	<2.00	3.33	5,590	1.12	<1.00	<1.00
	6/6/2024	-13.6	0.38	<0.200	0.269	0.293	262	49.6	<2.00	16.2	8,720	1.2	<1.00	<1.00
	9/5/2024	17.9	0.08	<0.200	0.307	0.114	241	44.8	<2.00	348.0	10,700	1.35	<1.00	<1.00
MW-12*	8/16/2023	-101	4.42	<0.200	0.322	0.213	442	70.3	<2.00	51.0	8,580	2.50	<1.00	<1.00
	12/15/2023	-30.6	0.03	<0.200	0.197	<0.100	156	41.5	<2.00	26.0	4,250	2.05	<1.00	<1.00
	3/5/2024	1.5	0.22	<0.200	0.159	<0.100	203	53.9	<2.00	4.18	6,610	1.26	<1.00	<1.00
	6/6/2024	-13.6	0.38	<0.200	0.268	0.264	265	49.6	<2.00	15.200	8,810	<1.00	<1.00	<1.00
	9/5/2024	-200	0.04	<0.200	0.789	7.20	97.0	60.0	<2.00	45.7	17,700	1.89	2.90	<1.00
MW-17	12/15/2023	-63.3	0.01	<0.200	4.79	578	24.8	<1.00	<2.00	17,800	17,100	19.0	308	268
	3/5/2024	-61.0	0.02	<0.200	4.35	423	55.8	<1.00	<2.00	13,800	24,700	18.3	381	141
	6/5/2024	-112.0	0.10	<0.200	1.65	136	12.8	<1.00	<2.00	14,800	51,800	22.0	167	82.5
	9/5/2024	-96.7	0.01	<0.200	1.55	90.1	40.3	<1.00	<2.00	7,240	64,000	15.5	74	21.3

Notes:

Detected results are **bold**.

NS = Not sampled

MNA = Monitored Natural Attenuation.

* - Blind duplicate sample collected, labeled as DUP-01 (duplicate sample identified second).

< - The analyte did not exceed the reporting limit.

TOC = Total Organic Carbons.

**TABLE 6
GROUNDWATER ANALYTICAL RESULTS - PFAS
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**

Parameters	2024 Iowa SWS Protected Groundwater	2024 Iowa SWS Non-Protected Groundwater	Sample ID:	MW-01	MW-06	MW-06	MW-06	MW-07	DP-01 (MW-07)	MW-07	MW-07	DP-01 (MW-07)
			Sample Date:	6/26/19	6/27/19	9/05/23	9/04/24	6/27/19	6/27/19	8/17/23	9/05/24	9/05/24
PFAS Compounds (ng/l)												
Perfluorobutanoic Acid (PFBA)	7,000	35,000		10	130	46	15	57	58	48	53	53
Perfluoropentanoic Acid (PFPeA)	NA	NA		3.0 J	23	23	2.5	160	170	81	73	69
Perfluorohexanoic Acid (PFHxA)	3,500	18,000		1.3 J	6.9	4.9	<1.6	22	24	7.7	13	12
Perfluoroheptanoic Acid (PFHpA)	NA	NA		0.63 J	3.0	2.3	<1.6	9.1	10	3.9	6.9	6.8
Perfluorooctanoic Acid (PFOA)	4	50,000		1.3	13	7.6	<1.6	13	14	8.9	18	18
Perfluorononanoic Acid (PFNA)	10	100		< 1.9	< 2.1	0.81 J	<1.6	1.7 J	1.6 J	1.9	4.4	4.3
Perfluorodecanoic Acid (PFDA)	NA	NA		< 1.9	< 2.1	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
Perfluoroundecanoic Acid (PFUnA)	NA	NA		< 1.9	< 2.1	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
Perfluorododecanoic Acid (PFDoA)	NA	NA		< 1.9	< 2.1	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
Perfluorotridecanoic Acid (PFTriDA)	NA	NA		< 0.94	< 1.1	< 1.9	< 1.9	< 0.96	< 0.94	< 1.9	< 1.9	< 0.94
Perfluorotetradecanoic Acid (PFTeDA)	NA	NA		< 0.94	< 1.1	< 1.9	< 1.9	< 0.96	< 0.94	< 1.9	< 1.9	< 0.94
Perfluorobutanesulfonic acid (PFBS)	2,000	10,000		2.2	2.3	1.6 J	<1.6	2.2	2.2	2.2	2.4	2.3
Perfluoropentanesulfonic acid	NA	NA		NA	NA	< 1.9	< 1.9	NA	NA	< 1.9	< 1.9	< 1.9
Perfluorohexanesulfonic acid (PFHxS)	10	700		< 1.9	2.2	2.0	<1.6	6.4	6.7	3.5	4.1	4.0
Perfluoroheptanesulfonic acid	NA	NA		< 1.9	< 2.1	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
Perfluorooctanesulfonic acid (PFOS)	4	20		0.42 J	8.7	22	<1.6	11	11	11	15	14
Perfluoronanesulfonic acid	NA	NA		NA	NA	< 1.9	< 1.9	NA	NA	< 1.9	< 1.9	NA
Perfluorodecanesulfonic acid	NA	NA		NA	NA	< 1.9	< 1.9	NA	NA	< 1.9	< 1.9	NA
Perfluorododecanesulfonic acid (PFDoS)	NA	NA		NA	NA	< 1.9	< 1.9	NA	NA	< 1.9	< 1.9	NA
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	NA	NA		NA	NA	<7.4	<7.4	NA	NA	<7.4	<7.4	NA
1H,1H,2H,2H-perfluorooctanesulfonic acid (4:2)	NA	NA		NA	NA	<7.4	<7.4	NA	NA	<7.4	<7.4	NA
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	NA	NA		NA	NA	<7.4	<7.4	NA	NA	<7.4	<7.4	NA
Perfluorooctanesulfonamide	NA	NA		NA	NA	< 1.9	< 1.9	NA	NA	< 1.9	< 1.9	NA
NMeFOSA	NA	NA		NA	NA	< 1.9	< 1.9	NA	NA	< 1.9	< 1.9	NA
N-ethylperfluoro-1-octanesulfonamide	NA	NA		NA	NA	< 1.9	< 1.9	NA	NA	< 1.9	< 1.9	NA
NMeFOSAA	NA	NA		< 2.8	< 3.2	<3.7	<3.7	< 2.9	< 2.8	<3.7	<3.7	< 2.8
NEFOSAA	NA	NA		< 2.8	< 3.2	<1.9	<1.9	< 2.9	< 2.8	<1.9	<1.9	< 2.8
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	NA	NA		NA	NA	<19	<19	NA	NA	<19	<19	NA
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	NA	NA		NA	NA	<19	<19	NA	NA	<19	<19	NA
HFPO-DA	10	100		NA	NA	<7.4	3.3	NA	NA	<7.4	<7.4	NA
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NA	NA		NA	NA	<7.4	<7.4	NA	NA	<7.4	<7.4	NA
Perfluoro-3-methoxypropanoic acid	NA	NA		NA	NA	0.54 J	<1.6	NA	NA	<3.7	0.87 J	0.89 J
Perfluoro(4-methoxybutanoic acid)	NA	NA		NA	NA	<3.7	<3.7	NA	NA	<3.7	<3.7	NA
Perfluoro-3,6-dioxaheptanoic acid	NA	NA		NA	NA	<3.7	<3.7	NA	NA	<3.7	<3.7	NA
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	NA	NA		NA	NA	<7.4	<7.4	NA	NA	<7.4	<7.4	NA
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	NA	NA		NA	NA	<7.4	<7.4	NA	NA	<7.4	<7.4	NA
PFEESA	NA	NA		NA	NA	<3.7	<3.7	NA	NA	<3.7	<3.7	NA
3:3 FTCA	NA	NA		NA	NA	<9.3	<9.3	NA	NA	<9.3	<9.3	NA
5:3 FTCA	NA	NA		NA	NA	<46	<46	NA	NA	<46	<46	NA
7:3 FTCA	NA	NA		NA	NA	<46	<46	NA	NA	<46	<46	NA

Results and comparison criteria are in nanograms/liter (ng/l).

PFAS - per- and polyfluoroalkyl substances

Iowa SWS - Iowa Statewide Standards

Detected results are **bold**.

Shaded results exceed applicable Iowa Statewide Standard for Protected Groundwater.

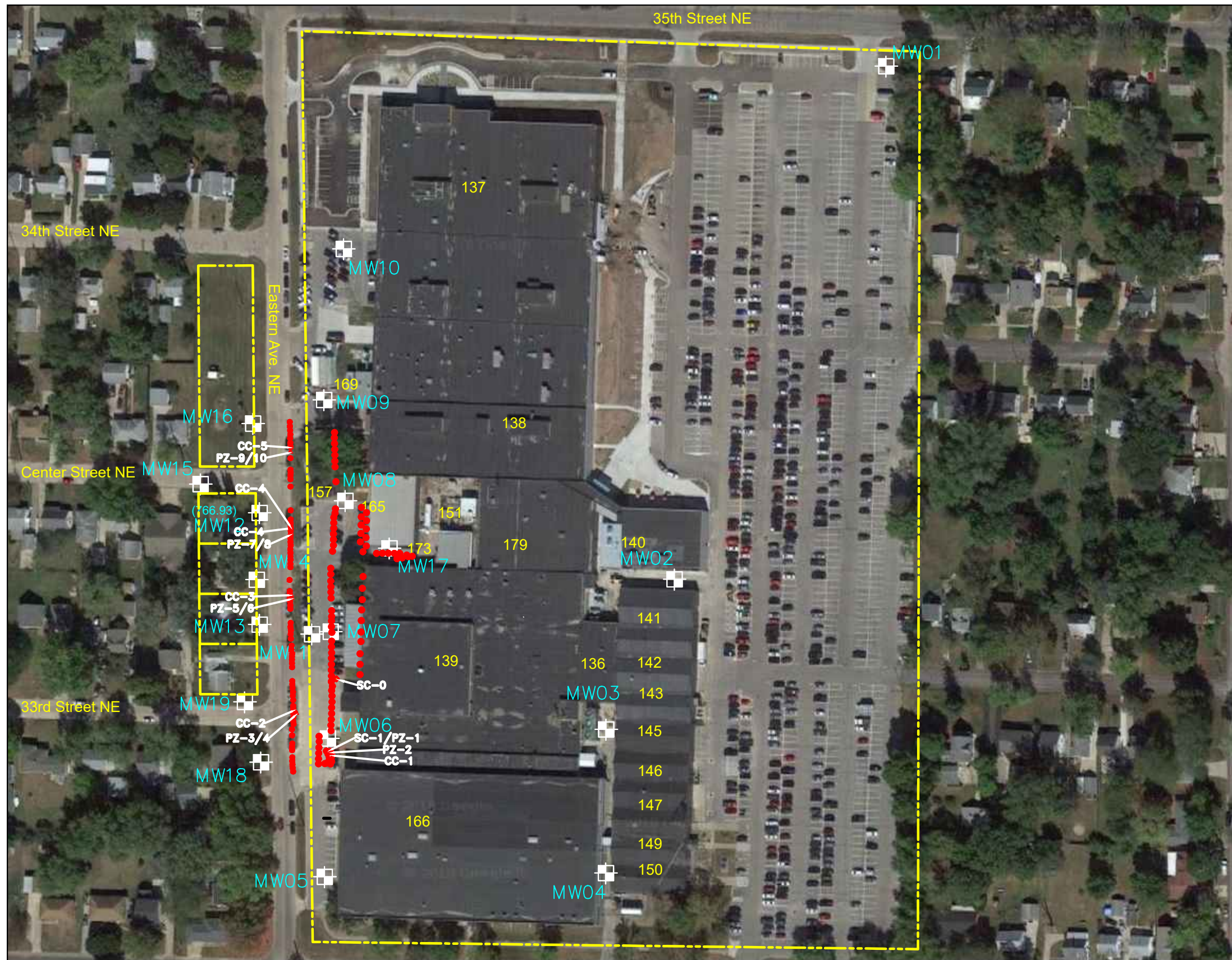
Underlined results applicable Iowa Statewide Standard for Non-Protected Groundwater.

"<" - The analyte did not exceed the reporting limit.

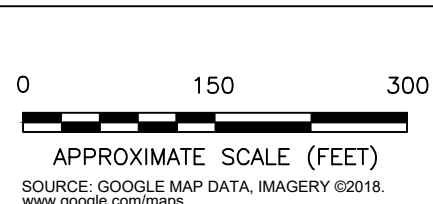
J - The analytical result is estimated.

NA - Not analyzed

FIGURES



- LEGEND:**
- PROPERTY BOUNDARY
 - MONITORING WELL LOCATION
 - BUILDING NUMBERS
 - INJECTION POINT LOCATION



11311 AURORA AVENUE
DES MOINES, IA 50322
PHONE: (515) 253-0830

FOR:
ROCKWELL COLLINS
855 35TH STREET NE
CEDAR RAPIDS, IOWA 52498

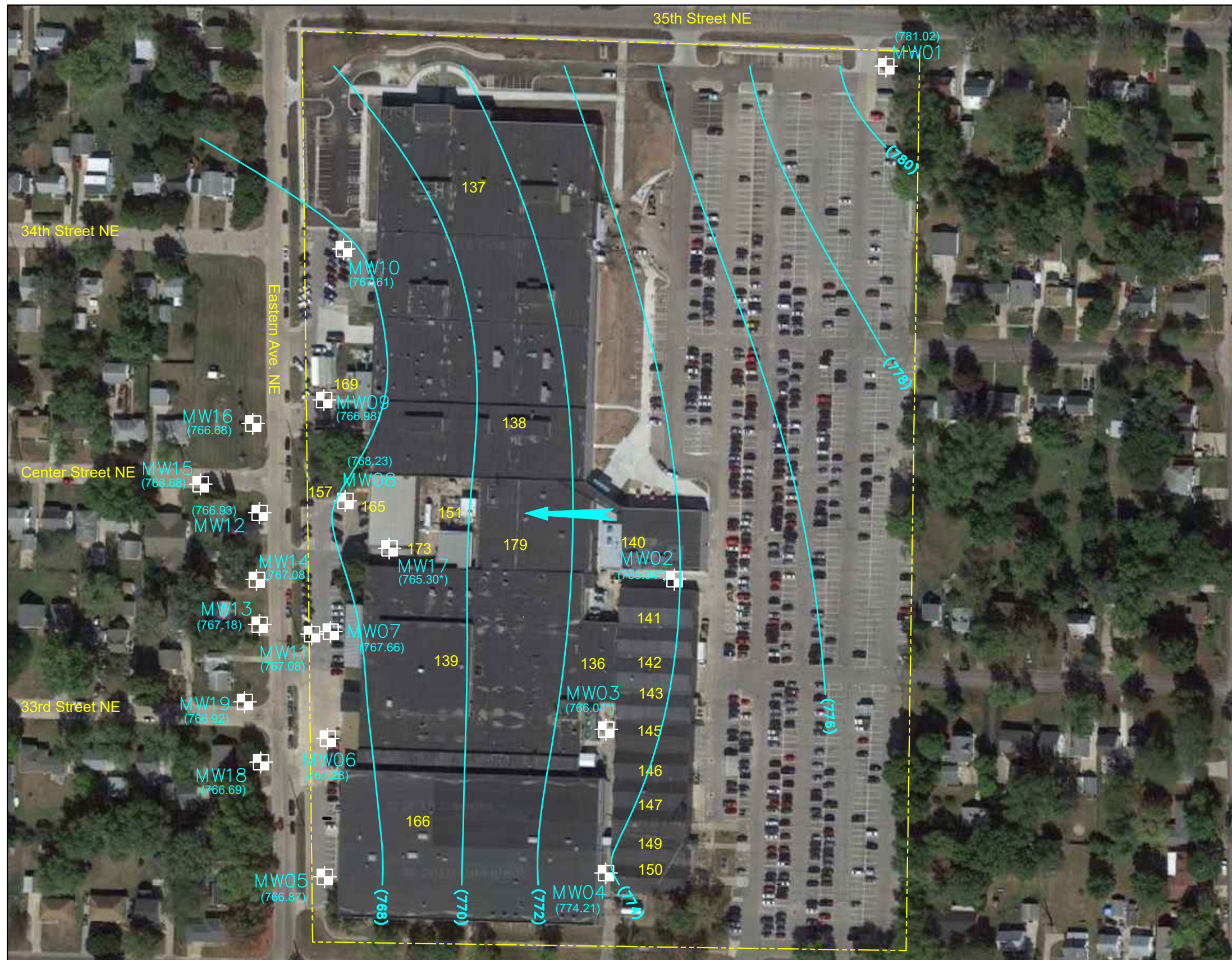
JOB NUMBER: 19379909 DRAWN BY: SAH

SITE PLAN MAP

CHECKED BY: SRV APPROVED BY: SRV

FIGURE:
1

DATE: 12/04/2024



LEGEND:

- PROPERTY BOUNDARY
- MONITORING WELL LOCATION
- 139 BUILDING NUMBERS
- (781) GROUNDWATER ELEVATION CONTOUR WITH ELEVATION (IN FEET ABOVE MEAN SEA LEVEL ; 2-FT INTERVALS)
- (766.69) APPROXIMATE GROUNDWATER FLOW DIRECTION
- (766.69) MEASURED GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- (NM) NOT MEASURED
- (*) DATA WAS NOT USED IN DEVELOPMENT OF THE GROUNDWATER ELEVATION CONTOURS

0 150 300



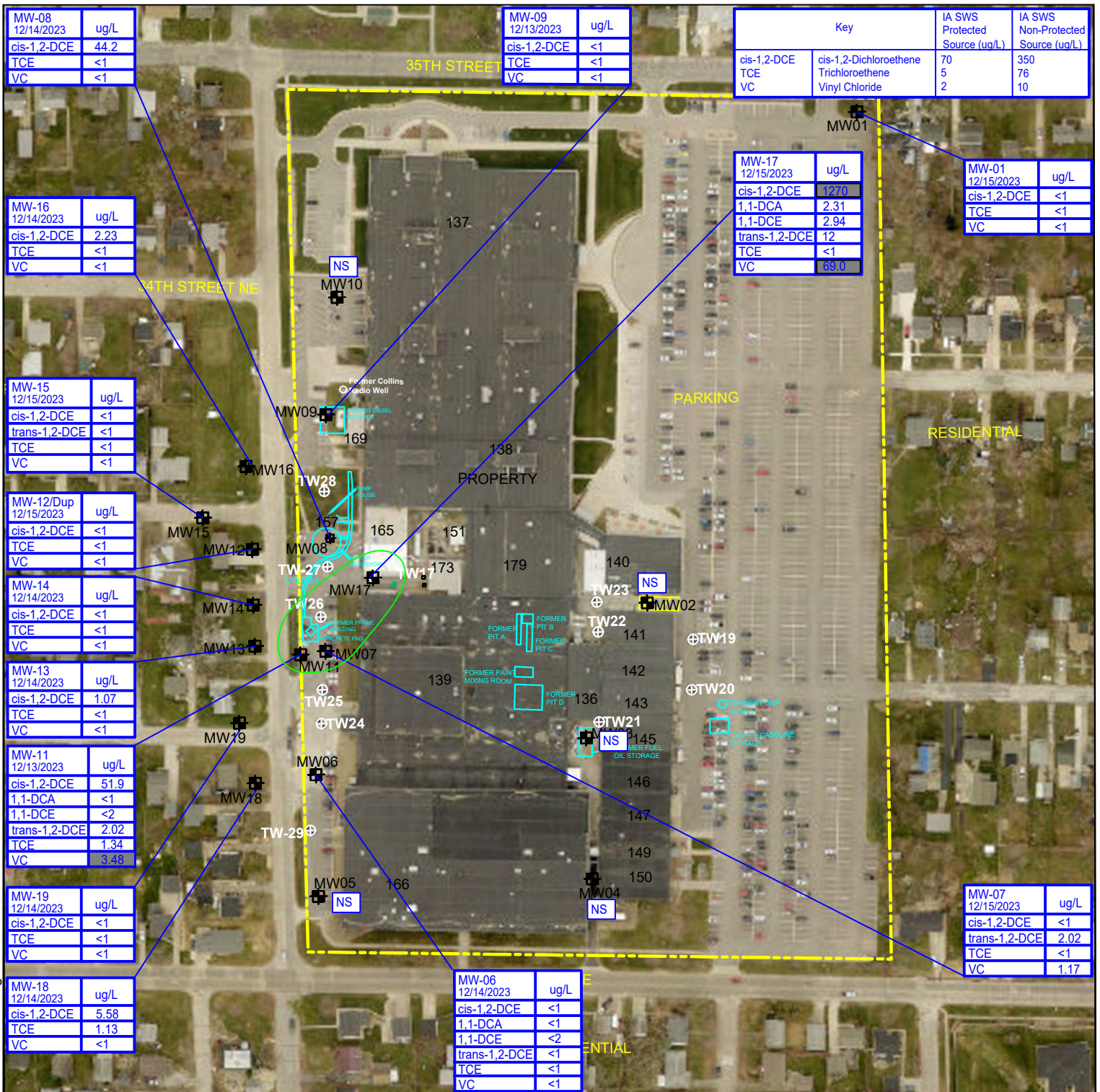
APPROXIMATE SCALE (FEET)

SOURCE: GOOGLE MAP DATA, IMAGERY ©2018.
www.google.com/maps









11311 AURORA AVENUE
DES MOINES, IA 50322
PHONE: (515) 253-0830

FOR: ROCKWELL COLLINS 855 35TH STREET NE CEDAR RAPIDS, IOWA 52498		GROUNDWATER POTENTIOMETRIC SURFACE MAP DECEMBER 13, 2023		FIGURE: 2
JOB NUMBER: 19379909	DRAWN BY: SAH	CHECKED BY: SRV	APPROVED BY: SRV	DATE: 12/4/2024

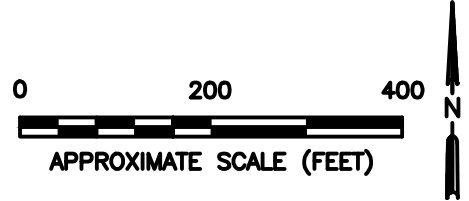



LEGEND:

-  MONITORING WELL LOCATIONS
-  TEMPORARY MONITORING WELL LOCATIONS
-  HISTORICAL SITE FEATURES
-  PROPERTY BOUNDARY
-  ESTIMATED EXTENT OF VOCs IN GROUNDWATER EXCEEDING IOWA STATEWIDE STANDARDS DASHED WHERE INFERRED
-  2017 SOIL EXCAVATION AREA

NOTES:






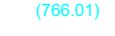


SHADED RESULTS EXCEED IOWA STATEWIDE STANDARDS FOR PROTECTED SOURCE.
 BOXED RESULTS EXCEED IOWA STATEWIDE STANDARDS FOR NON-PROTECTED SOURCE.
 NS = NOT SAMPLED
 ALL GROUNDWATER CONCENTRATIONS IN MICROGRAMS PER LITER (ug/L)
 < = INDICATES THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE SPECIFIED REPORTING LIMIT
 NE = NOT ESTABLISHED
 DUP = DUPLICATE SAMPLE
 SWS = STATE-WIDE STANDARD



 <p>Stantec</p> <p>11311 AURORA AVENUE DES MOINES, IA 50322 PHONE: (515) 253-0830</p>	FOR: ROCKWELL COLLINS FACILITY 855 35TH STREET CEDAR RAPIDS, IOWA 52498	FIGURE: 3	
	JOB NUMBER: 193710463	DRAWN BY: SAH	CHECKED BY: SRV
			DATE: 10/18/2024



LEGEND:

-  PROPERTY BOUNDARY
-  MONITORING WELL LOCATION
-  BUILDING NUMBERS
-  GROUNDWATER ELEVATION CONTOUR WITH ELEVATION (IN FEET ABOVE MEAN SEA LEVEL; 2-FT INTERVALS)
-  APPROXIMATE GROUNDWATER FLOW DIRECTION
-  MEASURED GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
-  NOT MEASURED
-  DATA WAS NOT USED IN DEVELOPMENT OF THE GROUNDWATER ELEVATION CONTOURS

0 150 300



APPROXIMATE SCALE (FEET)

SOURCE: GOOGLE MAP DATA, IMAGERY ©2018.
www.google.com/maps

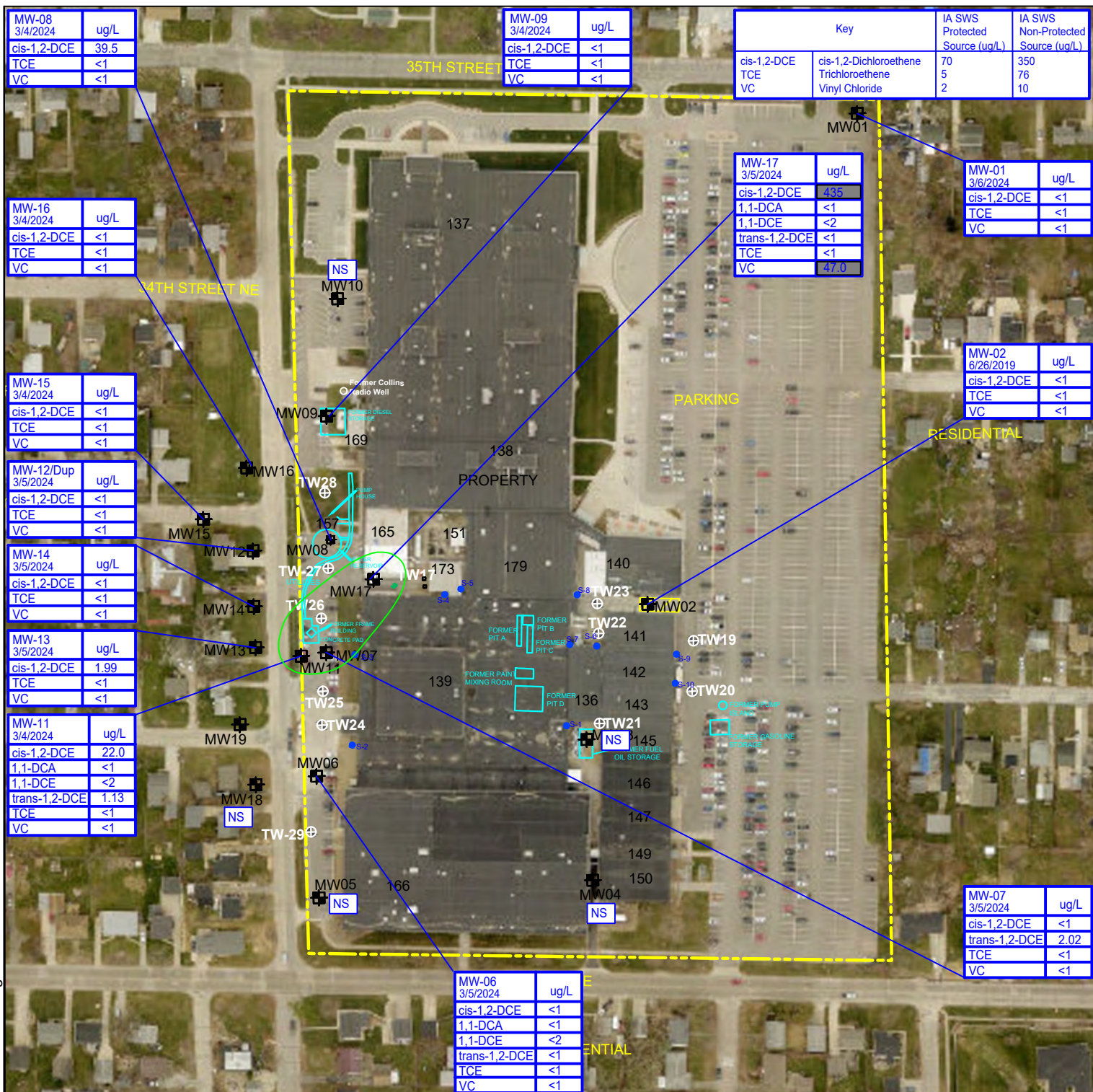


11311 AURORA AVENUE
DES MOINES, IA 50322
PHONE: (515) 253-0830

FOR: ROCKWELL COLLINS 855 35TH STREET NE CEDAR RAPIDS, IOWA 52498	
JOB NUMBER: 193709909	DRAWN BY: SAH

GROUNDWATER POTENTIOMETRIC SURFACE MAP MARCH 4, 2024	
CHECKED BY: SRV	APPROVED BY: SRV

FIGURE: 4
DATE: 12/4/2024

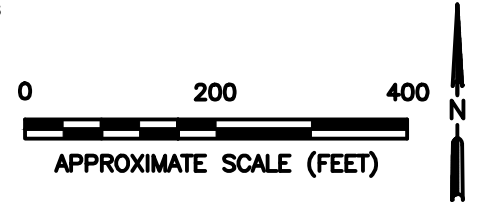


LEGEND:

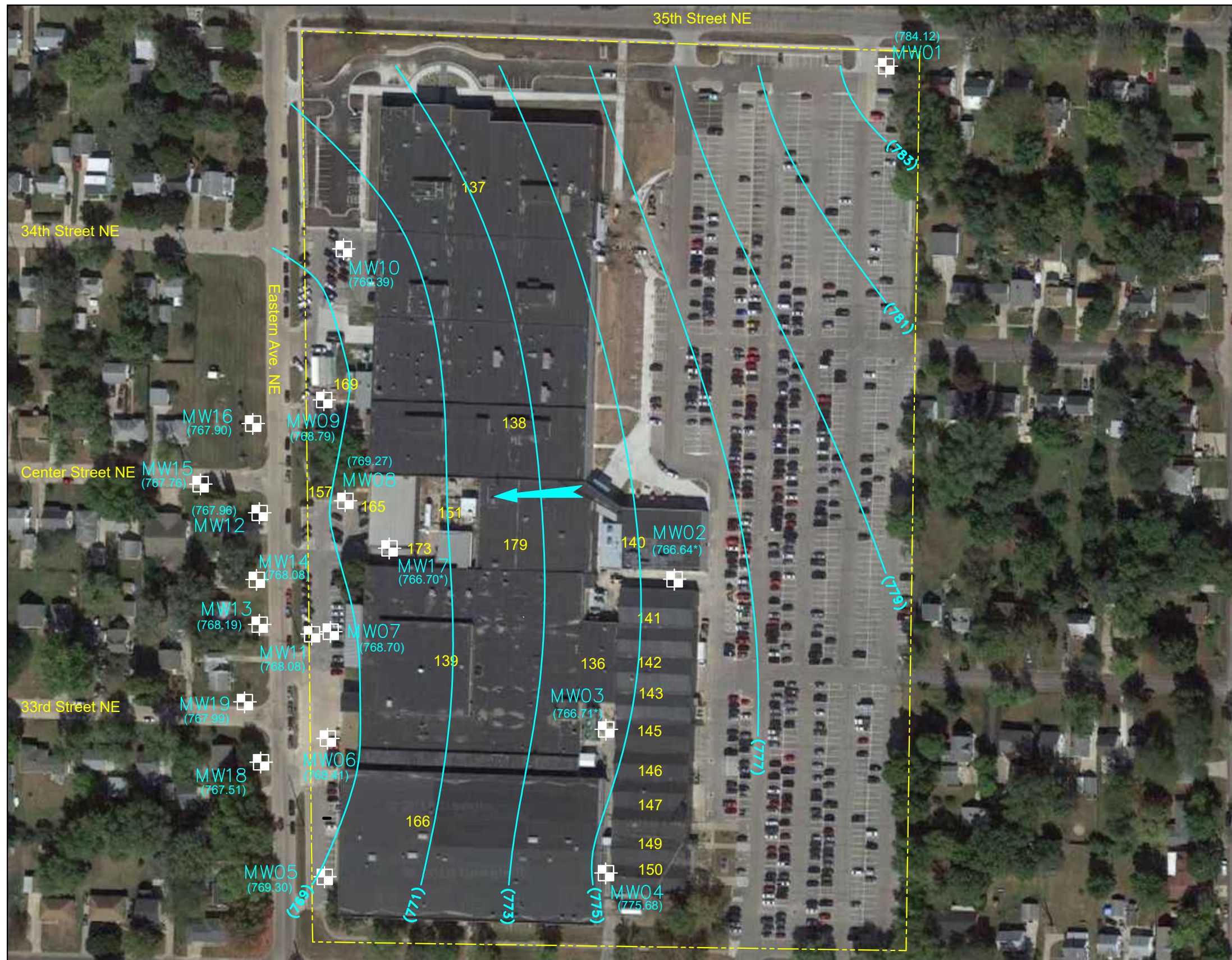
- MONITORING WELL LOCATIONS
- TEMPORARY MONITORING WELL LOCATIONS
- HISTORICAL SITE FEATURES
- PROPERTY BOUNDARY
- ESTIMATED EXTENT OF VOCs IN GROUNDWATER EXCEEDING IOWA STATEWIDE STANDARDS DASHED WHERE INFERRED
- 2017 SOIL EXCAVATION AREA

NOTES:

SHADED RESULTS EXCEED IOWA STATEWIDE STANDARDS FOR PROTECTED SOURCE.
 BOXED RESULTS EXCEED IOWA STATEWIDE STANDARDS FOR NON-PROTECTED SOURCE.
 NS = NOT SAMPLED
 ALL GROUNDWATER CONCENTRATIONS IN MICROGRAMS PER LITER (ug/L)
 < = INDICATES THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE SPECIFIED REPORTING LIMIT
 NE = NOT ESTABLISHED
 DUP = DUPLICATE SAMPLE
 SWS = STATE-WIDE STANDARD



<p>11311 AURORA AVENUE DES MOINES, IA 50322 PHONE: (515) 253-0830</p>	FOR: ROCKWELL COLLINS FACILITY 855 35TH STREET CEDAR RAPIDS, IOWA 52498		FIGURE: <h1>5</h1>	
	JOB NUMBER: 193710463	DRAWN BY: SAH	CHECKED BY: SRV	APPROVED BY: SRV



LEGEND:

- PROPERTY BOUNDARY
- MONITORING WELL LOCATION
- 139 BUILDING NUMBERS
- (781)— GROUNDWATER ELEVATION CONTOUR WITH ELEVATION (IN FEET ABOVE MEAN SEA LEVEL ; 2-FT INTERVALS)
- ➔ APPROXIMATE GROUNDWATER FLOW DIRECTION
- (769.30) MEASURED GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- (NM) NOT MEASURED
- (*) DATA WAS NOT USED IN DEVELOPMENT OF THE GROUNDWATER ELEVATION CONTOURS

0 150 300



APPROXIMATE SCALE (FEET)

SOURCE: GOOGLE MAP DATA, IMAGERY ©2018.
www.google.com/maps

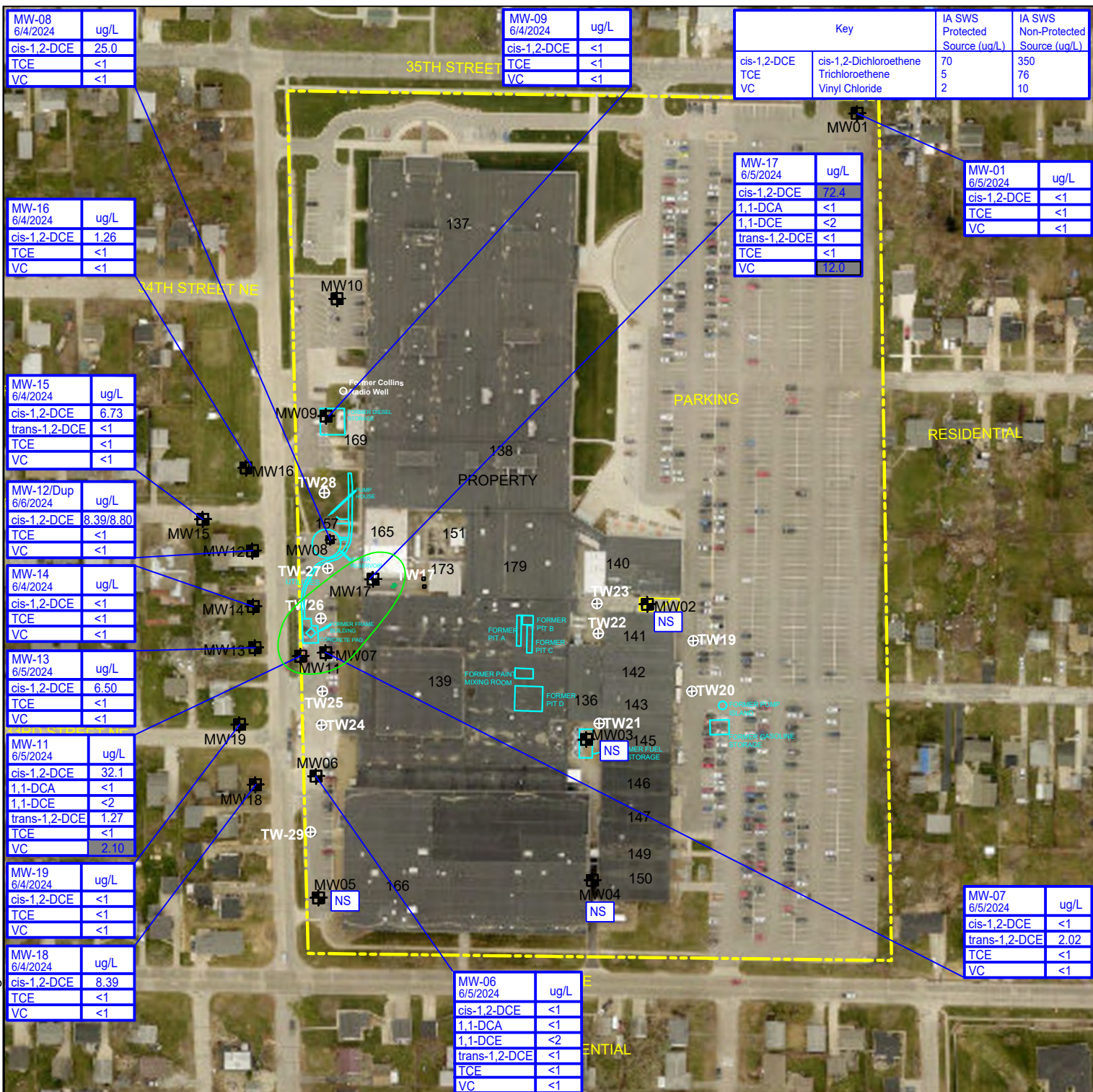


11311 AURORA AVENUE
DES MOINES, IA 50322
PHONE: (515) 253-0830

FOR: ROCKWELL COLLINS 855 35TH STREET NE CEDAR RAPIDS, IOWA 52498	
JOB NUMBER: 193710463	DRAWN BY: SAH

GROUNDWATER POTENTIOMETRIC SURFACE MAP JUNE 3, 2024	
CHECKED BY: SRV	APPROVED BY: SRV

FIGURE: 6
DATE: 12/4/2024

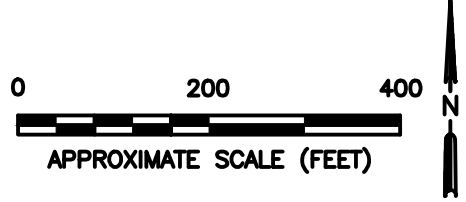


LEGEND:

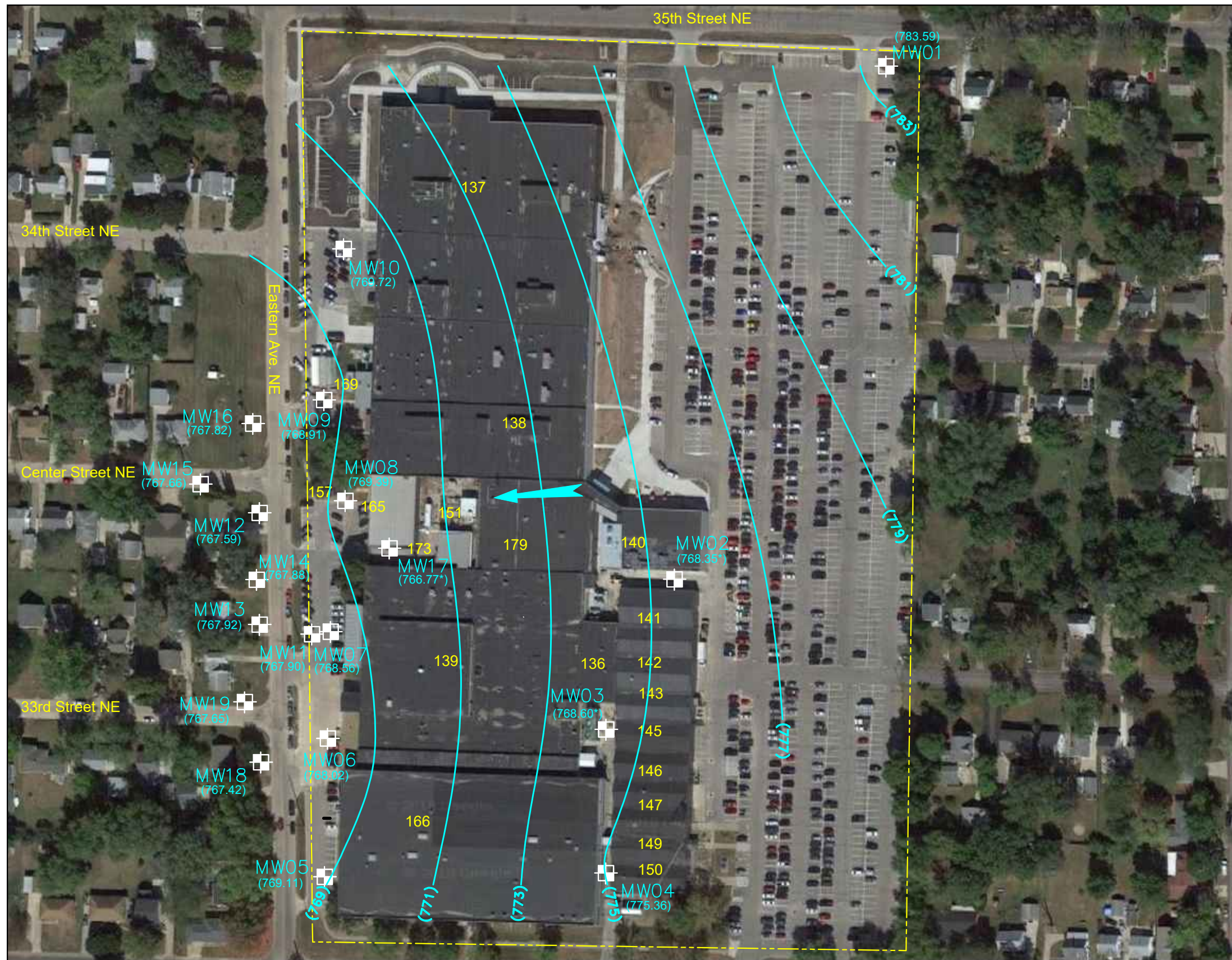
- MONITORING WELL LOCATIONS
- TEMPORARY MONITORING WELL LOCATIONS
- HISTORICAL SITE FEATURES
- PROPERTY BOUNDARY
- ESTIMATED EXTENT OF VOCs IN GROUNDWATER EXCEEDING IOWA STATEWIDE STANDARDS DASHED WHERE INFERRED
- 2017 SOIL EXCAVATION AREA

NOTES:

SHADED RESULTS EXCEED IOWA STATEWIDE STANDARDS FOR PROTECTED SOURCE.
 BOXED RESULTS EXCEED IOWA STATEWIDE STANDARDS FOR NON-PROTECTED SOURCE.
 NS = NOT SAMPLED
 ALL GROUNDWATER CONCENTRATIONS IN MICROGRAMS PER LITER (ug/L)
 < = INDICATES THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE SPECIFIED REPORTING LIMIT
 NE = NOT ESTABLISHED
 DUP = DUPLICATE SAMPLE
 SWS = STATE-WIDE STANDARD



<p>11311 AURORA AVENUE DES MOINES, IA 50322 PHONE: (515) 253-0830</p>	FOR: ROCKWELL COLLINS FACILITY 855 35TH STREET CEDAR RAPIDS, IOWA 52498		FIGURE: 7	
	JOB NUMBER: 193710463	DRAWN BY: SAH	CHECKED BY: SRV	APPROVED BY: SRV



LEGEND:

- PROPERTY BOUNDARY
- MONITORING WELL LOCATION
- 139 BUILDING NUMBERS
- (781)— GROUNDWATER ELEVATION CONTOUR WITH ELEVATION (IN FEET ABOVE MEAN SEA LEVEL; 2-FT INTERVALS)
- ➔ APPROXIMATE GROUNDWATER FLOW DIRECTION
- (766.11) MEASURED GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- (NM) NOT MEASURED
- (*) DATA WAS NOT USED IN DEVELOPMENT OF THE GROUNDWATER ELEVATION CONTOURS

0 150 300



APPROXIMATE SCALE (FEET)

SOURCE: GOOGLE MAP DATA, IMAGERY ©2018.
www.google.com/maps

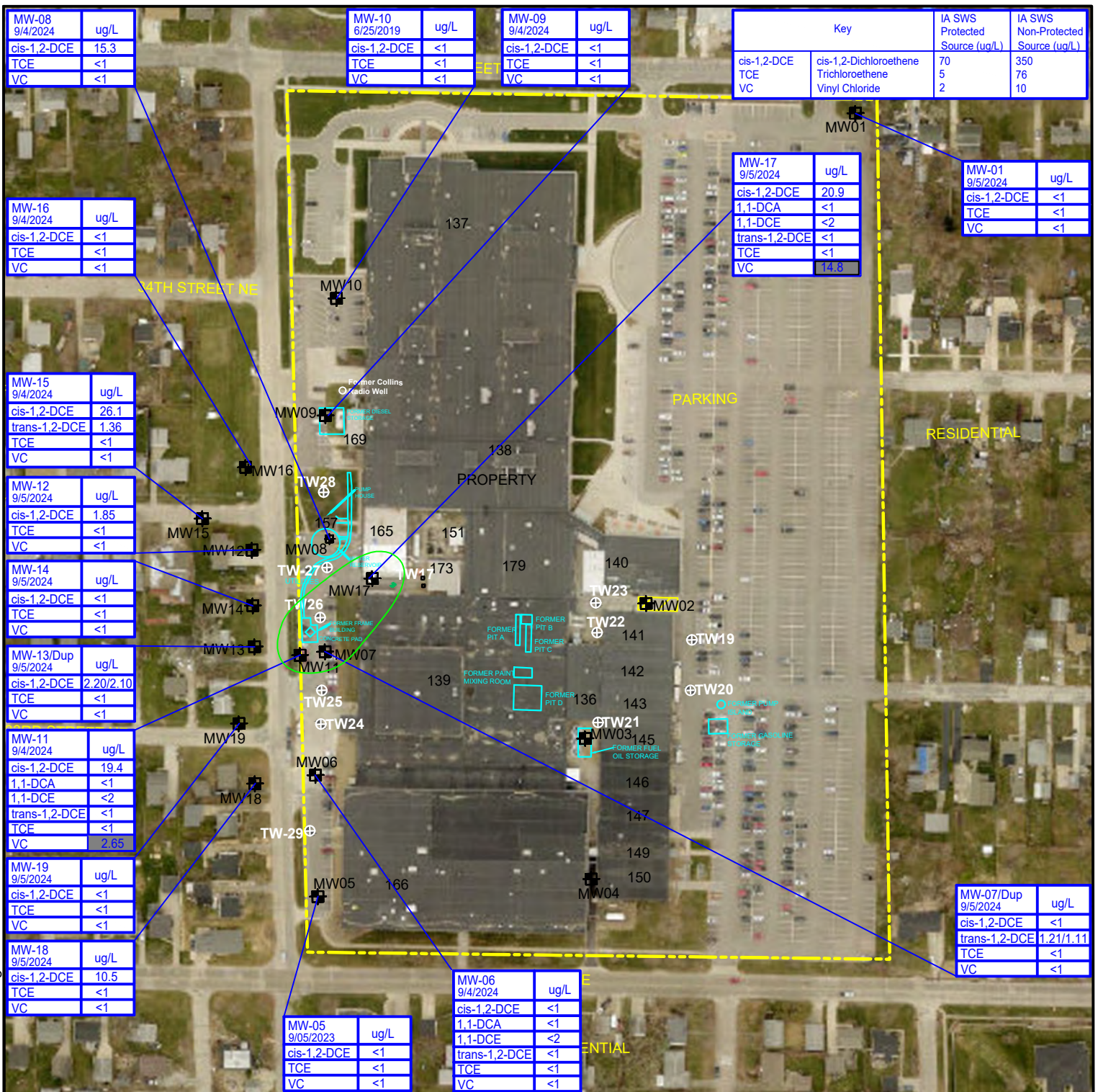


11311 AURORA AVENUE
DES MOINES, IA 50322
PHONE: (515) 253-0830

FOR: ROCKWELL COLLINS 855 35TH STREET NE CEDAR RAPIDS, IOWA 52498	
JOB NUMBER: 193710463	DRAWN BY: SAH

GROUNDWATER POTENTIOMETRIC SURFACE MAP SEPTEMBER 3, 2024	
CHECKED BY: SRV	APPROVED BY: SRV

FIGURE: <b style="font-size: 1.5em;">8
DATE: 12/4/2024

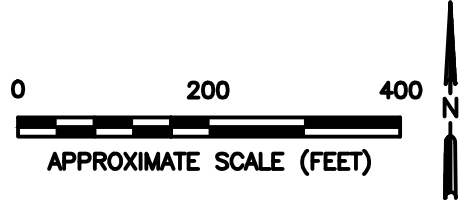


LEGEND:

- MONITORING WELL LOCATIONS
- TEMPORARY MONITORING WELL LOCATIONS
- HISTORICAL SITE FEATURES
- PROPERTY BOUNDARY
- ESTIMATED EXTENT OF VOCs IN GROUNDWATER EXCEEDING IOWA STATEWIDE STANDARDS DASHED WHERE INFERRED
- 2017 SOIL EXCAVATION AREA

NOTES:

SHADED RESULTS EXCEED IOWA STATEWIDE STANDARDS FOR PROTECTED SOURCE.
 BOXED RESULTS EXCEED IOWA STATEWIDE STANDARDS FOR NON-PROTECTED SOURCE.
 NS = NOT SAMPLED
 ALL GROUNDWATER CONCENTRATIONS IN MICROGRAMS PER LITER (ug/L)
 < = INDICATES THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE SPECIFIED REPORTING LIMIT
 NE = NOT ESTABLISHED
 DUP = DUPLICATE SAMPLE
 SWS = STATE-WIDE STANDARD



<p>11311 AURORA AVENUE DES MOINES, IA 50322 PHONE: (515) 253-0830</p>	FOR: ROCKWELL COLLINS FACILITY 855 35TH STREET CEDAR RAPIDS, IOWA 52498		FIGURE: 9	
	JOB NUMBER: 193710463	DRAWN BY: SAH	CHECKED BY: SRV	APPROVED BY: SRV

ATTACHMENT A



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW - 01

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: <u>40-mL vial (3)</u>	Preservation: <u>None</u>	Analysis Req.: <u>RSK 175 CO2</u>
Container Type: <u>40-mL vial (2)</u>	Preservation: <u>Sulfuric Acid</u>	Analysis Req.: <u>9060A - TOC</u>
Container Type: <u>250-mL Poly (1)</u>	Preservation: <u>None</u>	Analysis Req.: <u>9056A - ORGFM</u>
Container Type: 250-mL Poly (1)	Preservation: Nitric Acid	Analysis Req.: 6020B - Dissolved Fe and Mn
Container Type: <u>500-mL Poly (1)</u>	Preservation: <u>NaOH</u>	Analysis Req.: <u>SM 4500 S2 F - Sulfide</u>
Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCL</u>	Analysis Req.: <u>RSK 175 - Dissolved Gasses (GC)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-01 - 1223 Time Sampled: 1115

4. COMMENTS: ~~DUP-01~~

Depth of sample intake = ~10' BTR

QA/QC Sample Collected = ~~DUP-01~~ at 0100 → none

* 0715 water below pump - let Recharge for 15 min

* NOT enough volume to collect dissolved metals sample

Emma Brady
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW- 09

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 12/13/2023

Weather Conditions: 37, Clear/Sunny

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h) <u>14.78</u> feet	Well Diameter <u>2-inch inner diameter</u>
b. Depth to Water <u>10.43</u> feet	Three Well Volumes <u>2.103</u> gallons
c. Length of Water Column <u>4.30</u> feet	One System Volume <u>0.701</u>

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 14440) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 690360) w/Flow Through Cell Hanna digital turbidity meter (S/N = 06120003101)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec.Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)		Color (visual)
1347		Start						Troll/Hanna		
1350	10.44	500ml	14.57	6.73	1520	134.9	0.54	1196	1000	White
1353	10.50	500ml	14.62	6.64	1477	143.6	0.34	820	971	murky
1357	"	500ml	14.85	6.62	1515	144.7	0.25	525	576	"
1402	"	500ml	14.82	6.62	1542	143.6	0.20	357	373	"
1406	"	"	14.78	6.61	1552	140.1	0.16	238	258	"
1409	"	"	14.87	6.61	1551	138.8	0.15	207	180	"
1412	"	"	14.86	6.59	1548	138.9	0.13	154	150	"
1416	"	"	14.76	6.59	1539	137.0	0.12	134	115	"
1420	"	"	14.77	6.57	1518	134.2	0.11	47	75.9	cloudy
1424	10.51	"	14.77	6.56	1510	132.5	0.10	78	66.3	"
1428	"	"	14.72	6.56	1509	131.1	0.10	73.5	60.3	"
1432	"	"	14.90	6.56	1502	130.4	0.10	62.0	51.0	"
1437	"	"	14.67	6.57	1504	127.7	0.10	55.8	47.0	"
1441	"	"	14.56	6.57	1508	127.0	0.09	51.6	43.6	"
1445		sample								

↑ D.S



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 13

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-13- 1223 Time Sampled: 1135

4. COMMENTS: none
Depth of sample intake = ~13' BOC
QA/QC Sample Collected = None

Em Brady
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW - 15

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-15-1223 Time Sampled: 1458

4. COMMENTS: none
Depth of sample intake = ~ 13' BTOC
QA/QC Sample Collected = None

[Signature]
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW - 18

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-18-1223 Time Sampled: 1358

4. COMMENTS: Hanna portable turbidity meter SN0612000310 used. Second Reading Listed.

Evan Kelly
Sampler (Signature)

Emma Brady
(Print Name)



**GROUNDWATER
SAMPLE COLLECTION RECORD**

Well No. MW - 19

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 12/14/2023

Weather Conditions: 38°, clear

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h)	<u>12.18</u> feet	Well Diameter	<u>2-inch inner diameter</u>
b. Depth to Water	<u>6.91</u> feet	Three Well Volumes	<u>2.58</u> gallons
c. Length of Water Column	<u>5.27</u> feet	One System Volume	<u>0.859</u>

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 11439) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N= 646360) w/Flow Cell

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec. Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
1203	<u>6.85</u>	Start							<u>clear</u>
↓ Dis. 1205	<u>below pump</u>	<u>1000 mL</u>	<u>13.38</u>	<u>7.20</u>	<u>522.7</u>	<u>41.1</u>	<u>2.23</u>	<u>44.9 / 24.0</u>	<u>"</u>
		<u>1000 mL</u>							<u>"</u>
* 1210	<u>7.25</u>	<u>Recharge</u>							<u>"</u>
		<u>Restart</u>							<u>"</u>
1223	<u>7.30</u>								
↓ Dis. 1226	<u>7.84</u>	<u>500 mL</u>	<u>12.99</u>	<u>7.01</u>	<u>513</u>	<u>113.5</u>	<u>3.36</u>	<u>114 / 85.6</u>	<u>clear</u>
1227	<u>8.08</u>	<u>500 mL</u>	<u>13.53</u>	<u>6.46</u>	<u>516.5</u>	<u>104.6</u>	<u>2.23</u>	<u>113 / 80</u>	<u>clear</u>
↓ Dis. 1232	<u>8.28</u>	<u>500 mL</u>	<u>12.73</u>	<u>6.93</u>	<u>509.1</u>	<u>96.0</u>	<u>1.64</u>	<u>61.4 / 34.4</u>	<u>clear</u>
↓ Dis. 1235	<u>below pump</u>	<u>500 mL</u>	<u>13.35</u>	<u>6.94</u>	<u>503.6</u>	<u>84.7</u>	<u>1.19</u>	<u>27.6 / 19.7</u>	<u>"</u>
1240	<u>"</u>	<u>500 mL</u>	<u>12.41</u>	<u>6.96</u>	<u>508.7</u>	<u>73.0</u>	<u>1.36</u>	<u>27.1 / 18.0</u>	<u>"</u>
1245	<u>"</u>	<u>500 mL</u>	<u>11.72</u>	<u>6.95</u>	<u>511.41</u>	<u>65.4</u>	<u>1.39</u>	<u>23.7 / 20.3</u>	<u>"</u>
1250	<u>"</u>	<u>500 mL</u>	<u>11.63</u>	<u>6.94</u>	<u>511.27</u>	<u>64.1</u>	<u>1.41</u>	<u>27.1 / 19.5</u>	<u>"</u>
1255	<u>"</u>	<u>500 mL</u>	<u>11.41</u>	<u>6.94</u>	<u>511.35</u>	<u>63.2</u>	<u>1.41</u>	<u>20.5 / 18.7</u>	<u>"</u>
1300		<u>sample</u>							



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 06

3. SAMPLE COLLECTION: Method Peristaltic pump for PFAS and bailer for VOCs.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-06-0324 Time Sampled: 1310

4. COMMENTS: NONE
Depth of sample intake = ~ 2' from bottom.
QA/QC Sample Collected = NONE

Emma Brady
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW- 07

Job No.: 193709909 Client: Rockwell Collins-35th St
 Location: Cedar Rapids, Iowa Date: 3/5/2007
 Weather Conditions: 55°, Sunny

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h) 14.06 feet Well Diameter 2-inch inner diameter
 b. Depth to Water 7.74 feet Three Well Volumes 3.09 gallons
 c. Length of Water Column 6.32 feet One System Volume 1.03

2. WELL PURGING DATA:

a. Purge Method Peristaltic pump for PFAS and bailer for VOCs.
 b. Purge Requirements Low Flow Stabilization according to SOP.
 c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 870001) w/Flow Through Cell Hanna digital turbidity meter (S/N = 06120003101)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec.Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)		Color (visual)
1334	7.74	Start						Troll/Hanna		
1338	8.84	500 mL	12.98	6.74	1343.0	-103.1	0.62	236	185	grey
1342	8.93	500 mL	12.91	6.73	1386.7	-104.0	0.76	184	12.7	lt grey
1347	9.11	500 mL	12.61	6.74	1382.6	-101.8	1.31	53.7	52.9	cloudy
1352	9.23	"	12.46	6.75	1379.8	-100.1	1.61	34.9	35.7	colorless
1357	9.48	"	12.43	6.79	1364.4	-103.2	1.62	20.0	26.7	"
1402	9.50	"								"
1410		sample								

↓ Dis



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 08

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u> ✓
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-08-0324 Time Sampled: 1155

4. COMMENTS: none
Depth of sample intake = ~ 2' above bottom
QA/QC Sample Collected = NONE

Emma Brady
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 09

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260) ✓</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-09-0324 Time Sampled: 1318

4. COMMENTS: NONE

Depth of sample intake = ~2' From bottom

QA/QC Sample Collected = NONE

Emma Brady
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW- 11

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 3/4/2024

Weather Conditions: 40°, cloudy, Rain, Windy

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h)	<u>15.78</u> feet	Well Diameter	<u>2-inch inner diameter</u>
b. Depth to Water	<u>7.75</u> feet	Three Well Volumes	<u>3.93</u> gallons
c. Length of Water Column	<u>8.03</u> feet	One System Volume	<u>1.31</u>

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 14440) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N= 87000) w/Flow Through Cell Hanna digital turbidity meter (S/N=)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec.Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
1639	7.79	Start						Troll/Hanna	
1645	7.80	1000ml	11.64	6.74	2460	-128.1	0.32	424	Black
1648	7.81	1000ml	11.71	6.77	2416.3	-132.5	0.05	367	"
1651	"	"	11.84	6.78	2356.3	-137.0	0.03	238	Dark grey
1654	"	"	11.93	6.79	2338.1	-138.5	0.02	211	Light grey
1657	"	"	11.96	6.79	2301.0	-141.0	0.02	176	"
1701	"	"	11.96	6.79	2275	-142.0	0.02	149	Cloudy
1704	"	"	12.01	6.79	2238.4	-145.4	0.00	111	Colorless
1707	"	"	12.02	6.80	2230.1	-145.8	0.00	100.2	"
1710	"	"	12.00	6.80	2217.7	-146.8	0.00	75.8	"
1713	"	"	12.00	6.79	2209.1	-148.5	0.00	103.7	"
1716	"	"	11.97	6.79	2212.6	-149.5	0.00	110.6	"
1719	"	"	11.99	6.79	2207.2	-149.8	0.00	104.8	"
1725		sample							

↑ Dis



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 11

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260) ✓</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-11-0324 Time Sampled: 1725

4. COMMENTS: MS/MSD at ✓
Depth of sample intake = ~ 2' from bottom
QA/QC Sample Collected = MS/MSD ✓

HANNA not used due to high chances of Rain

[Signature]
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW- 13

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 3/5/2004

Weather Conditions: 40°, cloudy

1. WATER LEVEL DATA: (from TOC)

- a. Total Well Length (h) 15.23 feet
- b. Depth to Water 6.75 feet
- c. Length of Water Column 8.48 feet

- Well Diameter 2-inch inner diameter
- Three Well Volumes 4.15 gallons
- One System Volume 1.38

2. WELL PURGING DATA:

- a. Purge Method SS portable bladder pump (S/N= 14440) with disposable bladder and dedicated tubing.
- b. Purge Requirements Low Flow Stabilization according to SOP.
- c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N= 87000) w/Flow Through Cell Hanna digital turbidity meter (S/N= 06120003101)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec. Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
0907	6.70	Start						Troll/Hanna	
0911	6.85	500 mL	4.14	7.00	1343.3	42.2	1.92	104 87.7	Colorless
0915	6.85	500 mL	4.13	7.02	1345.5	41.8	1.86	108 72.0	"
0919	"	500 mL	4.32	7.05	1345.5	40.8	1.90	79.9 64.9	"
0922	"	500 mL	4.33	7.08	1334.5	39.6	1.07	75.4 71.2	"
0926	"	"	4.30	7.11	1328.3	38.1	0.96	67.3 57.9	"
0930	"	"	4.29	7.14	1314.0	36.6	0.70	60.8 51.5	"
0933	"	"	4.40	7.18	1295.6	34.7	0.52	51.3 44.0	"
0936	"	"	4.42	7.20	1283.0	33.1	0.43	41.7 37.8	"
0940	"	"	4.41	7.21	1272.1	32.4	0.64	36.3 32.4	"
0945		Sample							



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW- 14

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 3/5/2024

Weather Conditions: 40°, cloudy

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h)	<u>14.66</u> feet	Well Diameter	<u>2-inch inner diameter</u>
b. Depth to Water	<u>7.32</u> feet	Three Well Volumes	<u>3.54</u> gallons
c. Length of Water Column	<u>7.34</u> feet	One System Volume	<u>1.19</u>

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 11439) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N=87000) w/Flow Through Cell Hanna digital turbidity meter (S/N=06120003101)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec.Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)		Color (visual)
0751	7.25	Start						Troll/Hanna		
0754	7.65	1000 mL	8.05	6.83	1527.5	-2.5	0.94	95.0	63.3	Colorless
0758	7.70	1000 mL	8.99	6.82	1501.9	6.4	1.06	72.7	44.1	"
0801	7.70	1000 mL	8.95	6.81	1480.2	11.3	1.04	50.6	26.7	"
0804	7.72	"	8.71	6.79	1471.1	14.7	0.82	22.9	18.7	"
0808	"	"	8.61	6.78	1500.6	28.2	0.73	17.3	12.2	"
0812	"	"	8.71	6.77	1547.9	33.3	0.72	9.14	8.45	"
0816	"	"	8.68	6.76	1608.5	36.5	0.72	7.30	6.90	"
0820	"	"	8.73	6.76	1655.7	38.9	0.69	3.48	5.30	"
0824	"	"	8.69	6.76	1725.6	41.2	0.75	0.31	4.30	"
0828	"	"	8.76	6.77	1767.9	42.4	0.81	0.24	3.38	"
0832	"	"	8.72	6.77	1785.7	43.5	0.84	0.08	2.25	"
0838		Sample								

↓ Dis.



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 17

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: 40-mL vial (3)	Preservation: HCl	Analysis Req.: VOCs-(SW-846 8260)
Container Type: 40-mL vial (3)	Preservation: None	Analysis Req.: RSK 175 CO2
Container Type: 40-mL vial (2)	Preservation: Sulfuric Acid	Analysis Req.: 9060A - TOC
Container Type: 250-mL Poly (1)	Preservation: None	Analysis Req.: 9056A - ORGFM
Container Type: 250-mL Poly (1)	Preservation: Nitric Acid	Analysis Req.: 6020B - Dissolved Fe and Mn
Container Type: 500-mL Poly (1)	Preservation: NaOH	Analysis Req.: SM 4500 S2 F - Sulfide
Container Type: 40-mL vial (3)	Preservation: HCL	Analysis Req.: RSK 175 - Dissolved Gasses (GC)
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-17-0324 Time Sampled: 1541

4. COMMENTS: NONE
Depth of sample intake = ~ 2' from bottom
QA/QC Sample Collected = None

Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW - 18

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 3/5/2024

Weather Conditions: 40°, cloudy

1. WATER LEVEL DATA: (from TOC)

- a. Total Well Length (h) 13.84 feet
- b. Depth to Water 7.29 feet
- c. Length of Water Column 6.55 feet

- Well Diameter 2-inch inner diameter
- Three Well Volumes 3.20 gallons
- One System Volume 1.07

2. WELL PURGING DATA:

- a. Purge Method SS portable bladder pump (S/N= 11439) with disposable bladder and dedicated tubing.
- b. Purge Requirements Low Flow Stabilization according to SOP.
- c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 870001) w/Flow Cell

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec. Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
1012	7.22	Start						<u>1101/4111</u>	
1016	7.52	1000mL	10.12	6.62	3278.7	-35.2	0.22	640/512	<u>cloudy</u>
1020	7.66	1000mL	10.15	6.64	3217.4	-58.7	0.04	422/414	<u>"</u>
1024	7.64	1000mL	10.14	6.65	3202.4	-64.4	0.01	357/308	<u>"</u>
1027	7.63	"	10.14	6.65	3191.1	-74.5	0.01	306/229	<u>"</u>
1030	"	"	10.14	6.66	3173.4	-77.7	0.00	240/166	<u>"</u>
1033	"	"	10.30	6.66	3133.0	-79.9	0.00	129/135	<u>"</u>
1037	"	"	10.34	6.67	3114.3	-81.6	0.00	168/122	<u>"</u>
1041	"	"	10.33	6.67	3103.7	-82.5	0.00	125/87.9	<u>"</u>
1045	"	"	10.38	6.68	3102.8	-83.4	0.00	115/83.4	<u>"</u>
1049	"	"	10.41	6.68	3083.2	-84.1	0.00	98/74.2	<u>"</u>
1052	"	"	10.44	6.68	3081.3	-84.6	0.00	73/47.7	<u>"</u>
1056	"	"	10.47	6.69	3054.7	-85.0	0.00	59/41.1	<u>"</u>
1100	"	"	10.50	6.69	3061.7	-85.3	0.00	41/33.3	<u>colorless</u>
1105		Sample							

↓ P.S.



**GROUNDWATER
SAMPLE COLLECTION RECORD**

Well No. MW - 18

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: mw-18-0324 Time Sampled: 1105

4. COMMENTS: HANNA #06120003101 used for turbidity.

Emma Brady
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW - 01

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: <u>40-mL vial (3)</u>	Preservation: <u>None</u>	Analysis Req.: <u>RSK 175 CO2</u>
Container Type: <u>40-mL vial (2)</u>	Preservation: <u>Sulfuric Acid</u>	Analysis Req.: <u>9060A - TOC</u>
Container Type: <u>250-mL Poly (1)</u>	Preservation: <u>None</u>	Analysis Req.: <u>9056A - ORGFM</u>
Container Type: <u>250-mL Poly (1)</u>	Preservation: <u>Nitric Acid</u>	Analysis Req.: <u>6020B - Dissolved Fe and Mn</u>
Container Type: <u>500-mL Poly (1)</u>	Preservation: <u>NaOH</u>	Analysis Req.: <u>SM 4500 S2 F - Sulfide</u>
Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCL</u>	Analysis Req.: <u>RSK 175 - Dissolved Gasses (GC)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-01-0624 Time Sampled: 1638

4. COMMENTS: None
Depth of sample intake = 2' above TD
QA/QC Sample Collected = None

Emma Brady
Sampler (Signature)

Emma Brady
(Print Name)



**GROUNDWATER
SAMPLE COLLECTION RECORD**

Well No. MW- 06

Job No.: 193709909 Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa Date: 6/5/2024

Weather Conditions: 80°, Sunny

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h)	<u>14.73 feet</u>	Well Diameter	<u>2-inch inner diameter</u>
b. Depth to Water	<u>6.14 feet</u>	Three Well Volumes	<u>4.20</u> gallons
c. Length of Water Column	<u>8.59 feet</u>	One System Volume	<u>740</u> gal

2. WELL PURGING DATA:

a. Purge Method Peristaltic pump for PFAS and bailer for VOCs.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 103483) w/Flow Through Cell Hanna digital turbidity meter (S/N = 05100084601)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec.Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
1036	<u>6.26</u>	Start						Troll/Hanna	
1039	-	500 mL	16.53	6.86	2564.7	-98.3	1.31	242.7	out Black
1041	-	500 mL	16.27	6.86	2652.7	-98.2	1.14	231.5	out "
1045	-	500 mL	16.06	6.87	2678.7	-99.8	1.04	213.4	out "
1048	-	500 mL	16.07	6.87	2752.1	-101.7	0.98	173.9	155 "
1051	-	500 mL	16.01	6.88	2795.5	-104.0	0.89	150.8	120 Cloudy/grey
1054	-	500 mL	16.22	6.89	2790.8	-106.9	0.82	135.4	90.1 cloudy
1059	-	1000 mL	16.08	6.92	2789.5	-111.2	0.60	114.3	78.4 "
1104	-	1000 mL	16.04	6.93	2795.9	-116.0	0.55	40.1	58.0 "
1109	-	1000 mL	15.92	6.97	2720.3	-126.8	0.42	55.3	34.1 colorless
1114	-	1000 mL	15.98	6.99	2575.7	-130.0	0.27	39.50	25.7 "
1119	-	1000 mL	15.97	6.99	2652.6	-131.7	0.24	38.7	21.5 "
1125	-	Sample							

↓ 0:5



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 06

3. SAMPLE COLLECTION: Method Peristaltic pump for PFAS and bailer for VOCs.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-06-0624 Time Sampled: 1125

4. COMMENTS: NONE
Depth of sample intake = -2' from TD
QA/QC Sample Collected = NONE

[Signature]
Sampler (Signature)

Emma Brady
(Print Name)



**GROUNDWATER
SAMPLE COLLECTION RECORD**

Well No. MW- 09

Job No.: 193709909 Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa Date: 6/4/2024

Weather Conditions: 78°, Cloudy

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h)	<u>14.78</u> feet	Well Diameter	<u>2-inch</u> inner diameter
b. Depth to Water	<u>8.62</u> feet	Three Well Volumes	<u>3.00</u> gallons
c. Length of Water Column	<u>6.16</u> feet	One System Volume	<u>1.004</u> gal

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 144547) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N=1034834) w/Flow Through Cell Hanna digital turbidity meter (S/N=05100084601)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec.Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
1144	<u>8.73</u>	Start						Troll/Hanna	
1147	<u>8.67</u>	<u>500ml</u>	<u>15.92</u>	<u>6.46</u>	<u>501.86</u>	<u>279.0</u>	<u>5.52</u>	<u>1,180</u> over	<u>cloudy / tan</u>
1150	<u>8.68</u>	<u>500ml</u>	<u>15.41</u>	<u>6.46</u>	<u>490.96</u>	<u>273.2</u>	<u>5.58</u>	<u>645.9</u> over	<u>"</u>
1153	<u>8.63</u>	<u>1000ml</u>	<u>15.96</u>	<u>6.46</u>	<u>478.27</u>	<u>268.0</u>	<u>5.44</u>	<u>413.7</u> <u>494</u>	<u>"</u>
1157	<u>"</u>	<u>1000ml</u>	<u>16.43</u>	<u>6.48</u>	<u>463.17</u>	<u>261.0</u>	<u>5.30</u>	<u>264.7</u> <u>280</u>	<u>cloudy</u>
1201	<u>"</u>	<u>500ml</u>	<u>16.53</u>	<u>6.50</u>	<u>456.08</u>	<u>256.7</u>	<u>5.15</u>	<u>196.3</u> <u>170</u>	<u>"</u>
1204	<u>"</u>	<u>500ml</u>	<u>15.57</u>	<u>6.52</u>	<u>450.03</u>	<u>248.3</u>	<u>5.08</u>	<u>110.8</u> <u>102</u>	<u>"</u>
1207	<u>"</u>	<u>500ml</u>	<u>15.59</u>	<u>6.52</u>	<u>446.97</u>	<u>245.3</u>	<u>5.02</u>	<u>101.2</u> <u>85.6</u>	<u>"</u>
1211	<u>"</u>	<u>500ml</u>	<u>15.89</u>	<u>6.53</u>	<u>440.7</u>	<u>237.5</u>	<u>4.84</u>	<u>68.9</u> <u>57.7</u>	<u>"</u>
1215	<u>"</u>	<u>500ml</u>	<u>15.92</u>	<u>6.52</u>	<u>441.8</u>	<u>232.7</u>	<u>4.93</u>	<u>54.5</u> <u>48.4</u>	<u>"</u>
1219	<u>"</u>	<u>500ml</u>	<u>15.75</u>	<u>6.52</u>	<u>438.1</u>	<u>227.2</u>	<u>4.89</u>	<u>40.0</u> <u>30.2</u>	<u>"</u>
1224	<u>"</u>	<u>500ml</u>	<u>15.87</u>	<u>6.53</u>	<u>440.9</u>	<u>233.6</u>	<u>4.94</u>	<u>34.8</u> <u>27.7</u>	<u>colorless</u>
1230		Sample							

↓ Dis



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW- 12

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 6/6/2024

Weather Conditions: 75^o, Sunny

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h) 13.93 feet

b. Depth to Water 6.44 feet

c. Length of Water Column 7.49 feet

Well Diameter 2-inch inner diameter

Three Well Volumes 3.66 gallons

One System Volume 1.22

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 144547) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N=1034834) w/Flow Through Cell Hanna digital turbidity meter (S/N = 05100084101)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec.Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
0907	-	Start						Troll/Hanna	
0910	-	500ml	15.90	7.16	1497.0	-15.6	0.03	1052 over	Brown
0913	-	500ml	15.61	7.13	1449.8	-20.7	0.08	175.2 117	Light Brn
0916	-	500ml	15.75	7.10	1426.3	68.8	0.18	175.9 103	"
0920	-	500ml	15.55	7.10	1412.3	103.8	0.35	139.7 90.2	Cloudy
0923	-	500ml	15.38	7.12	1404.3	2.6	0.37	126.4 79.4	Colorless
0926	-	500ml	15.48	7.13	1393.0	-8.1	0.32	101.6 67.0	"
0929	-	500ml	15.42	7.13	1375.0	-11.6	0.30	67.6 45.0	"
0932	-	500ml	15.46	7.13	1365.5	-12.5	0.31	45.6 27.3	"
0935	-	500ml	15.44	7.12	1347.2	-13.6	0.38	32.1 18.4	"
0940	-	Sample							



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 12

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: <u>40-mL vial (3)</u>	Preservation: <u>None</u>	Analysis Req.: <u>RSK 175 CO2</u>
Container Type: <u>40-mL vial (2)</u>	Preservation: <u>Sulfuric Acid</u>	Analysis Req.: <u>9060A - TOC</u>
Container Type: <u>250-mL Poly (1)</u>	Preservation: <u>None</u>	Analysis Req.: <u>9056A - ORGFM</u>
Container Type: <u>250-mL Poly (1)</u>	Preservation: <u>Nitric Acid</u>	Analysis Req.: <u>6020B - Dissolved Fe and Mn</u>
Container Type: <u>500-mL Poly (1)</u>	Preservation: <u>NaOH</u>	Analysis Req.: <u>SM 4500 S2 F - Sulfide</u>
Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCL</u>	Analysis Req.: <u>RSK 175 - Dissolved Gasses (GC)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-12-0624 Time Sampled: 0940

4. COMMENTS: DUP - 01 ✓
Depth of sample intake = ~2' above TD
QA/QC Sample Collected = DUP - 01 at ~~0100~~

Em Brady
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 14

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-14-0624 Time Sampled: 1810

4. COMMENTS: NONE
Depth of sample intake = -2' from TD
QA/QC Sample Collected = None


Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW - 15

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: 40-mL vial (3)	Preservation: HCl	Analysis Req.: VOCs-(SW-846 8260)
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-15-0624 Time Sampled: 1435

4. COMMENTS: NONE
Depth of sample intake = ~2' from TD
QA/QC Sample Collected = None

[Signature]
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW - 16

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-16-0624 Time Sampled: 1330

4. COMMENTS: NONE
Depth of sample intake = ~2' from TD
QA/QC Sample Collected = None

[Signature]
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW - 18

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 6/4/2024

Weather Conditions: 80° Sunny

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h) 13.84 feet

b. Depth to Water 6.83 feet

c. Length of Water Column 7.01 feet

Well Diameter 2-inch inner diameter

Three Well Volumes 3.42 gallons

One System Volume 1.14

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N=199547) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N=1034839 w/Flow Cell)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec.Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
<u>1624</u>	<u>6.56</u>	<u>Start</u>							
<u>1627</u>	<u>6.71</u>	<u>500ml</u>	<u>17.39</u>	<u>6.89</u>	<u>1956.2</u>	<u>-98.9</u>	<u>0.17</u>	<u>456/428</u>	<u>cloudy</u>
<u>1630</u>	<u>6.71</u>	<u>500ml</u>	<u>16.84</u>	<u>6.89</u>	<u>1950.9</u>	<u>-106.0</u>	<u>0.10</u>	<u>339/281</u>	<u>"</u>
<u>1634</u>	<u>6.75</u>	<u>500ml</u>	<u>16.46</u>	<u>6.89</u>	<u>1940.1</u>	<u>-111.5</u>	<u>0.05</u>	<u>257/221</u>	<u>"</u>
<u>1637</u>	<u>6.75</u>	<u>500ml</u>	<u>16.20</u>	<u>6.89</u>	<u>1932.3</u>	<u>-114.5</u>	<u>0.03</u>	<u>140/133</u>	<u>"</u>
<u>1640</u>	<u>6.76</u>	<u>500ml</u>	<u>16.68</u>	<u>6.89</u>	<u>1931.0</u>	<u>-116.4</u>	<u>0.08</u>	<u>157/116</u>	<u>"</u>
<u>1644</u>	<u>6.76</u>	<u>500ml</u>	<u>15.92</u>	<u>6.90</u>	<u>1919.4</u>	<u>-119.3</u>	<u>0.01</u>	<u>132/101</u>	<u>"</u>
<u>1647</u>	<u>6.74</u>	<u>500ml</u>	<u>15.74</u>	<u>6.90</u>	<u>1916.7</u>	<u>-121.7</u>	<u>0.00</u>	<u>105/75.4</u>	<u>"</u>
<u>1650</u>	<u>6.79</u>	<u>500ml</u>	<u>15.83</u>	<u>6.90</u>	<u>1917.1</u>	<u>-123.1</u>	<u>0.00</u>	<u>91.5/69.9</u>	<u>colorless</u>
<u>1653</u>	<u>6.79</u>	<u>500ml</u>	<u>15.71</u>	<u>6.90</u>	<u>1910.4</u>	<u>-124.3</u>	<u>0.00</u>	<u>84.2/64.1</u>	<u>"</u>
<u>1657</u>	<u>"</u>	<u>500ml</u>	<u>16.05</u>	<u>6.91</u>	<u>1911.3</u>	<u>-126.0</u>	<u>0.00</u>	<u>65.5/52.4</u>	<u>"</u>
<u>1700</u>	<u>"</u>	<u>"</u>	<u>15.96</u>	<u>6.91</u>	<u>1912.8</u>	<u>-127.1</u>	<u>0.00</u>	<u>71.7/45.9</u>	<u>"</u>
<u>1703</u>	<u>6.80</u>	<u>"</u>	<u>15.80</u>	<u>6.92</u>	<u>1913.9</u>	<u>-127.1</u>	<u>0.00</u>	<u>65.8/39.5</u>	<u>"</u>
<u>1706</u>	<u>6.80</u>	<u>"</u>	<u>15.87</u>	<u>6.92</u>	<u>1910.4</u>	<u>-127.7</u>	<u>0.00</u>	<u>57.3/35.7</u>	<u>"</u>
<u>1710</u>	<u>—</u>	<u>sample</u>							



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW - 01

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 9/5/2024

Weather Conditions: 60's °F. Fair, smphgsw

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h)	<u>11.11 feet</u>	Well Diameter	<u>2-inch inner diameter</u>
b. Depth to Water	<u>6.24 feet</u>	Three Well Volumes	<u>2.38 gallons</u>
c. Length of Water Column	<u>4.87 feet</u>	One System Volume	<u>~400 mL</u>

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 11439) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 1034955) w/Flow Through Cell Hanna digital turbidity meter (S/N = E001643)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec. Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)	
075345	6.32	Start						Troll/Hanna		
075415	6.49	Full Cell	18.98	6.52	1,596.1	-35.4	0.72	169.11	cloudy	
075645	6.66	+500	18.98	6.49	1,329.1	-57.7	0.16	36.57	80.1	clr
080000	6.80	+500	19.26	6.48	1,336.7	-61.8	0.15	28.09	51.0	clr
0800345	6.93	+500	19.43	6.49	1,324.1	-59.8	0.16	20.85	40.5	clr
180830	7.08	+500	19.61	6.45	1,279.6	-69.1	0.18	3.55	21.1	clr
081215	7.25	+500	19.77	6.39	1,261.3	-88.0	0.15	1.03	7.99	clr
081615	7.41	+500	19.81	6.40	1,267.9	-96.5	0.15	1.16	7.66	clr
082000	7.61	+500	19.86	6.41	1,276.2	-103.9	0.12	1.00	7.50	clr
082330	7.78	+500	19.88	6.41	1,291.7	-109.4	0.10	1.84	7.26	clr
082715	7.97	+500	19.83	6.45	1,202.1	-116.5	0.09	2.00	7.41	clr
083030	8.14	+500	19.80	6.49	1,315.0	-119.1	0.07	2.04	7.50	clr
083415	8.29	+500	19.75	6.57	1,313.7	-112.0	0.10	1.67	5.02	clr
083745	8.44	+500	19.71	6.53	1,314.8	-109.9	0.07	2.40	6.12	clr

↓ DC
↓ P

try to stabilize DO

Handwritten signature

ST @ 0840



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW - 01

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: <u>40-mL vial (3)</u>	Preservation: <u>None</u>	Analysis Req.: <u>RSK 175 CO2</u>
Container Type: <u>40-mL vial (2)</u>	Preservation: <u>Sulfuric Acid</u>	Analysis Req.: <u>9060A - TOC</u>
Container Type: <u>250-mL Poly (1)</u>	Preservation: <u>None</u>	Analysis Req.: <u>9056A - ORGFM</u>
Container Type: <u>250-mL Poly (1)</u>	Preservation: <u>Nitric Acid</u>	Analysis Req.: <u>6020B - Dissolved Fe and Mn</u>
Container Type: <u>500-mL Poly (1)</u>	Preservation: <u>NaOH</u>	Analysis Req.: <u>SM 4500 S2 F - Sulfide</u>
Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCL</u>	Analysis Req.: <u>RSK 175 - Dissolved Gasses (GC)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-01 Time Sampled: 0840

4. COMMENTS:

Depth of sample intake = ~10'

QA/QC Sample Collected = -

Sean R. Clary

Sampler (Signature)

Sean R. Clary

(Print Name)



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW- 09

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 9/4/2024

Weather Conditions: ~72°F Fair, 6mph SSE

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h)	<u>14.78 feet</u>	Well Diameter	<u>2-inch inner diameter</u>
b. Depth to Water	<u>8.50 feet</u>	Three Well Volumes	<u>3.1 gallons</u>
c. Length of Water Column	<u>6.28 feet</u>	One System Volume	<u>~400 mL</u>

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 11440) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 1034455) w/Flow Through Cell Hanna digital turbidity meter (S/N = E001643)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec. Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
110815	8.57	Start	Start					Troll/Hanna	
111045	8.58	Fill Cell	21.35	6.56	629.15	214.7	2.56	4.002 260	cloudy/grey
111330	8.60	+500	21.44	6.43	609.12	233.5	1.36	6.979 260	brown/grey
111545	8.61	+500	19.38	6.29	485.62	241.3	1.65	7.519 260	brown
111730	8.61	+500	19.30	6.23	467.55	240.3	1.74	3.665 260	nd brown
111945	8.61	+500	19.01	6.27	465.52	244.9	2.07	7.849.1 260	Dk cloudy
112200	8.63	+500	18.90	6.17	452.76	246.4	1.64	1.602 260	nd cloudy
112415	8.62	+500	19.02	6.17	446.50	237.5	1.50	1.109 260	"
112630	8.62	+500	18.96	6.21	445.48	215.9	1.31	754.12 950	cloudy
112845	8.62	+500	18.87	6.21	445.23	211.4	1.23	660.21 801	"
113045	8.62	+500	19.96	6.27	436.48	207.3	1.15	580.66 674	"
113300	8.62	+500	18.89	6.24	427.13	206.4	1.23	444.76 580	nd cloudy
113515	8.62	+500	18.86	6.25	421.34	204.7	1.25	404.16 513	"
113730	8.62	+500	18.83	6.27	418.42	201.6	1.31	322.51 465	"
113945	8.62	+500	18.86	6.27	414.96	199.9	1.37	326.31 411	"
114200	8.62	+500	18.41	6.28	418.92	196.4	1.43	294.61 350	"
114415	8.62	+500	18.76	6.29	418.73	192.4	1.51	572.11 840	"
114630	8.62	+500	18.90	6.30	417.54	196.6	1.56	372.31 484	"
114845	8.62	+500	18.94	6.31	416.11	194.7	1.66	256.01 272	"
115100	8.62	+500	18.85	6.32	413.36	192.0	1.69	199.11 391	"
115315	8.62	+500	18.97	6.34	413.71	190.0	1.79	227.31 240	"
115530	8.62	+500	18.94	6.35	411.40	188.2	1.80	215.36 220	"
115745	8.62	+500	18.43	6.35	410.11	182.9	1.81	218.12 226	"

turbid
turbid

E001 off pump @ 1100 STA 1200



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW- 11

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 9/4/2024

Weather Conditions: ~77°F, Fair, 7 mph SE

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h) 15.78 feet

b. Depth to Water 7.35 feet

c. Length of Water Column 8.43 feet

Well Diameter 2-inch inner diameter

Three Well Volumes 4.1 gallons

One System Volume ~2400 mL

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 11439) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 034955) w/Flow Through Cell Hanna digital turbidity meter (S/N = 60-1643)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec. Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)		Color (visual)
161815	7.36	Start						Troll/Hanna		
161945	7.39	Full cell	24.55	6.67	2436.0	-83.4	2.12	613	-	DK grey
162230	7.40	+500	21.54	6.71	2,588.0	-100.2	0.05	1,291.0	420	"
162445	7.43	+500	20.97	6.69	2,570.1	-100.8	0.01	873.11	220	"
162700	7.45	+500	20.88	6.68	2,555.1	-102.5	0.02	880.66	220	"
163000	7.47	+500	20.70	6.69	2,563.2	-104.5	0.01	577.22	220	"
163245	7.47	+500	20.63	6.69	2,587.6	-106.8	0.00	585.16	498	"
163600	7.44	+500	20.45	6.71	2,617.7	-108.3	0.00	418.88	412	and grey
163745	7.44	+500	20.34	6.77	2,663.6	-110.2	0.00	354.11	338	"
164000	7.44	+500	20.41	6.72	2,693.8	-111.8	0.00	465.12	300	"
164245	7.44	+500	20.34	6.73	2,734.1	-113.5	0.00	629.71	283	"
164500	7.44	+500	20.17	6.74	2,782.5	-115.2	0.00	227.01	195	lt grey
164715	7.44	+500	20.30	6.75	2,796.1	-116.0	0.00	141.62	158	"
165000	7.44	+500	20.38	6.76	2,807.3	-117.1	0.04	259.6	187	"
165230	7.44	+500	20.35	6.76	2,810.1	-117.9	0.02	288.1	194	" Turb 149
165500	7.44	+500	20.29	6.76	2,820.9	-119.2	0.00	184.01	162	cloudy
165730	7.44	+500	20.31	6.76	2,830.6	-120.2	0.00	180.01	155	cloudy

STA (1700)

STA to SS su
sample BC turb
trend

MS/MSD
(Bottle/cuvette was wet)



**GROUNDWATER
SAMPLE COLLECTION RECORD**

Well No. MW- 12

Job No.: 193709909 **Client:** Rockwell Collins-35th St

Location: Cedar Rapids, Iowa **Date:** 9/5/2024

Weather Conditions: ~75°F mostly cloudy, 9 mph NNW

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h)	13.93 feet	Well Diameter	2-inch inner diameter
b. Depth to Water	6.91 feet	Three Well Volumes	3.5 gallons
c. Length of Water Column	7.12 feet	One System Volume	~400 mL

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 11440) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 103445) w/Flow Through Cell Hanna digital turbidity meter (S/N = E001643)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec.Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
142252	6.61	Start						Troll/Hanna	
142454	6.66	Cell full	23.07	7.14	1127.9	-11.8	3.05	1028.4 220	Brown
142626	6.74	+500	20.12	6.94	1228.7	-2.5	0.39	1006.2 220	"
142824	6.74	+500	19.90	6.90	1227.6	-1.2	0.18	1632.4 120	"
143016	6.78	+500	19.38	6.88	1222.7	3.5	0.13	1135.1 100	"
143128	6.78	+500	20.09	6.88	1222.5	3.2	0.12	1807.8 220	"
143339	6.74	+500	20.22	6.88	1227.7	5.4	0.12	576.4 658	"
143545	6.74	+500	20.48	6.89	1222.3	0.8	0.12	721.11 611	"
143800	6.74	+500	20.52	6.90	1217.3	4.6	0.12	449.8 218	"
144020	6.74	+500	20.64	6.92	1219.8	4.7	0.11	414.9 245	"
144313	"	+500	20.56	6.92	1223.0	6.2	0.11	368.1 215	Cloudy
144532	"	+500	20.60	6.92	1229.5	-1.6	0.10	272.1 147	"
144815	"	+500	20.57	6.93	1234.4	7.6	0.10	104.74 81.2	"
145032	"	+500	20.60	6.93	1237.3	10.0	0.10	139.47 98.1	"
145246	"	+500	20.53	6.94	1244.7	15.3	0.09	98.61 85.3	"
145428	"	+500	20.54	6.94	1242.6	16.6	0.09	98.13 47.3	Colorless
145722	"	+500	20.59	6.95	1252.7	17.9	0.08	48.71 34.7	"
1500		Sample							



**GROUNDWATER
SAMPLE COLLECTION RECORD**

Well No. MW- 12 .

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: <u>40-mL vial (3)</u>	Preservation: <u>None</u>	Analysis Req.: <u>RSK 175 CO2</u>
Container Type: <u>40-mL vial (2)</u>	Preservation: <u>Sulfuric Acid</u>	Analysis Req.: <u>9060A - TOC</u>
Container Type: <u>250-mL Poly (1)</u>	Preservation: <u>None</u>	Analysis Req.: <u>9056A - ORGFM</u>
Container Type: <u>250-mL Poly (1)</u>	Preservation: <u>Nitric Acid</u>	Analysis Req.: <u>6020B - Dissolved Fe and Mn</u>
Container Type: <u>500-mL Poly (1)</u>	Preservation: <u>NaOH</u>	Analysis Req.: <u>SM 4500 S2 F - Sulfide</u>
Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCL</u>	Analysis Req.: <u>RSK 175 - Dissolved Gasses (GC)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-12 Time Sampled: 1500

4. COMMENTS: ~~DUP 01~~ ~~DUP 02~~ ~~DUP 03~~ ~~DUP 04~~ ~~DUP 05~~ ~~DUP 06~~ ~~DUP 07~~ ~~DUP 08~~ ~~DUP 09~~ ~~DUP 10~~ ~~DUP 11~~ ~~DUP 12~~ ~~DUP 13~~ ~~DUP 14~~ ~~DUP 15~~ ~~DUP 16~~ ~~DUP 17~~ ~~DUP 18~~ ~~DUP 19~~ ~~DUP 20~~ ~~DUP 21~~ ~~DUP 22~~ ~~DUP 23~~ ~~DUP 24~~ ~~DUP 25~~ ~~DUP 26~~ ~~DUP 27~~ ~~DUP 28~~ ~~DUP 29~~ ~~DUP 30~~ ~~DUP 31~~ ~~DUP 32~~ ~~DUP 33~~ ~~DUP 34~~ ~~DUP 35~~ ~~DUP 36~~ ~~DUP 37~~ ~~DUP 38~~ ~~DUP 39~~ ~~DUP 40~~ ~~DUP 41~~ ~~DUP 42~~ ~~DUP 43~~ ~~DUP 44~~ ~~DUP 45~~ ~~DUP 46~~ ~~DUP 47~~ ~~DUP 48~~ ~~DUP 49~~ ~~DUP 50~~ ~~DUP 51~~ ~~DUP 52~~ ~~DUP 53~~ ~~DUP 54~~ ~~DUP 55~~ ~~DUP 56~~ ~~DUP 57~~ ~~DUP 58~~ ~~DUP 59~~ ~~DUP 60~~ ~~DUP 61~~ ~~DUP 62~~ ~~DUP 63~~ ~~DUP 64~~ ~~DUP 65~~ ~~DUP 66~~ ~~DUP 67~~ ~~DUP 68~~ ~~DUP 69~~ ~~DUP 70~~ ~~DUP 71~~ ~~DUP 72~~ ~~DUP 73~~ ~~DUP 74~~ ~~DUP 75~~ ~~DUP 76~~ ~~DUP 77~~ ~~DUP 78~~ ~~DUP 79~~ ~~DUP 80~~ ~~DUP 81~~ ~~DUP 82~~ ~~DUP 83~~ ~~DUP 84~~ ~~DUP 85~~ ~~DUP 86~~ ~~DUP 87~~ ~~DUP 88~~ ~~DUP 89~~ ~~DUP 90~~ ~~DUP 91~~ ~~DUP 92~~ ~~DUP 93~~ ~~DUP 94~~ ~~DUP 95~~ ~~DUP 96~~ ~~DUP 97~~ ~~DUP 98~~ ~~DUP 99~~ ~~DUP 100~~ FCRA

Depth of sample intake = ~13'

QA/QC Sample Collected = ~~DUP 01~~ at 0100

[Signature]
Sampler (Signature)

Emma Bradley
(Print Name)



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW- 13

Job No.: 193709909 Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa Date: 9/5/2024

Weather Conditions: 79°F, cloudy

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h)	<u>15.23</u> feet	Well Diameter	<u>2-inch</u> inner diameter
b. Depth to Water	<u>6.48</u> feet	Three Well Volumes	<u>4.3</u> gallons
c. Length of Water Column	<u>8.75</u> feet	One System Volume	<u>~400mL</u>

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 11440) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N=1034455) w/Flow Through Cell Hanna digital turbidity meter (S/N= E001643)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec. Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
1614	6.48	Start						Troll/Hanna	
1616.13	6.55	10M Full	21.75	6.85	1365.4	60.6	2.57	343.7	Colorless
1618.32	6.58	+500	18.71	6.86	1578.8	56.0	0.55	243.8	"
1621.57	6.59	+500	17.59	6.79	1433.1	58.4	0.25	170.0	"
1624.57	6.54	+500	19.66	6.75	1308.0	57.5	0.22	137.3	"
1626.10	6.59	+500	14.87	6.73	1263.5	70.6	0.21	107.7	"
1630.02	6.59	+500	14.89	6.74	1244.2	75.4	0.23	76.1	"
1633.34	6.60	+500	19.99	6.74	1250.2	69.0	0.35	54.8	"
1636.19	6.60	+500	14.94	6.75	1259.9	48.6	0.50	58.9	"
1639.18	6.60	+500	20.00	6.75	1265.0	54.7	0.48	52.9	"
1645		Sample							



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 13 .

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-13 Time Sampled: 1645

4. COMMENTS: Dup-02 @ —
Depth of sample intake = ~14.25
QA/QC Sample Collected = None

[Signature]
Sampler (Signature)

Emma Boly
(Print Name)



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW - 15

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-15 Time Sampled: 1417

4. COMMENTS: _____

Depth of sample intake = ~141

QA/QC Sample Collected = None

Sean R Clary

Sampler (Signature)

Sean R Clary

(Print Name)



**GROUNDWATER
SAMPLE COLLECTION RECORD**

Well No. MW - 16

Job No.: 193709909 Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa Date: 9/4/2024

Weather Conditions: ~74°F, Fair, 9 mph SSE

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h)	<u>15.18 feet</u>	Well Diameter	<u>2-inch inner diameter</u>
b. Depth to Water	<u>7.02 feet</u>	Three Well Volumes	<u>4</u> gallons
c. Length of Water Column	<u>8.16 feet</u>	One System Volume	<u>~900 mL</u>

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 114439) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP.

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 1034955) w/Flow Through Cell Hanna digital turbidity meter (S/N = K0011643)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec. Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)	
130715	7.03	Start						Troll/Hanna		
130930	7.05	Fill well	20.41	6.63	2,726.9	139.8	3.09	239.40	251	cloudy
131115	7.05	+500	18.73	6.59	2,930.4	149.3	0.48	234.41	201	"
131315	7.05	+500	18.15	6.58	2,800.0	134.5	0.25	199.70	154	"
131515	7.05	+500	18.15	6.58	2,751.6	122.7	0.18	193.43	111	1+ cloudy
131715	7.05	+500	18.02	6.58	2,726.6	116.3	0.15	165.93	103	"
131915	7.06	+500	17.95	6.58	2,704.7	113.5	0.13	125.45	99.9	"
132115	7.06	+500	17.91	6.59	2,695.2	112.6	0.13	112.66	95.7	"

N₂ was off on 9/13/23

gpk

ST@ 1323



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW - 17

Job No.: 193709909 Client: Rockwell Collins-35th St
 Location: Cedar Rapids, Iowa Date: 9/5/2024
 Weather Conditions: 75°F, Cloudy

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h) 14.78 feet Well Diameter 2-inch inner diameter
 b. Depth to Water 8.14 feet Three Well Volumes 3.2 gallons
 c. Length of Water Column 6.64 feet One System Volume ~400 mL

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 11439) with disposable bladder and dedicated tubing.
 b. Purge Requirements Low Flow Stabilization according to SOP.
 c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 1034955) w/Flow Through Cell Hanna digital turbidity meter (S/N = E0016431)

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec. Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
100700	8.06	Start						Troll/Hanna	
101000	8.20	Full Cell	22.14	6.58	1,461.8	-91.9	0.95	50.0	-
101515	8.25	+500	21.44	6.60	2,251.0	-100.1	0.19	32.22	43.7
101845	8.56	+500	20.57	6.60	2,123.0	-99.8	0.13	27.95	42.1
102100	8.75	+500	20.61	6.59	1,912.6	-101.1	0.07	27.18	39.8
102600	8.97	+500	21.04	6.57	1,769.5	-102.0	0.04	22.66	35.5
103145	9.24	+500	21.52	6.54	1,671.4	-99.2	0.04	20.59	28.4
103245	9.65	+500	21.87	6.52	1,607.2	-97.8	0.02	14.95	23.4
104215	10.08	+500	21.61	6.49	1,575.1	-93.6	0.02	10.01	14.4
104700	10.36	+500	21.42	6.49	1,498.2	-88.8	0.01	7.86	10.9
105145	10.67	+500	21.55	6.49	1,483.6	-85.8	0.02	5.80	10.5
105630	10.85	+500	21.64	6.47	1,522.1	-85.2	0.002	6.43	9.08
110045	11.25	+500	21.54	6.49	1,572.1	-85.9	0.01	6.32	9.33
110530	11.55	+500	21.51	6.50	1,617.2	-87.4	0.01	6.57	14.2
111023	11.87	+500	21.47	6.53	1,698.0	-80.7	0.01	7.28	11.3
111451	12.15	+500	21.53	6.55	1,763.5	-82.6	0.01	8.41	12.4
111921	12.46	+500	21.49	6.55	1,814.6	-81.2	0.02	8.60	13.0
112453	12.76	+500	21.32	6.53	1,821.0	-88.1	0.01	7.26	14.2
112849	13.03	+500	20.90	6.55	1,964.5	-80.7	0.00	5.80	12.0
113315	13.30	+500	20.77	6.58	2,001.4	-45.0	0.00	5.78	13.2
113710	13.50	+500	20.72	6.59	2,122.9	-97.4	0.00	4.82	15.4
114125	ON PUMP	+500	20.78	6.59	2,183.7	-96.7	0.01	4.56	17.5
1155		Sample							

PT
 PV
 ↓ DC
 TP
 try to stabilize DO

OK



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW- 17

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: 40-mL vial (3)	Preservation: HCl	Analysis Req.: VOCs-(SW-846 8260)
Container Type: 40-mL vial (3)	Preservation: None	Analysis Req.: RSK 175 CO2
Container Type: 40-mL vial (2)	Preservation: Sulfuric Acid	Analysis Req.: 9060A - TOC
Container Type: 250-mL Poly (1)	Preservation: None	Analysis Req.: 9056A - ORGFM
Container Type: 250-mL Poly (1)	Preservation: Nitric Acid	Analysis Req.: 6020B - Dissolved Fe and Mn
Container Type: 500-mL Poly (1)	Preservation: NaOH	Analysis Req.: SM 4500 S2 F - Sulfide
Container Type: 40-mL vial (3)	Preservation: HCL	Analysis Req.: RSK 175 - Dissolved Gasses (GC)
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-17 Time Sampled: 1155

4. COMMENTS: # let recharge 10 minutes then sample
 Depth of sample intake = ~13.75'
 QA/QC Sample Collected = None
 Filled HCL vial's then let recharge

Sampler (Signature)

EMMA BRADY (Print Name)



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW - 18

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 9/5/2024

Weather Conditions: 79°F, Clear, Sunny

1. WATER LEVEL DATA: (from TOC)

- a. Total Well Length (h) 13.84 feet Well Diameter 2-inch inner diameter
- b. Depth to Water 6.92 feet Three Well Volumes 3.4 gallons
- c. Length of Water Column 6.92 feet One System Volume ~400 mL

2. WELL PURGING DATA:

- a. Purge Method SS portable bladder pump (S/N= 11440) with disposable bladder and dedicated tubing.
- b. Purge Requirements Low Flow Stabilization according to SOP. HANNA E001643
- c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 1034953) w/Flow Cell

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec. Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
1737.46	6.45	Start							
1734.33	7.05	Cell Full	21.83	6.81	1785.2	-42.0	3.03	943.99	Brown
1741.53	7.10	+500	19.59	6.74	1924.9	-47.7	0.24	7087.80	"
1744.22	7.15	+500	19.06	6.73	1925.7	-49.1	0.08	784/660	"
1747.10	7.16	+500	18.93	6.73	1919.6	-50.2	0.06	609/620	"
1750.01	7.16	+500	18.88	6.73	1917.2	-51.6	0.05	530/573	"
1752.10	7.16	+500	18.83	6.74	1916.7	-52.6	0.04	408/483	"
1755.00	7.16	+500	18.75	6.74	1912.7	-53.9	0.04	386/446	Cloudy
1757.15	7.17	+500	18.77	6.75	1912.9	-54.8	0.03	341/311	"
1759.59	7.17	+500	18.64	6.75	1911.9	-55.8	0.03	286/248	"
1802.38	7.17	+500	18.57	6.75	1912.3	-56.5	0.03	238/210	"
1804.26	7.17	+500	18.55	6.76	1904.4	-56.9	0.03	211/174	"
1806.04	7.17	+500	18.51	6.76	1910.5	-57.3	0.02	195/152	"
1808.17	7.17	+500	18.55	6.76	1908.6	-57.7	0.02	178/145	"
1811.23	7.17	+500	18.48	6.76	1904.4	-58.1	0.02	187/148	"
1813.44	7.17	+500	18.49	6.76	1909.2	-58.4	0.02	153/130	"
18.16.22	7.17	+500	18.40	6.76	1908.1	-58.7	0.02	141/100	"
18.18.20	7.17	+500	18.31	6.76	1906.8	-58.8	0.02	116/94.6	"
1821.34	7.17	+500	18.24	6.76	1907.7	-59.0	0.01	120/45.3	Colorless
1825		Sample							



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW - 18

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-18 Time Sampled: 1825

4. COMMENTS: NONE
Pump inlet ~ 12.8'

[Signature]
Sampler (Signature)

Emma Brady
(Print Name)



GROUNDWATER SAMPLE COLLECTION RECORD

Well No. MW - 19

Job No.: 193709909

Client: Rockwell Collins-35th St

Location: Cedar Rapids, Iowa

Date: 9/5/2024

Weather Conditions: 79°F, Cloudy

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (h) 12.18 feet

b. Depth to Water 6.18 feet

c. Length of Water Column 6 feet

Well Diameter 2-inch inner diameter

Three Well Volumes 2.9 gallons

One System Volume ~400ml

2. WELL PURGING DATA:

a. Purge Method SS portable bladder pump (S/N= 11440) with disposable bladder and dedicated tubing.

b. Purge Requirements Low Flow Stabilization according to SOP. HANNA 60011647

c. Field Testing Equipment Used In-Situ AT600 Multiparameter Meter (S/N = 1034955) w/Flow Cell

Time	DTW (ft)	Volume (mL)	Temp. (°C) (+/- 0.5)	pH (s.u.) (+/- 0.1)	Spec.Cond. (µΩ/cm) (+/- 3%)	ORP (mV) (+/- 10 mV)	DO (mg/L) (+/- 0.3)	Turbidity (NTU) (+/- 10% when >50 NTU)	Color (visual)
1704	6.13	Start							
1705.13	6.25	Cell full	21.33	7.12	560.14	64.3	3.02	120.6	Cloudy
1707.28	6.33	+500	19.65	7.05	542.72	77.9	0.86	42.9/61.4	"
1708.48	6.43	+500	19.34	7.02	533.03	80.9	0.85	35.9/36.1	Colorless
1710.52	6.55	+500	19.50	7.01	523.07	80.4	1.08	33.5/33.5	"
1713.27	6.67	+500	19.71	7.01	515.44	80.9	1.38	28.5/31.1	"
1716.04	6.77	+500	19.98	6.99	508.90	81.7	1.56	20.9/25.6	"
1718.11	6.91	+500	19.88	6.98	505.92	82.0	1.61	21.27/26.6	"
1721		Sample							

STC 1721



GROUNDWATER
SAMPLE COLLECTION RECORD

Well No. MW - 19

3. SAMPLE COLLECTION: Method SS portable bladder pump with disposable bladder and dedicated tubing.

Container Type: <u>40-mL vial (3)</u>	Preservation: <u>HCl</u>	Analysis Req.: <u>VOCs-(SW-846 8260)</u>
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____
Container Type: _____	Preservation: _____	Analysis Req.: _____

Sample ID #: MW-19 Time Sampled: 1721

4. COMMENTS: None
Pump inlet ~ 11.2'

[Signature]
Sampler (Signature)

Emma Brady
(Print)

ATTACHMENT B



ANALYTICAL REPORT

PREPARED FOR

Attn: Steve Varsa
Stantec Consulting Services Inc
11311 Aurora Avenue
Des Moines, Iowa 50322-7904

Generated 1/2/2024 3:47:36 PM

JOB DESCRIPTION

Rockwell Collins - 35th Street

JOB NUMBER

310-271709-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



Generated
1/2/2024 3:47:36 PM

Authorized for release by
Zach Bindert, Client Service Manager
Zach.Bindert@et.eurofinsus.com
(319)277-2401



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Sample Summary	7
Detection Summary	8
Client Sample Results	11
Definitions	32
Surrogate Summary	33
QC Sample Results	35
QC Association	53
Chronicle	57
Certification Summary	61
Method Summary	62
Chain of Custody	63
Receipt Checklists	70

Case Narrative

Client: Stantec Consulting Services Inc
Project: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Job ID: 310-271709-1

Eurofins Cedar Falls

Job Narrative 310-271709-1

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 12/15/2023 3:05 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.1°C and 3.2°C

GC/MS VOA

Method 8260D: The following samples were collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-17-1223 (310-271709-14).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-409603 recovered above the upper control limit for Carbon tetrachloride (29.4%D) and 1,1,1-Trichloroethane (21.7%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-409603/3).

Method 8260D: The laboratory control sample (LCS) for analytical batch 310-409603 recovered outside control limits for the following analytes: Carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 310-409603 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-409725 recovered above the upper control limit for Methyl tert-butyl ether (30.1%D). The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated sample is impacted: (CCV 310-409725/3).

Method 8260D: The following samples were collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-17-1223 (310-271709-14).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-409731 recovered above the upper control limit for Carbon tetrachloride (25.3%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-409731/3).

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

GC VOA

Method RSK_175_CO2: The sample duplicate precision for the following sample associated with analytical batch 570-395448 was outside control limits: (310-271709-J-5 DU). The associated Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD) precision met acceptance criteria.

Method RSK_175: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-17-1223 (310-271709-14).

Eurofins Cedar Falls

Case Narrative

Client: Stantec Consulting Services Inc
Project: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Job ID: 310-271709-1 (Continued)

Eurofins Cedar Falls

Method RSK_175: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-598465.

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

HPLC/IC

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

Metals

Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: MW-17-1223 (310-271709-14). The sample(s) was preserved to the appropriate pH in the laboratory.

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

General Chemistry

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

Eurofins Cedar Falls

Case Narrative

Client: Stantec Consulting Services Inc
Project: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Job ID: 310-271709-2

Eurofins Cedar Falls

Job Narrative 310-271709-2

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 12/15/2023 3:05 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.1°C and 3.2°C

HPLC/IC

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

Eurofins Cedar Falls

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-271709-1	TB-01	Water	12/13/23 07:00	12/15/23 15:05
310-271709-2	DUP-001	Water	12/15/23 01:00	12/15/23 15:05
310-271709-3	MW-01-1223	Water	12/15/23 11:15	12/15/23 15:05
310-271709-4	MW-06-1223	Water	12/14/23 16:15	12/15/23 15:05
310-271709-5	MW-07-1223	Water	12/15/23 12:30	12/15/23 15:05
310-271709-6	MW-08-1223	Water	12/14/23 08:45	12/15/23 15:05
310-271709-7	MW-09-1223	Water	12/13/23 14:45	12/15/23 15:05
310-271709-8	MW-11-1223	Water	12/13/23 15:53	12/15/23 15:05
310-271709-9	MW-12-1223	Water	12/15/23 10:10	12/15/23 15:05
310-271709-10	MW-13-1223	Water	12/14/23 11:35	12/15/23 15:05
310-271709-11	MW-14-1223	Water	12/14/23 10:45	12/15/23 15:05
310-271709-12	MW-15-1223	Water	12/14/23 14:58	12/15/23 15:05
310-271709-13	MW-16-1223	Water	12/14/23 09:45	12/15/23 15:05
310-271709-14	MW-17-1223	Water	12/15/23 08:40	12/15/23 15:05
310-271709-15	MW-18-1223	Water	12/14/23 13:58	12/15/23 15:05
310-271709-16	MW-19-1223	Water	12/14/23 13:00	12/15/23 15:05



Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: TB-01

Lab Sample ID: 310-271709-1

No Detections.

Client Sample ID: DUP-001

Lab Sample ID: 310-271709-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	4250		50.0		ug/L	10		RSK-175	Total/NA
Methane	26.0		1.00		ug/L	1		RSK-175	Total/NA
Chloride	156		20.0		mg/L	20		9056A	Total/NA
Sulfate	41.5		1.00		mg/L	1		9056A	Total/NA
Manganese	0.197		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	2.05		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-01-1223

Lab Sample ID: 310-271709-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	15400		50.0		ug/L	10		RSK-175	Total/NA
Chloride	139		20.0		mg/L	20		9056A	Total/NA
Sulfate	146		20.0		mg/L	20		9056A	Total/NA
Total Organic Carbon	6.47		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-06-1223

Lab Sample ID: 310-271709-4

No Detections.

Client Sample ID: MW-07-1223

Lab Sample ID: 310-271709-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10.3		10.0		ug/L	1		8260D	Total/NA
Benzene	0.600		0.500		ug/L	1		8260D	Total/NA
Carbon disulfide	1.23		1.00		ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	2.02		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	1.17		1.00		ug/L	1		8260D	Total/NA
Carbon dioxide	41900		50.0		ug/L	10		RSK-175	Total/NA
Methane	19100		20.0		ug/L	20		RSK-175	Total/NA
Ethane	13.6		1.00		ug/L	1		RSK-175	Total/NA
Ethene	20.6		1.00		ug/L	1		RSK-175	Total/NA
Chloride	316		20.0		mg/L	20		9056A	Total/NA
Iron	92.2		0.400		mg/L	4		6020B	Dissolved
Manganese	1.09		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	136		10.0		mg/L	10		9060A	Total/NA

Client Sample ID: MW-08-1223

Lab Sample ID: 310-271709-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	44.2		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-09-1223

Lab Sample ID: 310-271709-7

No Detections.

Client Sample ID: MW-11-1223

Lab Sample ID: 310-271709-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16.5		10.0		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	51.9		1.00		ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	2.02		1.00		ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-11-1223 (Continued)

Lab Sample ID: 310-271709-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.34		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	3.48		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-12-1223

Lab Sample ID: 310-271709-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	4870		50.0		ug/L	10		RSK-175	Total/NA
Methane	26.8		1.00		ug/L	1		RSK-175	Total/NA
Chloride	163		20.0		mg/L	20		9056A	Total/NA
Sulfate	41.5		1.00		mg/L	1		9056A	Total/NA
Iron	0.185		0.100		mg/L	1		6020B	Dissolved
Manganese	0.200		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	2.09		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-13-1223

Lab Sample ID: 310-271709-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.07		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-14-1223

Lab Sample ID: 310-271709-11

No Detections.

Client Sample ID: MW-15-1223

Lab Sample ID: 310-271709-12

No Detections.

Client Sample ID: MW-16-1223

Lab Sample ID: 310-271709-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.23		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-17-1223

Lab Sample ID: 310-271709-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	39.5		10.0		ug/L	1		8260D	Total/NA
Benzene	9.72		0.500		ug/L	1		8260D	Total/NA
2-Butanone (MEK)	110		10.0		ug/L	1		8260D	Total/NA
Carbon disulfide	2.31		1.00		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1270		10.0		ug/L	10		8260D	Total/NA
1,1-Dichloroethane	2.31		1.00		ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	12.0		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	69.0		1.00		ug/L	1		8260D	Total/NA
Carbon dioxide	17100		50.0		ug/L	10		RSK-175	Total/NA
Methane	17800		20.0		ug/L	20		RSK-175	Total/NA
Ethane	268		1.00		ug/L	1		RSK-175	Total/NA
Ethene	308		1.00		ug/L	1		RSK-175	Total/NA
Chloride	24.8		20.0		mg/L	20		9056A	Total/NA
Iron	578		0.700		mg/L	7		6020B	Dissolved
Manganese	4.79		0.0700		mg/L	7		6020B	Dissolved
Total Organic Carbon	19.0		1.00		mg/L	1		9060A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-18-1223

Lab Sample ID: 310-271709-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.58		1.00		ug/L	1		8260D	Total/NA
Trichloroethene	1.13		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-19-1223

Lab Sample ID: 310-271709-16

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls



Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: TB-01

Lab Sample ID: 310-271709-1

Date Collected: 12/13/23 07:00

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/19/23 23:43	1
Benzene	<0.500		0.500		ug/L			12/19/23 23:43	1
Bromodichloromethane	<1.00		1.00		ug/L			12/19/23 23:43	1
Bromoform	<5.00		5.00		ug/L			12/19/23 23:43	1
Bromomethane	<4.00		4.00		ug/L			12/19/23 23:43	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/19/23 23:43	1
Carbon disulfide	<1.00		1.00		ug/L			12/19/23 23:43	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/19/23 23:43	1
Chlorobenzene	<1.00		1.00		ug/L			12/19/23 23:43	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/19/23 23:43	1
Chloroethane	<4.00		4.00		ug/L			12/19/23 23:43	1
Chloroform	<3.00		3.00		ug/L			12/19/23 23:43	1
Chloromethane	<3.00		3.00		ug/L			12/19/23 23:43	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/19/23 23:43	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/19/23 23:43	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/19/23 23:43	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/19/23 23:43	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/19/23 23:43	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/19/23 23:43	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/19/23 23:43	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/19/23 23:43	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/19/23 23:43	1
Ethylbenzene	<1.00		1.00		ug/L			12/19/23 23:43	1
2-Hexanone	<10.0		10.0		ug/L			12/19/23 23:43	1
Methylene Chloride	<5.00		5.00		ug/L			12/19/23 23:43	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/19/23 23:43	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/19/23 23:43	1
Naphthalene	<5.00		5.00		ug/L			12/19/23 23:43	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/19/23 23:43	1
Tetrachloroethene	<1.00		1.00		ug/L			12/19/23 23:43	1
Toluene	<1.00		1.00		ug/L			12/19/23 23:43	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/19/23 23:43	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/19/23 23:43	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/19/23 23:43	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/19/23 23:43	1
Trichloroethene	<1.00		1.00		ug/L			12/19/23 23:43	1
Vinyl chloride	<1.00		1.00		ug/L			12/19/23 23:43	1
Xylenes, Total	<3.00		3.00		ug/L			12/19/23 23:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		12/19/23 23:43	1
Dibromofluoromethane (Surr)	115		73 - 130		12/19/23 23:43	1
Toluene-d8 (Surr)	100		80 - 120		12/19/23 23:43	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: DUP-001

Lab Sample ID: 310-271709-2

Date Collected: 12/15/23 01:00

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/21/23 16:00	1
Benzene	<0.500		0.500		ug/L			12/21/23 16:00	1
Bromodichloromethane	<1.00		1.00		ug/L			12/21/23 16:00	1
Bromoform	<5.00		5.00		ug/L			12/21/23 16:00	1
Bromomethane	<4.00		4.00		ug/L			12/21/23 16:00	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/21/23 16:00	1
Carbon disulfide	<1.00		1.00		ug/L			12/21/23 16:00	1
Carbon tetrachloride	<2.00	*+	2.00		ug/L			12/21/23 16:00	1
Chlorobenzene	<1.00		1.00		ug/L			12/21/23 16:00	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/21/23 16:00	1
Chloroethane	<4.00		4.00		ug/L			12/21/23 16:00	1
Chloroform	<3.00		3.00		ug/L			12/21/23 16:00	1
Chloromethane	<3.00		3.00		ug/L			12/21/23 16:00	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 16:00	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 16:00	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 16:00	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 16:00	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 16:00	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/21/23 16:00	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/21/23 16:00	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/21/23 16:00	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/21/23 16:00	1
Ethylbenzene	<1.00		1.00		ug/L			12/21/23 16:00	1
2-Hexanone	<10.0		10.0		ug/L			12/21/23 16:00	1
Methylene Chloride	<5.00		5.00		ug/L			12/21/23 16:00	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/21/23 16:00	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/21/23 16:00	1
Naphthalene	<5.00		5.00		ug/L			12/21/23 16:00	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/21/23 16:00	1
Tetrachloroethene	<1.00		1.00		ug/L			12/21/23 16:00	1
Toluene	<1.00		1.00		ug/L			12/21/23 16:00	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 16:00	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 16:00	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/21/23 16:00	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/21/23 16:00	1
Trichloroethene	<1.00		1.00		ug/L			12/21/23 16:00	1
Vinyl chloride	<1.00		1.00		ug/L			12/21/23 16:00	1
Xylenes, Total	<3.00		3.00		ug/L			12/21/23 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		12/21/23 16:00	1
Dibromofluoromethane (Surr)	114		73 - 130		12/21/23 16:00	1
Toluene-d8 (Surr)	98		80 - 120		12/21/23 16:00	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	4250		50.0		ug/L			12/21/23 19:19	10
Methane	26.0		1.00		ug/L			12/21/23 15:33	1
Ethane	<1.00		1.00		ug/L			12/21/23 15:33	1
Ethene	<1.00		1.00		ug/L			12/21/23 15:33	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: DUP-001

Lab Sample ID: 310-271709-2

Date Collected: 12/15/23 01:00

Matrix: Water

Date Received: 12/15/23 15:05

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	111		60 - 140		12/21/23 15:33	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	156		20.0		mg/L			12/18/23 15:18	20
Nitrate as N	<0.200		0.200		mg/L			12/15/23 19:04	1
Sulfate	41.5		1.00		mg/L			12/15/23 19:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.100		0.100		mg/L		12/19/23 09:10	12/20/23 12:14	1
Manganese	0.197		0.0100		mg/L		12/19/23 09:10	12/20/23 12:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	2.05		1.00		mg/L			12/28/23 03:34	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		12/21/23 10:40	12/21/23 10:40	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-01-1223

Lab Sample ID: 310-271709-3

Date Collected: 12/15/23 11:15

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/21/23 16:23	1
Benzene	<0.500		0.500		ug/L			12/21/23 16:23	1
Bromodichloromethane	<1.00		1.00		ug/L			12/21/23 16:23	1
Bromoform	<5.00		5.00		ug/L			12/21/23 16:23	1
Bromomethane	<4.00		4.00		ug/L			12/21/23 16:23	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/21/23 16:23	1
Carbon disulfide	<1.00		1.00		ug/L			12/21/23 16:23	1
Carbon tetrachloride	<2.00	*+	2.00		ug/L			12/21/23 16:23	1
Chlorobenzene	<1.00		1.00		ug/L			12/21/23 16:23	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/21/23 16:23	1
Chloroethane	<4.00		4.00		ug/L			12/21/23 16:23	1
Chloroform	<3.00		3.00		ug/L			12/21/23 16:23	1
Chloromethane	<3.00		3.00		ug/L			12/21/23 16:23	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 16:23	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 16:23	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 16:23	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 16:23	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 16:23	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/21/23 16:23	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/21/23 16:23	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/21/23 16:23	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/21/23 16:23	1
Ethylbenzene	<1.00		1.00		ug/L			12/21/23 16:23	1
2-Hexanone	<10.0		10.0		ug/L			12/21/23 16:23	1
Methylene Chloride	<5.00		5.00		ug/L			12/21/23 16:23	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/21/23 16:23	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/21/23 16:23	1
Naphthalene	<5.00		5.00		ug/L			12/21/23 16:23	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/21/23 16:23	1
Tetrachloroethene	<1.00		1.00		ug/L			12/21/23 16:23	1
Toluene	<1.00		1.00		ug/L			12/21/23 16:23	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 16:23	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 16:23	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/21/23 16:23	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/21/23 16:23	1
Trichloroethene	<1.00		1.00		ug/L			12/21/23 16:23	1
Vinyl chloride	<1.00		1.00		ug/L			12/21/23 16:23	1
Xylenes, Total	<3.00		3.00		ug/L			12/21/23 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		12/21/23 16:23	1
Dibromofluoromethane (Surr)	113		73 - 130		12/21/23 16:23	1
Toluene-d8 (Surr)	98		80 - 120		12/21/23 16:23	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	15400		50.0		ug/L			12/21/23 19:33	10
Methane	<1.00		1.00		ug/L			12/21/23 15:50	1
Ethane	<1.00		1.00		ug/L			12/21/23 15:50	1
Ethene	<1.00		1.00		ug/L			12/21/23 15:50	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-01-1223

Lab Sample ID: 310-271709-3

Date Collected: 12/15/23 11:15

Matrix: Water

Date Received: 12/15/23 15:05

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	111		60 - 140		12/21/23 15:50	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	139		20.0		mg/L			12/18/23 13:42	20
Nitrate as N	<0.200		0.200		mg/L			12/15/23 17:27	1
Sulfate	146		20.0		mg/L			12/18/23 13:42	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	6.47		1.00		mg/L			12/28/23 03:58	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		12/21/23 10:40	12/21/23 10:40	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-06-1223

Lab Sample ID: 310-271709-4

Date Collected: 12/14/23 16:15

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/21/23 15:37	1
Benzene	<0.500		0.500		ug/L			12/21/23 15:37	1
Bromodichloromethane	<1.00		1.00		ug/L			12/21/23 15:37	1
Bromoform	<5.00		5.00		ug/L			12/21/23 15:37	1
Bromomethane	<4.00		4.00		ug/L			12/21/23 15:37	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/21/23 15:37	1
Carbon disulfide	<1.00		1.00		ug/L			12/21/23 15:37	1
Carbon tetrachloride	<2.00	*+	2.00		ug/L			12/21/23 15:37	1
Chlorobenzene	<1.00		1.00		ug/L			12/21/23 15:37	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/21/23 15:37	1
Chloroethane	<4.00		4.00		ug/L			12/21/23 15:37	1
Chloroform	<3.00		3.00		ug/L			12/21/23 15:37	1
Chloromethane	<3.00		3.00		ug/L			12/21/23 15:37	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 15:37	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 15:37	1
1,2-Dichlorobenzene	<1.00	F1	1.00		ug/L			12/21/23 15:37	1
1,3-Dichlorobenzene	<1.00	F1	1.00		ug/L			12/21/23 15:37	1
1,4-Dichlorobenzene	<1.00	F1	1.00		ug/L			12/21/23 15:37	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/21/23 15:37	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/21/23 15:37	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/21/23 15:37	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/21/23 15:37	1
Ethylbenzene	<1.00		1.00		ug/L			12/21/23 15:37	1
2-Hexanone	<10.0		10.0		ug/L			12/21/23 15:37	1
Methylene Chloride	<5.00		5.00		ug/L			12/21/23 15:37	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/21/23 15:37	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/21/23 15:37	1
Naphthalene	<5.00	F1	5.00		ug/L			12/21/23 15:37	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/21/23 15:37	1
Tetrachloroethene	<1.00		1.00		ug/L			12/21/23 15:37	1
Toluene	<1.00		1.00		ug/L			12/21/23 15:37	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 15:37	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 15:37	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/21/23 15:37	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/21/23 15:37	1
Trichloroethene	<1.00		1.00		ug/L			12/21/23 15:37	1
Vinyl chloride	<1.00		1.00		ug/L			12/21/23 15:37	1
Xylenes, Total	<3.00		3.00		ug/L			12/21/23 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		12/21/23 15:37	1
Dibromofluoromethane (Surr)	115		73 - 130		12/21/23 15:37	1
Toluene-d8 (Surr)	98		80 - 120		12/21/23 15:37	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-07-1223

Lab Sample ID: 310-271709-5

Date Collected: 12/15/23 12:30

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10.3		10.0		ug/L			12/21/23 16:45	1
Benzene	0.600		0.500		ug/L			12/21/23 16:45	1
Bromodichloromethane	<1.00		1.00		ug/L			12/21/23 16:45	1
Bromoform	<5.00		5.00		ug/L			12/21/23 16:45	1
Bromomethane	<4.00		4.00		ug/L			12/21/23 16:45	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/21/23 16:45	1
Carbon disulfide	1.23		1.00		ug/L			12/21/23 16:45	1
Carbon tetrachloride	<2.00	*+	2.00		ug/L			12/21/23 16:45	1
Chlorobenzene	<1.00		1.00		ug/L			12/21/23 16:45	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/21/23 16:45	1
Chloroethane	<4.00		4.00		ug/L			12/21/23 16:45	1
Chloroform	<3.00		3.00		ug/L			12/21/23 16:45	1
Chloromethane	<3.00		3.00		ug/L			12/21/23 16:45	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 16:45	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 16:45	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 16:45	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 16:45	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 16:45	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/21/23 16:45	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/21/23 16:45	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/21/23 16:45	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/21/23 16:45	1
Ethylbenzene	<1.00		1.00		ug/L			12/21/23 16:45	1
2-Hexanone	<10.0		10.0		ug/L			12/21/23 16:45	1
Methylene Chloride	<5.00		5.00		ug/L			12/21/23 16:45	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/21/23 16:45	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/21/23 16:45	1
Naphthalene	<5.00		5.00		ug/L			12/21/23 16:45	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/21/23 16:45	1
Tetrachloroethene	<1.00		1.00		ug/L			12/21/23 16:45	1
Toluene	<1.00		1.00		ug/L			12/21/23 16:45	1
trans-1,2-Dichloroethene	2.02		1.00		ug/L			12/21/23 16:45	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 16:45	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/21/23 16:45	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/21/23 16:45	1
Trichloroethene	<1.00		1.00		ug/L			12/21/23 16:45	1
Vinyl chloride	1.17		1.00		ug/L			12/21/23 16:45	1
Xylenes, Total	<3.00		3.00		ug/L			12/21/23 16:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		12/21/23 16:45	1
Dibromofluoromethane (Surr)	111		73 - 130		12/21/23 16:45	1
Toluene-d8 (Surr)	99		80 - 120		12/21/23 16:45	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	41900		50.0		ug/L			12/21/23 20:02	10
Methane	19100		20.0		ug/L			12/22/23 16:54	20
Ethane	13.6		1.00		ug/L			12/21/23 16:07	1
Ethene	20.6		1.00		ug/L			12/21/23 16:07	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-07-1223

Lab Sample ID: 310-271709-5

Date Collected: 12/15/23 12:30

Matrix: Water

Date Received: 12/15/23 15:05

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	110		60 - 140		12/21/23 16:07	1
1,1,1-Trifluoroethane	114		60 - 140		12/22/23 16:54	20

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	316		20.0		mg/L			12/18/23 14:42	20
Nitrate as N	<0.200		0.200		mg/L			12/15/23 18:28	1
Sulfate	<1.00		1.00		mg/L			12/15/23 18:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	92.2		0.400		mg/L		12/19/23 09:10	12/20/23 16:05	4
Manganese	1.09		0.0100		mg/L		12/19/23 09:10	12/20/23 12:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	136		10.0		mg/L			12/28/23 04:22	10
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		12/21/23 10:40	12/21/23 10:40	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-08-1223

Lab Sample ID: 310-271709-6

Date Collected: 12/14/23 08:45

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/20/23 02:45	1
Benzene	<0.500		0.500		ug/L			12/20/23 02:45	1
Bromodichloromethane	<1.00		1.00		ug/L			12/20/23 02:45	1
Bromoform	<5.00		5.00		ug/L			12/20/23 02:45	1
Bromomethane	<4.00		4.00		ug/L			12/20/23 02:45	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/20/23 02:45	1
Carbon disulfide	<1.00		1.00		ug/L			12/20/23 02:45	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/20/23 02:45	1
Chlorobenzene	<1.00		1.00		ug/L			12/20/23 02:45	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/20/23 02:45	1
Chloroethane	<4.00		4.00		ug/L			12/20/23 02:45	1
Chloroform	<3.00		3.00		ug/L			12/20/23 02:45	1
Chloromethane	<3.00		3.00		ug/L			12/20/23 02:45	1
cis-1,2-Dichloroethene	44.2		1.00		ug/L			12/20/23 02:45	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 02:45	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 02:45	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 02:45	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 02:45	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/20/23 02:45	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/20/23 02:45	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/20/23 02:45	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/20/23 02:45	1
Ethylbenzene	<1.00		1.00		ug/L			12/20/23 02:45	1
2-Hexanone	<10.0		10.0		ug/L			12/20/23 02:45	1
Methylene Chloride	<5.00		5.00		ug/L			12/20/23 02:45	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/20/23 02:45	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/20/23 02:45	1
Naphthalene	<5.00		5.00		ug/L			12/20/23 02:45	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/20/23 02:45	1
Tetrachloroethene	<1.00		1.00		ug/L			12/20/23 02:45	1
Toluene	<1.00		1.00		ug/L			12/20/23 02:45	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 02:45	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 02:45	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/20/23 02:45	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/20/23 02:45	1
Trichloroethene	<1.00		1.00		ug/L			12/20/23 02:45	1
Vinyl chloride	<1.00		1.00		ug/L			12/20/23 02:45	1
Xylenes, Total	<3.00		3.00		ug/L			12/20/23 02:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		12/20/23 02:45	1
Dibromofluoromethane (Surr)	113		73 - 130		12/20/23 02:45	1
Toluene-d8 (Surr)	98		80 - 120		12/20/23 02:45	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-09-1223

Lab Sample ID: 310-271709-7

Date Collected: 12/13/23 14:45

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/20/23 03:08	1
Benzene	<0.500		0.500		ug/L			12/20/23 03:08	1
Bromodichloromethane	<1.00		1.00		ug/L			12/20/23 03:08	1
Bromoform	<5.00		5.00		ug/L			12/20/23 03:08	1
Bromomethane	<4.00		4.00		ug/L			12/20/23 03:08	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/20/23 03:08	1
Carbon disulfide	<1.00		1.00		ug/L			12/20/23 03:08	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/20/23 03:08	1
Chlorobenzene	<1.00		1.00		ug/L			12/20/23 03:08	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/20/23 03:08	1
Chloroethane	<4.00		4.00		ug/L			12/20/23 03:08	1
Chloroform	<3.00		3.00		ug/L			12/20/23 03:08	1
Chloromethane	<3.00		3.00		ug/L			12/20/23 03:08	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 03:08	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 03:08	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 03:08	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 03:08	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 03:08	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/20/23 03:08	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/20/23 03:08	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/20/23 03:08	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/20/23 03:08	1
Ethylbenzene	<1.00		1.00		ug/L			12/20/23 03:08	1
2-Hexanone	<10.0		10.0		ug/L			12/20/23 03:08	1
Methylene Chloride	<5.00		5.00		ug/L			12/20/23 03:08	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/20/23 03:08	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/20/23 03:08	1
Naphthalene	<5.00		5.00		ug/L			12/20/23 03:08	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/20/23 03:08	1
Tetrachloroethene	<1.00		1.00		ug/L			12/20/23 03:08	1
Toluene	<1.00		1.00		ug/L			12/20/23 03:08	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 03:08	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 03:08	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/20/23 03:08	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/20/23 03:08	1
Trichloroethene	<1.00		1.00		ug/L			12/20/23 03:08	1
Vinyl chloride	<1.00		1.00		ug/L			12/20/23 03:08	1
Xylenes, Total	<3.00		3.00		ug/L			12/20/23 03:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		12/20/23 03:08	1
Dibromofluoromethane (Surr)	114		73 - 130		12/20/23 03:08	1
Toluene-d8 (Surr)	99		80 - 120		12/20/23 03:08	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-11-1223

Lab Sample ID: 310-271709-8

Date Collected: 12/13/23 15:53

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	16.5		10.0		ug/L			12/20/23 03:31	1
Benzene	<0.500		0.500		ug/L			12/20/23 03:31	1
Bromodichloromethane	<1.00		1.00		ug/L			12/20/23 03:31	1
Bromoform	<5.00		5.00		ug/L			12/20/23 03:31	1
Bromomethane	<4.00		4.00		ug/L			12/20/23 03:31	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/20/23 03:31	1
Carbon disulfide	<1.00		1.00		ug/L			12/20/23 03:31	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/20/23 03:31	1
Chlorobenzene	<1.00		1.00		ug/L			12/20/23 03:31	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/20/23 03:31	1
Chloroethane	<4.00		4.00		ug/L			12/20/23 03:31	1
Chloroform	<3.00		3.00		ug/L			12/20/23 03:31	1
Chloromethane	<3.00		3.00		ug/L			12/20/23 03:31	1
cis-1,2-Dichloroethene	51.9		1.00		ug/L			12/20/23 03:31	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 03:31	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 03:31	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 03:31	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 03:31	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/20/23 03:31	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/20/23 03:31	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/20/23 03:31	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/20/23 03:31	1
Ethylbenzene	<1.00		1.00		ug/L			12/20/23 03:31	1
2-Hexanone	<10.0		10.0		ug/L			12/20/23 03:31	1
Methylene Chloride	<5.00		5.00		ug/L			12/20/23 03:31	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/20/23 03:31	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/20/23 03:31	1
Naphthalene	<5.00		5.00		ug/L			12/20/23 03:31	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/20/23 03:31	1
Tetrachloroethene	<1.00		1.00		ug/L			12/20/23 03:31	1
Toluene	<1.00		1.00		ug/L			12/20/23 03:31	1
trans-1,2-Dichloroethene	2.02		1.00		ug/L			12/20/23 03:31	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 03:31	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/20/23 03:31	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/20/23 03:31	1
Trichloroethene	1.34		1.00		ug/L			12/20/23 03:31	1
Vinyl chloride	3.48		1.00		ug/L			12/20/23 03:31	1
Xylenes, Total	<3.00		3.00		ug/L			12/20/23 03:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		12/20/23 03:31	1
Dibromofluoromethane (Surr)	116		73 - 130		12/20/23 03:31	1
Toluene-d8 (Surr)	99		80 - 120		12/20/23 03:31	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-12-1223

Lab Sample ID: 310-271709-9

Date Collected: 12/15/23 10:10

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/21/23 17:08	1
Benzene	<0.500		0.500		ug/L			12/21/23 17:08	1
Bromodichloromethane	<1.00		1.00		ug/L			12/21/23 17:08	1
Bromoform	<5.00		5.00		ug/L			12/21/23 17:08	1
Bromomethane	<4.00		4.00		ug/L			12/21/23 17:08	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/21/23 17:08	1
Carbon disulfide	<1.00		1.00		ug/L			12/21/23 17:08	1
Carbon tetrachloride	<2.00	*+	2.00		ug/L			12/21/23 17:08	1
Chlorobenzene	<1.00		1.00		ug/L			12/21/23 17:08	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/21/23 17:08	1
Chloroethane	<4.00		4.00		ug/L			12/21/23 17:08	1
Chloroform	<3.00		3.00		ug/L			12/21/23 17:08	1
Chloromethane	<3.00		3.00		ug/L			12/21/23 17:08	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 17:08	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 17:08	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 17:08	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 17:08	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 17:08	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/21/23 17:08	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/21/23 17:08	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/21/23 17:08	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/21/23 17:08	1
Ethylbenzene	<1.00		1.00		ug/L			12/21/23 17:08	1
2-Hexanone	<10.0		10.0		ug/L			12/21/23 17:08	1
Methylene Chloride	<5.00		5.00		ug/L			12/21/23 17:08	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/21/23 17:08	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/21/23 17:08	1
Naphthalene	<5.00		5.00		ug/L			12/21/23 17:08	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/21/23 17:08	1
Tetrachloroethene	<1.00		1.00		ug/L			12/21/23 17:08	1
Toluene	<1.00		1.00		ug/L			12/21/23 17:08	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 17:08	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 17:08	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/21/23 17:08	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/21/23 17:08	1
Trichloroethene	<1.00		1.00		ug/L			12/21/23 17:08	1
Vinyl chloride	<1.00		1.00		ug/L			12/21/23 17:08	1
Xylenes, Total	<3.00		3.00		ug/L			12/21/23 17:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		12/21/23 17:08	1
Dibromofluoromethane (Surr)	113		73 - 130		12/21/23 17:08	1
Toluene-d8 (Surr)	98		80 - 120		12/21/23 17:08	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	4870		50.0		ug/L			12/22/23 12:28	10
Methane	26.8		1.00		ug/L			12/21/23 16:24	1
Ethane	<1.00		1.00		ug/L			12/21/23 16:24	1
Ethene	<1.00		1.00		ug/L			12/21/23 16:24	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-12-1223

Lab Sample ID: 310-271709-9

Date Collected: 12/15/23 10:10

Matrix: Water

Date Received: 12/15/23 15:05

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	112		60 - 140		12/21/23 16:24	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	163		20.0		mg/L			12/18/23 14:54	20
Nitrate as N	<0.200		0.200		mg/L			12/15/23 18:40	1
Sulfate	41.5		1.00		mg/L			12/15/23 18:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.185		0.100		mg/L		12/19/23 09:10	12/20/23 12:18	1
Manganese	0.200		0.0100		mg/L		12/19/23 09:10	12/20/23 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	2.09		1.00		mg/L			12/28/23 04:46	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		12/21/23 10:40	12/21/23 10:40	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-13-1223

Lab Sample ID: 310-271709-10

Date Collected: 12/14/23 11:35

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/20/23 03:54	1
Benzene	<0.500		0.500		ug/L			12/20/23 03:54	1
Bromodichloromethane	<1.00		1.00		ug/L			12/20/23 03:54	1
Bromoform	<5.00		5.00		ug/L			12/20/23 03:54	1
Bromomethane	<4.00		4.00		ug/L			12/20/23 03:54	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/20/23 03:54	1
Carbon disulfide	<1.00		1.00		ug/L			12/20/23 03:54	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/20/23 03:54	1
Chlorobenzene	<1.00		1.00		ug/L			12/20/23 03:54	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/20/23 03:54	1
Chloroethane	<4.00		4.00		ug/L			12/20/23 03:54	1
Chloroform	<3.00		3.00		ug/L			12/20/23 03:54	1
Chloromethane	<3.00		3.00		ug/L			12/20/23 03:54	1
cis-1,2-Dichloroethene	1.07		1.00		ug/L			12/21/23 15:15	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 03:54	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 03:54	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 03:54	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 03:54	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/20/23 03:54	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/20/23 03:54	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/20/23 03:54	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/20/23 03:54	1
Ethylbenzene	<1.00		1.00		ug/L			12/20/23 03:54	1
2-Hexanone	<10.0		10.0		ug/L			12/20/23 03:54	1
Methylene Chloride	<5.00		5.00		ug/L			12/20/23 03:54	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/20/23 03:54	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/20/23 03:54	1
Naphthalene	<5.00		5.00		ug/L			12/20/23 03:54	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/20/23 03:54	1
Tetrachloroethene	<1.00		1.00		ug/L			12/20/23 03:54	1
Toluene	<1.00		1.00		ug/L			12/20/23 03:54	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 03:54	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 03:54	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/20/23 03:54	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/20/23 03:54	1
Trichloroethene	<1.00		1.00		ug/L			12/20/23 03:54	1
Vinyl chloride	<1.00		1.00		ug/L			12/20/23 03:54	1
Xylenes, Total	<3.00		3.00		ug/L			12/20/23 03:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		12/20/23 03:54	1
4-Bromofluorobenzene (Surr)	102		80 - 120		12/21/23 15:15	1
Dibromofluoromethane (Surr)	114		73 - 130		12/20/23 03:54	1
Dibromofluoromethane (Surr)	113		73 - 130		12/21/23 15:15	1
Toluene-d8 (Surr)	100		80 - 120		12/20/23 03:54	1
Toluene-d8 (Surr)	99		80 - 120		12/21/23 15:15	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-14-1223

Lab Sample ID: 310-271709-11

Date Collected: 12/14/23 10:45

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/20/23 04:16	1
Benzene	<0.500		0.500		ug/L			12/20/23 04:16	1
Bromodichloromethane	<1.00		1.00		ug/L			12/20/23 04:16	1
Bromoform	<5.00		5.00		ug/L			12/20/23 04:16	1
Bromomethane	<4.00		4.00		ug/L			12/20/23 04:16	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/20/23 04:16	1
Carbon disulfide	<1.00		1.00		ug/L			12/20/23 04:16	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/20/23 04:16	1
Chlorobenzene	<1.00		1.00		ug/L			12/20/23 04:16	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/20/23 04:16	1
Chloroethane	<4.00		4.00		ug/L			12/20/23 04:16	1
Chloroform	<3.00		3.00		ug/L			12/20/23 04:16	1
Chloromethane	<3.00		3.00		ug/L			12/20/23 04:16	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 04:16	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 04:16	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 04:16	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 04:16	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 04:16	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/20/23 04:16	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/20/23 04:16	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/20/23 04:16	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/20/23 04:16	1
Ethylbenzene	<1.00		1.00		ug/L			12/20/23 04:16	1
2-Hexanone	<10.0		10.0		ug/L			12/20/23 04:16	1
Methylene Chloride	<5.00		5.00		ug/L			12/20/23 04:16	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/20/23 04:16	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/20/23 04:16	1
Naphthalene	<5.00		5.00		ug/L			12/20/23 04:16	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/20/23 04:16	1
Tetrachloroethene	<1.00		1.00		ug/L			12/20/23 04:16	1
Toluene	<1.00		1.00		ug/L			12/20/23 04:16	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 04:16	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 04:16	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/20/23 04:16	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/20/23 04:16	1
Trichloroethene	<1.00		1.00		ug/L			12/20/23 04:16	1
Vinyl chloride	<1.00		1.00		ug/L			12/20/23 04:16	1
Xylenes, Total	<3.00		3.00		ug/L			12/20/23 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		12/20/23 04:16	1
Dibromofluoromethane (Surr)	115		73 - 130		12/20/23 04:16	1
Toluene-d8 (Surr)	97		80 - 120		12/20/23 04:16	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-15-1223

Lab Sample ID: 310-271709-12

Date Collected: 12/14/23 14:58

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/20/23 04:39	1
Benzene	<0.500		0.500		ug/L			12/20/23 04:39	1
Bromodichloromethane	<1.00		1.00		ug/L			12/20/23 04:39	1
Bromoform	<5.00		5.00		ug/L			12/20/23 04:39	1
Bromomethane	<4.00		4.00		ug/L			12/20/23 04:39	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/20/23 04:39	1
Carbon disulfide	<1.00		1.00		ug/L			12/20/23 04:39	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/20/23 04:39	1
Chlorobenzene	<1.00		1.00		ug/L			12/20/23 04:39	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/20/23 04:39	1
Chloroethane	<4.00		4.00		ug/L			12/20/23 04:39	1
Chloroform	<3.00		3.00		ug/L			12/20/23 04:39	1
Chloromethane	<3.00		3.00		ug/L			12/20/23 04:39	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 04:39	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 04:39	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 04:39	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 04:39	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 04:39	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/20/23 04:39	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/20/23 04:39	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/20/23 04:39	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/20/23 04:39	1
Ethylbenzene	<1.00		1.00		ug/L			12/20/23 04:39	1
2-Hexanone	<10.0		10.0		ug/L			12/20/23 04:39	1
Methylene Chloride	<5.00		5.00		ug/L			12/20/23 04:39	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/20/23 04:39	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/20/23 04:39	1
Naphthalene	<5.00		5.00		ug/L			12/20/23 04:39	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/20/23 04:39	1
Tetrachloroethene	<1.00		1.00		ug/L			12/20/23 04:39	1
Toluene	<1.00		1.00		ug/L			12/20/23 04:39	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 04:39	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 04:39	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/20/23 04:39	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/20/23 04:39	1
Trichloroethene	<1.00		1.00		ug/L			12/20/23 04:39	1
Vinyl chloride	<1.00		1.00		ug/L			12/20/23 04:39	1
Xylenes, Total	<3.00		3.00		ug/L			12/20/23 04:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		12/20/23 04:39	1
Dibromofluoromethane (Surr)	114		73 - 130		12/20/23 04:39	1
Toluene-d8 (Surr)	98		80 - 120		12/20/23 04:39	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-16-1223

Lab Sample ID: 310-271709-13

Date Collected: 12/14/23 09:45

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/20/23 05:02	1
Benzene	<0.500		0.500		ug/L			12/20/23 05:02	1
Bromodichloromethane	<1.00		1.00		ug/L			12/20/23 05:02	1
Bromoform	<5.00		5.00		ug/L			12/20/23 05:02	1
Bromomethane	<4.00		4.00		ug/L			12/20/23 05:02	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/20/23 05:02	1
Carbon disulfide	<1.00		1.00		ug/L			12/20/23 05:02	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/20/23 05:02	1
Chlorobenzene	<1.00		1.00		ug/L			12/20/23 05:02	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/20/23 05:02	1
Chloroethane	<4.00		4.00		ug/L			12/20/23 05:02	1
Chloroform	<3.00		3.00		ug/L			12/20/23 05:02	1
Chloromethane	<3.00		3.00		ug/L			12/20/23 05:02	1
cis-1,2-Dichloroethene	2.23		1.00		ug/L			12/20/23 05:02	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 05:02	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 05:02	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 05:02	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 05:02	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/20/23 05:02	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/20/23 05:02	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/20/23 05:02	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/20/23 05:02	1
Ethylbenzene	<1.00		1.00		ug/L			12/20/23 05:02	1
2-Hexanone	<10.0		10.0		ug/L			12/20/23 05:02	1
Methylene Chloride	<5.00		5.00		ug/L			12/20/23 05:02	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/20/23 05:02	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/20/23 05:02	1
Naphthalene	<5.00		5.00		ug/L			12/20/23 05:02	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/20/23 05:02	1
Tetrachloroethene	<1.00		1.00		ug/L			12/20/23 05:02	1
Toluene	<1.00		1.00		ug/L			12/20/23 05:02	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 05:02	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 05:02	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/20/23 05:02	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/20/23 05:02	1
Trichloroethene	<1.00		1.00		ug/L			12/20/23 05:02	1
Vinyl chloride	<1.00		1.00		ug/L			12/20/23 05:02	1
Xylenes, Total	<3.00		3.00		ug/L			12/20/23 05:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		12/20/23 05:02	1
Dibromofluoromethane (Surr)	115		73 - 130		12/20/23 05:02	1
Toluene-d8 (Surr)	98		80 - 120		12/20/23 05:02	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-17-1223

Lab Sample ID: 310-271709-14

Date Collected: 12/15/23 08:40

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	39.5		10.0		ug/L			12/21/23 20:56	1
Benzene	9.72		0.500		ug/L			12/21/23 20:56	1
Bromodichloromethane	<1.00		1.00		ug/L			12/21/23 20:56	1
Bromoform	<5.00		5.00		ug/L			12/21/23 20:56	1
Bromomethane	<4.00		4.00		ug/L			12/21/23 20:56	1
2-Butanone (MEK)	110		10.0		ug/L			12/21/23 20:56	1
Carbon disulfide	2.31		1.00		ug/L			12/21/23 20:56	1
Carbon tetrachloride	<2.00	*+	2.00		ug/L			12/21/23 20:56	1
Chlorobenzene	<1.00		1.00		ug/L			12/21/23 20:56	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/21/23 20:56	1
Chloroethane	<4.00		4.00		ug/L			12/21/23 20:56	1
Chloroform	<3.00		3.00		ug/L			12/21/23 20:56	1
Chloromethane	<3.00		3.00		ug/L			12/21/23 20:56	1
cis-1,2-Dichloroethene	1270		10.0		ug/L			12/22/23 18:27	10
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 20:56	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 20:56	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 20:56	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 20:56	1
1,1-Dichloroethane	2.31		1.00		ug/L			12/21/23 20:56	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/21/23 20:56	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/21/23 20:56	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/21/23 20:56	1
Ethylbenzene	<1.00		1.00		ug/L			12/21/23 20:56	1
2-Hexanone	<10.0		10.0		ug/L			12/21/23 20:56	1
Methylene Chloride	<5.00		5.00		ug/L			12/21/23 20:56	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/21/23 20:56	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/21/23 20:56	1
Naphthalene	<5.00		5.00		ug/L			12/21/23 20:56	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/21/23 20:56	1
Tetrachloroethene	<1.00		1.00		ug/L			12/21/23 20:56	1
Toluene	<1.00		1.00		ug/L			12/21/23 20:56	1
trans-1,2-Dichloroethene	12.0		1.00		ug/L			12/21/23 20:56	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 20:56	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/21/23 20:56	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/21/23 20:56	1
Trichloroethene	<1.00		1.00		ug/L			12/21/23 20:56	1
Vinyl chloride	69.0		1.00		ug/L			12/21/23 20:56	1
Xylenes, Total	<3.00		3.00		ug/L			12/21/23 20:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		12/21/23 20:56	1
4-Bromofluorobenzene (Surr)	102		80 - 120		12/22/23 18:27	10
Dibromofluoromethane (Surr)	104		73 - 130		12/21/23 20:56	1
Dibromofluoromethane (Surr)	113		73 - 130		12/22/23 18:27	10
Toluene-d8 (Surr)	99		80 - 120		12/21/23 20:56	1
Toluene-d8 (Surr)	98		80 - 120		12/22/23 18:27	10

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	17100		50.0		ug/L			12/22/23 12:57	10

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-17-1223

Lab Sample ID: 310-271709-14

Date Collected: 12/15/23 08:40

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	17800		20.0		ug/L			12/22/23 17:11	20
Ethane	268		1.00		ug/L			12/21/23 16:41	1
Ethene	308		1.00		ug/L			12/21/23 16:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	112		60 - 140					12/21/23 16:41	1
1,1,1-Trifluoroethane	114		60 - 140					12/22/23 17:11	20

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.8		20.0		mg/L			12/18/23 15:06	20
Nitrate as N	<0.200		0.200		mg/L			12/15/23 18:52	1
Sulfate	<1.00		1.00		mg/L			12/15/23 18:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	578		0.700		mg/L		12/19/23 09:10	12/20/23 16:08	7
Manganese	4.79		0.0700		mg/L		12/19/23 09:10	12/20/23 16:08	7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	19.0		1.00		mg/L			12/28/23 05:10	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		12/21/23 10:40	12/21/23 10:40	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-18-1223

Lab Sample ID: 310-271709-15

Date Collected: 12/14/23 13:58

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/20/23 05:25	1
Benzene	<0.500		0.500		ug/L			12/20/23 05:25	1
Bromodichloromethane	<1.00		1.00		ug/L			12/20/23 05:25	1
Bromoform	<5.00		5.00		ug/L			12/20/23 05:25	1
Bromomethane	<4.00		4.00		ug/L			12/20/23 05:25	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/20/23 05:25	1
Carbon disulfide	<1.00		1.00		ug/L			12/20/23 05:25	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/20/23 05:25	1
Chlorobenzene	<1.00		1.00		ug/L			12/20/23 05:25	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/20/23 05:25	1
Chloroethane	<4.00		4.00		ug/L			12/20/23 05:25	1
Chloroform	<3.00		3.00		ug/L			12/20/23 05:25	1
Chloromethane	<3.00		3.00		ug/L			12/20/23 05:25	1
cis-1,2-Dichloroethene	5.58		1.00		ug/L			12/20/23 05:25	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 05:25	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 05:25	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 05:25	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 05:25	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/20/23 05:25	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/20/23 05:25	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/20/23 05:25	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/20/23 05:25	1
Ethylbenzene	<1.00		1.00		ug/L			12/20/23 05:25	1
2-Hexanone	<10.0		10.0		ug/L			12/20/23 05:25	1
Methylene Chloride	<5.00		5.00		ug/L			12/20/23 05:25	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/20/23 05:25	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/20/23 05:25	1
Naphthalene	<5.00		5.00		ug/L			12/20/23 05:25	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/20/23 05:25	1
Tetrachloroethene	<1.00		1.00		ug/L			12/20/23 05:25	1
Toluene	<1.00		1.00		ug/L			12/20/23 05:25	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 05:25	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 05:25	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/20/23 05:25	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/20/23 05:25	1
Trichloroethene	1.13		1.00		ug/L			12/20/23 05:25	1
Vinyl chloride	<1.00		1.00		ug/L			12/20/23 05:25	1
Xylenes, Total	<3.00		3.00		ug/L			12/20/23 05:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		12/20/23 05:25	1
Dibromofluoromethane (Surr)	112		73 - 130		12/20/23 05:25	1
Toluene-d8 (Surr)	99		80 - 120		12/20/23 05:25	1

Client Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-19-1223

Lab Sample ID: 310-271709-16

Date Collected: 12/14/23 13:00

Matrix: Water

Date Received: 12/15/23 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/20/23 15:27	1
Benzene	<0.500		0.500		ug/L			12/20/23 15:27	1
Bromodichloromethane	<1.00		1.00		ug/L			12/20/23 15:27	1
Bromoform	<5.00		5.00		ug/L			12/20/23 15:27	1
Bromomethane	<4.00		4.00		ug/L			12/20/23 15:27	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/20/23 15:27	1
Carbon disulfide	<1.00		1.00		ug/L			12/20/23 15:27	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/20/23 15:27	1
Chlorobenzene	<1.00		1.00		ug/L			12/20/23 15:27	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/20/23 15:27	1
Chloroethane	<4.00		4.00		ug/L			12/20/23 15:27	1
Chloroform	<3.00		3.00		ug/L			12/20/23 15:27	1
Chloromethane	<3.00		3.00		ug/L			12/20/23 15:27	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 15:27	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 15:27	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 15:27	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 15:27	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 15:27	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/20/23 15:27	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/20/23 15:27	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/20/23 15:27	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/20/23 15:27	1
Ethylbenzene	<1.00		1.00		ug/L			12/20/23 15:27	1
2-Hexanone	<10.0		10.0		ug/L			12/20/23 15:27	1
Methylene Chloride	<5.00		5.00		ug/L			12/20/23 15:27	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/20/23 15:27	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/20/23 15:27	1
Naphthalene	<5.00		5.00		ug/L			12/20/23 15:27	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/20/23 15:27	1
Tetrachloroethene	<1.00		1.00		ug/L			12/20/23 15:27	1
Toluene	<1.00		1.00		ug/L			12/20/23 15:27	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/22/23 15:28	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 15:27	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/20/23 15:27	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/20/23 15:27	1
Trichloroethene	<1.00		1.00		ug/L			12/20/23 15:27	1
Vinyl chloride	<1.00		1.00		ug/L			12/20/23 15:27	1
Xylenes, Total	<3.00		3.00		ug/L			12/20/23 15:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		80 - 120		12/20/23 15:27	1
4-Bromofluorobenzene (Surr)	104		80 - 120		12/22/23 15:28	1
Dibromofluoromethane (Surr)	105		73 - 130		12/20/23 15:27	1
Dibromofluoromethane (Surr)	96		73 - 130		12/22/23 15:28	1
Toluene-d8 (Surr)	94		80 - 120		12/20/23 15:27	1
Toluene-d8 (Surr)	100		80 - 120		12/22/23 15:28	1

Eurofins Cedar Falls

Definitions/Glossary

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.

GC VOA

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

Glossary

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

Surrogate Summary

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DBFM (73-130)	TOL (80-120)
310-271709-1	TB-01	102	115	100
310-271709-2	DUP-001	103	114	98
310-271709-3	MW-01-1223	101	113	98
310-271709-4	MW-06-1223	106	115	98
310-271709-4 MS	MW-06-1223	102	103	100
310-271709-4 MSD	MW-06-1223	104	103	100
310-271709-5	MW-07-1223	102	111	99
310-271709-6	MW-08-1223	102	113	98
310-271709-7	MW-09-1223	103	114	99
310-271709-8	MW-11-1223	102	116	99
310-271709-9	MW-12-1223	104	113	98
310-271709-10	MW-13-1223	102	114	100
310-271709-10	MW-13-1223	102	113	99
310-271709-11	MW-14-1223	102	115	97
310-271709-12	MW-15-1223	101	114	98
310-271709-13	MW-16-1223	103	115	98
310-271709-14	MW-17-1223	102	104	99
310-271709-14	MW-17-1223	102	113	98
310-271709-15	MW-18-1223	103	112	99
310-271709-16	MW-19-1223	111	105	94
310-271709-16	MW-19-1223	104	96	100
LCS 310-409318/6	Lab Control Sample	102	104	99
LCS 310-409318/7	Lab Control Sample	101	111	98
LCS 310-409419/6	Lab Control Sample	106	99	99
LCS 310-409419/7	Lab Control Sample	111	105	96
LCS 310-409603/6	Lab Control Sample	102	105	100
LCS 310-409603/7	Lab Control Sample	101	113	97
LCS 310-409725/6	Lab Control Sample	103	101	100
LCS 310-409725/7	Lab Control Sample	102	98	98
LCS 310-409731/6	Lab Control Sample	102	100	101
LCS 310-409731/7	Lab Control Sample	102	113	98
MB 310-409318/5	Method Blank	101	113	98
MB 310-409419/5	Method Blank	110	102	98
MB 310-409603/5	Method Blank	102	113	98
MB 310-409725/5	Method Blank	101	97	97
MB 310-409731/5	Method Blank	102	112	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: RSK-175 - Dissolved Gases (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TFE1
		(60-140)
310-271709-2	DUP-001	111
310-271709-3	MW-01-1223	111

Eurofins Cedar Falls

Surrogate Summary

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TFE1 (60-140)
310-271709-5	MW-07-1223	110
310-271709-5	MW-07-1223	114
310-271709-9	MW-12-1223	112
310-271709-14	MW-17-1223	112
310-271709-14	MW-17-1223	114
LCS 240-598465/4	Lab Control Sample	117
LCS 240-598640/4	Lab Control Sample	117
LCSD 240-598640/5	Lab Control Sample Dup	116
MB 240-598465/3	Method Blank	118
MB 240-598640/3	Method Blank	117

Surrogate Legend

TFE = 1,1,1-Trifluoroethane

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: MB 310-409318/5
Matrix: Water
Analysis Batch: 409318

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0		10.0		ug/L			12/19/23 22:35	1
Benzene	<0.500		0.500		ug/L			12/19/23 22:35	1
Bromodichloromethane	<1.00		1.00		ug/L			12/19/23 22:35	1
Bromoform	<5.00		5.00		ug/L			12/19/23 22:35	1
Bromomethane	<4.00		4.00		ug/L			12/19/23 22:35	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/19/23 22:35	1
Carbon disulfide	<1.00		1.00		ug/L			12/19/23 22:35	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/19/23 22:35	1
Chlorobenzene	<1.00		1.00		ug/L			12/19/23 22:35	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/19/23 22:35	1
Chloroethane	<4.00		4.00		ug/L			12/19/23 22:35	1
Chloroform	<3.00		3.00		ug/L			12/19/23 22:35	1
Chloromethane	<3.00		3.00		ug/L			12/19/23 22:35	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/19/23 22:35	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/19/23 22:35	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/19/23 22:35	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/19/23 22:35	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/19/23 22:35	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/19/23 22:35	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/19/23 22:35	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/19/23 22:35	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/19/23 22:35	1
Ethylbenzene	<1.00		1.00		ug/L			12/19/23 22:35	1
2-Hexanone	<10.0		10.0		ug/L			12/19/23 22:35	1
Methylene Chloride	<5.00		5.00		ug/L			12/19/23 22:35	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/19/23 22:35	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/19/23 22:35	1
Naphthalene	<5.00		5.00		ug/L			12/19/23 22:35	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/19/23 22:35	1
Tetrachloroethene	<1.00		1.00		ug/L			12/19/23 22:35	1
Toluene	<1.00		1.00		ug/L			12/19/23 22:35	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/19/23 22:35	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/19/23 22:35	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/19/23 22:35	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/19/23 22:35	1
Trichloroethene	<1.00		1.00		ug/L			12/19/23 22:35	1
Vinyl chloride	<1.00		1.00		ug/L			12/19/23 22:35	1
Xylenes, Total	<3.00		3.00		ug/L			12/19/23 22:35	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	101		80 - 120		12/19/23 22:35	1
Dibromofluoromethane (Surr)	113		73 - 130		12/19/23 22:35	1
Toluene-d8 (Surr)	98		80 - 120		12/19/23 22:35	1

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: LCS 310-409318/6
Matrix: Water
Analysis Batch: 409318

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	31.63		ug/L		79	50 - 150
Benzene	20.0	19.27		ug/L		96	72 - 124
Bromodichloromethane	20.0	19.94		ug/L		100	74 - 122
Bromoform	20.0	18.14		ug/L		91	61 - 122
2-Butanone (MEK)	40.0	33.42		ug/L		84	50 - 150
Carbon disulfide	20.0	17.05		ug/L		85	59 - 135
Carbon tetrachloride	20.0	22.12		ug/L		111	67 - 132
Chlorobenzene	20.0	18.78		ug/L		94	76 - 120
Chlorodibromomethane	20.0	19.43		ug/L		97	71 - 121
Chloroform	20.0	18.93		ug/L		95	72 - 125
cis-1,2-Dichloroethene	20.0	18.90		ug/L		94	74 - 123
cis-1,3-Dichloropropene	20.0	19.05		ug/L		95	71 - 125
1,2-Dichlorobenzene	20.0	17.54		ug/L		88	74 - 120
1,3-Dichlorobenzene	20.0	17.93		ug/L		90	72 - 120
1,4-Dichlorobenzene	20.0	17.55		ug/L		88	72 - 120
1,1-Dichloroethane	20.0	18.61		ug/L		93	70 - 127
1,2-Dichloroethane	20.0	19.29		ug/L		96	71 - 125
1,1-Dichloroethene	20.0	18.87		ug/L		94	63 - 132
1,2-Dichloropropane	20.0	19.65		ug/L		98	73 - 124
Ethylbenzene	20.0	18.99		ug/L		95	74 - 122
2-Hexanone	40.0	33.51		ug/L		84	60 - 140
Methylene Chloride	20.0	18.13		ug/L		91	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	34.98		ug/L		87	60 - 139
Methyl tert-butyl ether	20.0	19.92		ug/L		100	68 - 130
Naphthalene	20.0	17.44		ug/L		87	50 - 150
1,1,2,2-Tetrachloroethane	20.0	18.29		ug/L		91	68 - 124
Tetrachloroethene	20.0	19.88		ug/L		99	71 - 130
Toluene	20.0	19.23		ug/L		96	74 - 123
trans-1,2-Dichloroethene	20.0	19.54		ug/L		98	70 - 126
trans-1,3-Dichloropropene	20.0	18.72		ug/L		94	69 - 123
1,1,1-Trichloroethane	20.0	21.74		ug/L		109	73 - 129
1,1,2-Trichloroethane	20.0	19.09		ug/L		95	73 - 123
Trichloroethene	20.0	19.91		ug/L		100	72 - 126
Xylenes, Total	40.0	37.04		ug/L		93	73 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	104		73 - 130
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCS 310-409318/7
Matrix: Water
Analysis Batch: 409318

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	19.10		ug/L		96	23 - 150
Chloroethane	20.0	18.99		ug/L		95	54 - 136
Chloromethane	20.0	18.79		ug/L		94	38 - 150

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: LCS 310-409318/7
Matrix: Water
Analysis Batch: 409318

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	20.0	20.76		ug/L		104	56 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	111		73 - 130
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 310-409419/5
Matrix: Water
Analysis Batch: 409419

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/20/23 10:43	1
Benzene	<0.500		0.500		ug/L			12/20/23 10:43	1
Bromodichloromethane	<1.00		1.00		ug/L			12/20/23 10:43	1
Bromoform	<5.00		5.00		ug/L			12/20/23 10:43	1
Bromomethane	<4.00		4.00		ug/L			12/20/23 10:43	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/20/23 10:43	1
Carbon disulfide	<1.00		1.00		ug/L			12/20/23 10:43	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/20/23 10:43	1
Chlorobenzene	<1.00		1.00		ug/L			12/20/23 10:43	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/20/23 10:43	1
Chloroethane	<4.00		4.00		ug/L			12/20/23 10:43	1
Chloroform	<3.00		3.00		ug/L			12/20/23 10:43	1
Chloromethane	<3.00		3.00		ug/L			12/20/23 10:43	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/20/23 10:43	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 10:43	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 10:43	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 10:43	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/20/23 10:43	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/20/23 10:43	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/20/23 10:43	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/20/23 10:43	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/20/23 10:43	1
Ethylbenzene	<1.00		1.00		ug/L			12/20/23 10:43	1
2-Hexanone	<10.0		10.0		ug/L			12/20/23 10:43	1
Methylene Chloride	<5.00		5.00		ug/L			12/20/23 10:43	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/20/23 10:43	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/20/23 10:43	1
Naphthalene	<5.00		5.00		ug/L			12/20/23 10:43	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/20/23 10:43	1
Tetrachloroethene	<1.00		1.00		ug/L			12/20/23 10:43	1
Toluene	<1.00		1.00		ug/L			12/20/23 10:43	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/20/23 10:43	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/20/23 10:43	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/20/23 10:43	1
Trichloroethene	<1.00		1.00		ug/L			12/20/23 10:43	1
Vinyl chloride	<1.00		1.00		ug/L			12/20/23 10:43	1

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: MB 310-409419/5
Matrix: Water
Analysis Batch: 409419

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<3.00		3.00		ug/L			12/20/23 10:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		80 - 120		12/20/23 10:43	1
Dibromofluoromethane (Surr)	102		73 - 130		12/20/23 10:43	1
Toluene-d8 (Surr)	98		80 - 120		12/20/23 10:43	1

Lab Sample ID: LCS 310-409419/6
Matrix: Water
Analysis Batch: 409419

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	37.26		ug/L		93	50 - 150
Benzene	20.0	17.77		ug/L		89	72 - 124
Bromodichloromethane	20.0	17.42		ug/L		87	74 - 122
Bromoform	20.0	17.01		ug/L		85	61 - 122
2-Butanone (MEK)	40.0	36.99		ug/L		92	50 - 150
Carbon disulfide	20.0	20.24		ug/L		101	59 - 135
Carbon tetrachloride	20.0	17.66		ug/L		88	67 - 132
Chlorobenzene	20.0	17.16		ug/L		86	76 - 120
Chlorodibromomethane	20.0	16.70		ug/L		84	71 - 121
Chloroform	20.0	18.94		ug/L		95	72 - 125
cis-1,2-Dichloroethene	20.0	17.44		ug/L		87	74 - 123
cis-1,3-Dichloropropene	20.0	18.96		ug/L		95	71 - 125
1,2-Dichlorobenzene	20.0	18.47		ug/L		92	74 - 120
1,3-Dichlorobenzene	20.0	18.36		ug/L		92	72 - 120
1,4-Dichlorobenzene	20.0	17.72		ug/L		89	72 - 120
1,1-Dichloroethane	20.0	17.66		ug/L		88	70 - 127
1,2-Dichloroethane	20.0	18.23		ug/L		91	71 - 125
1,1-Dichloroethene	20.0	19.87		ug/L		99	63 - 132
1,2-Dichloropropane	20.0	17.08		ug/L		85	73 - 124
Ethylbenzene	20.0	18.25		ug/L		91	74 - 122
2-Hexanone	40.0	37.36		ug/L		93	60 - 140
Methylene Chloride	20.0	20.51		ug/L		103	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	35.16		ug/L		88	60 - 139
Methyl tert-butyl ether	20.0	18.23		ug/L		91	68 - 130
Naphthalene	20.0	19.08		ug/L		95	50 - 150
1,1,2,2-Tetrachloroethane	20.0	16.26		ug/L		81	68 - 124
Tetrachloroethene	20.0	18.14		ug/L		91	71 - 130
Toluene	20.0	17.17		ug/L		86	74 - 123
trans-1,3-Dichloropropene	20.0	17.38		ug/L		87	69 - 123
1,1,1-Trichloroethane	20.0	18.26		ug/L		91	73 - 129
1,1,2-Trichloroethane	20.0	17.94		ug/L		90	73 - 123
Trichloroethene	20.0	17.81		ug/L		89	72 - 126
Xylenes, Total	40.0	37.61		ug/L		94	73 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		80 - 120

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: LCS 310-409419/6
Matrix: Water
Analysis Batch: 409419

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

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	99		73 - 130
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCS 310-409419/7
Matrix: Water
Analysis Batch: 409419

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Bromomethane	20.0	10.65		ug/L		53	23 - 150
Chloroethane	20.0	14.18		ug/L		71	54 - 136
Chloromethane	20.0	17.08		ug/L		85	38 - 150
Vinyl chloride	20.0	15.36		ug/L		77	56 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	111		80 - 120
Dibromofluoromethane (Surr)	105		73 - 130
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: MB 310-409603/5
Matrix: Water
Analysis Batch: 409603

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0		10.0		ug/L			12/21/23 12:58	1
Benzene	<0.500		0.500		ug/L			12/21/23 12:58	1
Bromodichloromethane	<1.00		1.00		ug/L			12/21/23 12:58	1
Bromoform	<5.00		5.00		ug/L			12/21/23 12:58	1
Bromomethane	<4.00		4.00		ug/L			12/21/23 12:58	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/21/23 12:58	1
Carbon disulfide	<1.00		1.00		ug/L			12/21/23 12:58	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/21/23 12:58	1
Chlorobenzene	<1.00		1.00		ug/L			12/21/23 12:58	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/21/23 12:58	1
Chloroethane	<4.00		4.00		ug/L			12/21/23 12:58	1
Chloroform	<3.00		3.00		ug/L			12/21/23 12:58	1
Chloromethane	<3.00		3.00		ug/L			12/21/23 12:58	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 12:58	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 12:58	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 12:58	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 12:58	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/21/23 12:58	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/21/23 12:58	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/21/23 12:58	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/21/23 12:58	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/21/23 12:58	1
Ethylbenzene	<1.00		1.00		ug/L			12/21/23 12:58	1
2-Hexanone	<10.0		10.0		ug/L			12/21/23 12:58	1
Methylene Chloride	<5.00		5.00		ug/L			12/21/23 12:58	1

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: MB 310-409603/5
Matrix: Water
Analysis Batch: 409603

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/21/23 12:58	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/21/23 12:58	1
Naphthalene	<5.00		5.00		ug/L			12/21/23 12:58	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/21/23 12:58	1
Tetrachloroethene	<1.00		1.00		ug/L			12/21/23 12:58	1
Toluene	<1.00		1.00		ug/L			12/21/23 12:58	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/21/23 12:58	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/21/23 12:58	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/21/23 12:58	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/21/23 12:58	1
Trichloroethene	<1.00		1.00		ug/L			12/21/23 12:58	1
Vinyl chloride	<1.00		1.00		ug/L			12/21/23 12:58	1
Xylenes, Total	<3.00		3.00		ug/L			12/21/23 12:58	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	102		80 - 120		12/21/23 12:58	1
Dibromofluoromethane (Surr)	113		73 - 130		12/21/23 12:58	1
Toluene-d8 (Surr)	98		80 - 120		12/21/23 12:58	1

Lab Sample ID: LCS 310-409603/6
Matrix: Water
Analysis Batch: 409603

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	21.68		ug/L		108	72 - 124
Bromodichloromethane	20.0	22.43		ug/L		112	74 - 122
Bromoform	20.0	19.67		ug/L		98	61 - 122
2-Butanone (MEK)	40.0	40.24		ug/L		101	50 - 150
Carbon disulfide	20.0	20.98		ug/L		105	59 - 135
Carbon tetrachloride	20.0	26.53	*+	ug/L		133	67 - 132
Chlorobenzene	20.0	20.89		ug/L		104	76 - 120
Chlorodibromomethane	20.0	21.02		ug/L		105	71 - 121
Chloroform	20.0	21.48		ug/L		107	72 - 125
cis-1,2-Dichloroethene	20.0	21.57		ug/L		108	74 - 123
cis-1,3-Dichloropropene	20.0	21.80		ug/L		109	71 - 125
1,2-Dichlorobenzene	20.0	18.93		ug/L		95	74 - 120
1,3-Dichlorobenzene	20.0	19.75		ug/L		99	72 - 120
1,4-Dichlorobenzene	20.0	19.22		ug/L		96	72 - 120
1,1-Dichloroethane	20.0	21.60		ug/L		108	70 - 127
1,2-Dichloroethane	20.0	21.76		ug/L		109	71 - 125
1,1-Dichloroethene	20.0	22.56		ug/L		113	63 - 132
1,2-Dichloropropane	20.0	22.12		ug/L		111	73 - 124
Ethylbenzene	20.0	21.68		ug/L		108	74 - 122
2-Hexanone	40.0	37.26		ug/L		93	60 - 140
Methylene Chloride	20.0	20.66		ug/L		103	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	38.10		ug/L		95	60 - 139
Methyl tert-butyl ether	20.0	22.09		ug/L		110	68 - 130

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: LCS 310-409603/6
Matrix: Water
Analysis Batch: 409603

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Naphthalene	20.0	18.95		ug/L		95	50 - 150
1,1,2,2-Tetrachloroethane	20.0	18.73		ug/L		94	68 - 124
Tetrachloroethene	20.0	23.73		ug/L		119	71 - 130
Toluene	20.0	21.39		ug/L		107	74 - 123
trans-1,2-Dichloroethene	20.0	22.84		ug/L		114	70 - 126
trans-1,3-Dichloropropene	20.0	21.45		ug/L		107	69 - 123
1,1,1-Trichloroethane	20.0	25.35		ug/L		127	73 - 129
1,1,2-Trichloroethane	20.0	20.41		ug/L		102	73 - 123
Trichloroethene	20.0	23.00		ug/L		115	72 - 126
Xylenes, Total	40.0	41.67		ug/L		104	73 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	105		73 - 130
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 310-409603/7
Matrix: Water
Analysis Batch: 409603

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	20.59		ug/L		103	23 - 150
Chloroethane	20.0	20.18		ug/L		101	54 - 136
Chloromethane	20.0	20.83		ug/L		104	38 - 150
Vinyl chloride	20.0	22.76		ug/L		114	56 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	113		73 - 130
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: 310-271709-4 MS
Matrix: Water
Analysis Batch: 409603

Client Sample ID: MW-06-1223
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	<10.0		40.0	31.18		ug/L		78	31 - 150
Benzene	<0.500		20.0	18.00		ug/L		88	46 - 130
Bromodichloromethane	<1.00		20.0	17.20		ug/L		86	57 - 130
Bromoform	<5.00		20.0	14.80		ug/L		74	44 - 130
2-Butanone (MEK)	<10.0		40.0	31.95		ug/L		80	38 - 150
Carbon disulfide	<1.00		20.0	16.94		ug/L		85	38 - 135
Carbon tetrachloride	<2.00	++	20.0	19.06		ug/L		95	45 - 132
Chlorobenzene	<1.00		20.0	12.62		ug/L		63	59 - 130
Chlorodibromomethane	<5.00		20.0	16.27		ug/L		81	54 - 130
Chloroform	<3.00		20.0	16.38		ug/L		82	51 - 130
cis-1,2-Dichloroethene	<1.00		20.0	16.48		ug/L		82	45 - 130
cis-1,3-Dichloropropene	<5.00		20.0	16.67		ug/L		83	53 - 130

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: 310-271709-4 MS

Matrix: Water

Analysis Batch: 409603

Client Sample ID: MW-06-1223

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	<1.00	F1	20.0	6.017	F1	ug/L		30	59 - 130
1,3-Dichlorobenzene	<1.00	F1	20.0	5.041	F1	ug/L		25	57 - 130
1,4-Dichlorobenzene	<1.00	F1	20.0	5.109	F1	ug/L		26	57 - 130
1,1-Dichloroethane	<1.00		20.0	16.32		ug/L		82	49 - 130
1,2-Dichloroethane	<1.00		20.0	17.34		ug/L		87	51 - 130
1,1-Dichloroethene	<2.00		20.0	16.07		ug/L		80	37 - 132
1,2-Dichloropropane	<1.00		20.0	16.94		ug/L		85	57 - 130
Ethylbenzene	<1.00		20.0	12.26		ug/L		61	45 - 130
2-Hexanone	<10.0		40.0	29.16		ug/L		73	46 - 140
Methylene Chloride	<5.00		20.0	16.39		ug/L		82	37 - 150
Methyl isobutyl ketone (MIBK)	<10.0		40.0	30.69		ug/L		77	47 - 139
Methyl tert-butyl ether	<1.00		20.0	18.82		ug/L		94	52 - 130
Naphthalene	<5.00	F1	20.0	<5.00	F1	ug/L		0	40 - 150
1,1,2,2-Tetrachloroethane	<1.00		20.0	14.38		ug/L		72	54 - 130
Tetrachloroethene	<1.00		20.0	14.33		ug/L		72	47 - 130
Toluene	<1.00		20.0	14.71		ug/L		74	51 - 130
trans-1,2-Dichloroethene	<1.00		20.0	16.85		ug/L		84	48 - 130
trans-1,3-Dichloropropene	<5.00		20.0	15.65		ug/L		78	50 - 130
1,1,1-Trichloroethane	<1.00		20.0	19.18		ug/L		96	52 - 130
1,1,2-Trichloroethane	<1.00		20.0	16.54		ug/L		83	58 - 130
Trichloroethene	<1.00		20.0	16.33		ug/L		82	51 - 130
Xylenes, Total	<3.00		40.0	21.28		ug/L		53	43 - 130

Surrogate	%Recovery	MS MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	103		73 - 130
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: 310-271709-4 MSD

Matrix: Water

Analysis Batch: 409603

Client Sample ID: MW-06-1223

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	<10.0		40.0	31.31		ug/L		78	31 - 150	0	29
Benzene	<0.500		20.0	17.81		ug/L		87	46 - 130	1	20
Bromodichloromethane	<1.00		20.0	17.22		ug/L		86	57 - 130	0	20
Bromoform	<5.00		20.0	14.59		ug/L		73	44 - 130	1	20
2-Butanone (MEK)	<10.0		40.0	31.38		ug/L		78	38 - 150	2	20
Carbon disulfide	<1.00		20.0	15.62		ug/L		78	38 - 135	8	30
Carbon tetrachloride	<2.00	*+	20.0	19.15		ug/L		96	45 - 132	0	20
Chlorobenzene	<1.00		20.0	12.63		ug/L		63	59 - 130	0	20
Chlorodibromomethane	<5.00		20.0	16.20		ug/L		81	54 - 130	0	20
Chloroform	<3.00		20.0	16.42		ug/L		82	51 - 130	0	20
cis-1,2-Dichloroethene	<1.00		20.0	16.43		ug/L		82	45 - 130	0	20
cis-1,3-Dichloropropene	<5.00		20.0	16.29		ug/L		81	53 - 130	2	20
1,2-Dichlorobenzene	<1.00	F1	20.0	6.042	F1	ug/L		30	59 - 130	0	20
1,3-Dichlorobenzene	<1.00	F1	20.0	5.182	F1	ug/L		26	57 - 130	3	20
1,4-Dichlorobenzene	<1.00	F1	20.0	5.176	F1	ug/L		26	57 - 130	1	20

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: 310-271709-4 MSD

Client Sample ID: MW-06-1223

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 409603

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane	<1.00		20.0	16.31		ug/L		82	49 - 130	0	20
1,2-Dichloroethane	<1.00		20.0	17.32		ug/L		87	51 - 130	0	20
1,1-Dichloroethene	<2.00		20.0	15.96		ug/L		80	37 - 132	1	26
1,2-Dichloropropane	<1.00		20.0	17.13		ug/L		86	57 - 130	1	20
Ethylbenzene	<1.00		20.0	12.16		ug/L		61	45 - 130	1	20
2-Hexanone	<10.0		40.0	28.72		ug/L		72	46 - 140	2	20
Methylene Chloride	<5.00		20.0	16.45		ug/L		82	37 - 150	0	24
Methyl isobutyl ketone (MIBK)	<10.0		40.0	30.52		ug/L		76	47 - 139	1	20
Methyl tert-butyl ether	<1.00		20.0	19.11		ug/L		96	52 - 130	2	20
Naphthalene	<5.00	F1	20.0	<5.00	F1	ug/L		0	40 - 150	NC	30
1,1,1,2-Tetrachloroethane	<1.00		20.0	14.38		ug/L		72	54 - 130	0	20
Tetrachloroethene	<1.00		20.0	14.14		ug/L		71	47 - 130	1	20
Toluene	<1.00		20.0	14.84		ug/L		74	51 - 130	1	20
trans-1,2-Dichloroethene	<1.00		20.0	16.36		ug/L		82	48 - 130	3	22
trans-1,3-Dichloropropene	<5.00		20.0	15.42		ug/L		77	50 - 130	1	20
1,1,1-Trichloroethane	<1.00		20.0	18.86		ug/L		94	52 - 130	2	20
1,1,2-Trichloroethane	<1.00		20.0	16.49		ug/L		82	58 - 130	0	20
Trichloroethene	<1.00		20.0	16.11		ug/L		81	51 - 130	1	20
Xylenes, Total	<3.00		40.0	21.14		ug/L		53	43 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	103		73 - 130
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: MB 310-409725/5

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 409725

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/22/23 12:44	1
Benzene	<0.500		0.500		ug/L			12/22/23 12:44	1
Bromodichloromethane	<1.00		1.00		ug/L			12/22/23 12:44	1
Bromoform	<5.00		5.00		ug/L			12/22/23 12:44	1
Bromomethane	<4.00		4.00		ug/L			12/22/23 12:44	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/22/23 12:44	1
Carbon disulfide	<1.00		1.00		ug/L			12/22/23 12:44	1
Carbon tetrachloride	<2.00		2.00		ug/L			12/22/23 12:44	1
Chlorobenzene	<1.00		1.00		ug/L			12/22/23 12:44	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/22/23 12:44	1
Chloroethane	<4.00		4.00		ug/L			12/22/23 12:44	1
Chloroform	<3.00		3.00		ug/L			12/22/23 12:44	1
Chloromethane	<3.00		3.00		ug/L			12/22/23 12:44	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/22/23 12:44	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/22/23 12:44	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/22/23 12:44	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/22/23 12:44	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/22/23 12:44	1

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: MB 310-409725/5
Matrix: Water
Analysis Batch: 409725

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<1.00		1.00		ug/L			12/22/23 12:44	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/22/23 12:44	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/22/23 12:44	1
Ethylbenzene	<1.00		1.00		ug/L			12/22/23 12:44	1
2-Hexanone	<10.0		10.0		ug/L			12/22/23 12:44	1
Methylene Chloride	<5.00		5.00		ug/L			12/22/23 12:44	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/22/23 12:44	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/22/23 12:44	1
Naphthalene	<5.00		5.00		ug/L			12/22/23 12:44	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/22/23 12:44	1
Tetrachloroethene	<1.00		1.00		ug/L			12/22/23 12:44	1
Toluene	<1.00		1.00		ug/L			12/22/23 12:44	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/22/23 12:44	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/22/23 12:44	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/22/23 12:44	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/22/23 12:44	1
Trichloroethene	<1.00		1.00		ug/L			12/22/23 12:44	1
Vinyl chloride	<1.00		1.00		ug/L			12/22/23 12:44	1
Xylenes, Total	<3.00		3.00		ug/L			12/22/23 12:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		12/22/23 12:44	1
Dibromofluoromethane (Surr)	97		73 - 130		12/22/23 12:44	1
Toluene-d8 (Surr)	97		80 - 120		12/22/23 12:44	1

Lab Sample ID: LCS 310-409725/6
Matrix: Water
Analysis Batch: 409725

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	43.73		ug/L		109	50 - 150
Benzene	20.0	19.38		ug/L		97	72 - 124
Bromodichloromethane	20.0	18.13		ug/L		91	74 - 122
Bromoform	20.0	16.65		ug/L		83	61 - 122
2-Butanone (MEK)	40.0	44.49		ug/L		111	50 - 150
Carbon disulfide	20.0	20.19		ug/L		101	59 - 135
Carbon tetrachloride	20.0	20.26		ug/L		101	67 - 132
Chlorobenzene	20.0	20.64		ug/L		103	76 - 120
Chlorodibromomethane	20.0	18.85		ug/L		94	71 - 121
Chloroform	20.0	19.40		ug/L		97	72 - 125
cis-1,2-Dichloroethene	20.0	20.19		ug/L		101	74 - 123
cis-1,3-Dichloropropene	20.0	19.69		ug/L		98	71 - 125
1,2-Dichlorobenzene	20.0	19.86		ug/L		99	74 - 120
1,3-Dichlorobenzene	20.0	20.39		ug/L		102	72 - 120
1,4-Dichlorobenzene	20.0	19.95		ug/L		100	72 - 120
1,2-Dichloroethane	20.0	18.02		ug/L		90	71 - 125
1,1-Dichloroethene	20.0	19.96		ug/L		100	63 - 132
1,2-Dichloropropane	20.0	19.84		ug/L		99	73 - 124

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: LCS 310-409725/6
Matrix: Water
Analysis Batch: 409725

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	20.0	20.24		ug/L		101	74 - 122
2-Hexanone	40.0	44.14		ug/L		110	60 - 140
Methylene Chloride	20.0	19.63		ug/L		98	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	41.66		ug/L		104	60 - 139
Methyl tert-butyl ether	20.0	24.84		ug/L		124	68 - 130
Naphthalene	20.0	19.96		ug/L		100	50 - 150
1,1,2,2-Tetrachloroethane	20.0	21.14		ug/L		106	68 - 124
Tetrachloroethene	20.0	20.61		ug/L		103	71 - 130
Toluene	20.0	19.31		ug/L		97	74 - 123
trans-1,2-Dichloroethene	20.0	19.51		ug/L		98	70 - 126
trans-1,3-Dichloropropene	20.0	16.85		ug/L		84	69 - 123
1,1,1-Trichloroethane	20.0	19.88		ug/L		99	73 - 129
1,1,2-Trichloroethane	20.0	20.65		ug/L		103	73 - 123
Trichloroethene	20.0	19.48		ug/L		97	72 - 126
Xylenes, Total	40.0	39.37		ug/L		98	73 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	101		73 - 130
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 310-409725/7
Matrix: Water
Analysis Batch: 409725

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	8.883		ug/L		44	23 - 150
Chloroethane	20.0	22.28		ug/L		111	54 - 136
Chloromethane	20.0	18.95		ug/L		95	38 - 150
Vinyl chloride	20.0	19.41		ug/L		97	56 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	98		73 - 130
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 310-409731/5
Matrix: Water
Analysis Batch: 409731

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			12/22/23 12:00	1
Benzene	<0.500		0.500		ug/L			12/22/23 12:00	1
Bromodichloromethane	<1.00		1.00		ug/L			12/22/23 12:00	1
Bromoform	<5.00		5.00		ug/L			12/22/23 12:00	1
Bromomethane	<4.00		4.00		ug/L			12/22/23 12:00	1
2-Butanone (MEK)	<10.0		10.0		ug/L			12/22/23 12:00	1
Carbon disulfide	<1.00		1.00		ug/L			12/22/23 12:00	1

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: MB 310-409731/5
Matrix: Water
Analysis Batch: 409731

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<2.00		2.00		ug/L			12/22/23 12:00	1
Chlorobenzene	<1.00		1.00		ug/L			12/22/23 12:00	1
Chlorodibromomethane	<5.00		5.00		ug/L			12/22/23 12:00	1
Chloroethane	<4.00		4.00		ug/L			12/22/23 12:00	1
Chloroform	<3.00		3.00		ug/L			12/22/23 12:00	1
Chloromethane	<3.00		3.00		ug/L			12/22/23 12:00	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			12/22/23 12:00	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			12/22/23 12:00	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			12/22/23 12:00	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			12/22/23 12:00	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			12/22/23 12:00	1
1,1-Dichloroethane	<1.00		1.00		ug/L			12/22/23 12:00	1
1,2-Dichloroethane	<1.00		1.00		ug/L			12/22/23 12:00	1
1,1-Dichloroethene	<2.00		2.00		ug/L			12/22/23 12:00	1
1,2-Dichloropropane	<1.00		1.00		ug/L			12/22/23 12:00	1
Ethylbenzene	<1.00		1.00		ug/L			12/22/23 12:00	1
2-Hexanone	<10.0		10.0		ug/L			12/22/23 12:00	1
Methylene Chloride	<5.00		5.00		ug/L			12/22/23 12:00	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			12/22/23 12:00	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			12/22/23 12:00	1
Naphthalene	<5.00		5.00		ug/L			12/22/23 12:00	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			12/22/23 12:00	1
Tetrachloroethene	<1.00		1.00		ug/L			12/22/23 12:00	1
Toluene	<1.00		1.00		ug/L			12/22/23 12:00	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			12/22/23 12:00	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			12/22/23 12:00	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			12/22/23 12:00	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			12/22/23 12:00	1
Trichloroethene	<1.00		1.00		ug/L			12/22/23 12:00	1
Vinyl chloride	<1.00		1.00		ug/L			12/22/23 12:00	1
Xylenes, Total	<3.00		3.00		ug/L			12/22/23 12:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		12/22/23 12:00	1
Dibromofluoromethane (Surr)	112		73 - 130		12/22/23 12:00	1
Toluene-d8 (Surr)	99		80 - 120		12/22/23 12:00	1

Lab Sample ID: LCS 310-409731/6
Matrix: Water
Analysis Batch: 409731

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	35.85		ug/L		90	50 - 150
Benzene	20.0	20.81		ug/L		104	72 - 124
Bromodichloromethane	20.0	21.25		ug/L		106	74 - 122
Bromoform	20.0	19.76		ug/L		99	61 - 122
2-Butanone (MEK)	40.0	40.85		ug/L		102	50 - 150
Carbon disulfide	20.0	19.09		ug/L		95	59 - 135

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: LCS 310-409731/6
Matrix: Water
Analysis Batch: 409731

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	20.0	25.16		ug/L		126	67 - 132
Chlorobenzene	20.0	20.33		ug/L		102	76 - 120
Chlorodibromomethane	20.0	21.49		ug/L		107	71 - 121
Chloroform	20.0	20.26		ug/L		101	72 - 125
cis-1,2-Dichloroethene	20.0	19.96		ug/L		100	74 - 123
cis-1,3-Dichloropropene	20.0	22.12		ug/L		111	71 - 125
1,2-Dichlorobenzene	20.0	18.27		ug/L		91	74 - 120
1,3-Dichlorobenzene	20.0	18.90		ug/L		95	72 - 120
1,4-Dichlorobenzene	20.0	18.71		ug/L		94	72 - 120
1,1-Dichloroethane	20.0	20.11		ug/L		101	70 - 127
1,2-Dichloroethane	20.0	21.57		ug/L		108	71 - 125
1,1-Dichloroethene	20.0	20.58		ug/L		103	63 - 132
1,2-Dichloropropane	20.0	21.19		ug/L		106	73 - 124
Ethylbenzene	20.0	20.65		ug/L		103	74 - 122
2-Hexanone	40.0	39.37		ug/L		98	60 - 140
Methylene Chloride	20.0	19.78		ug/L		99	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	39.18		ug/L		98	60 - 139
Methyl tert-butyl ether	20.0	22.47		ug/L		112	68 - 130
Naphthalene	20.0	18.62		ug/L		93	50 - 150
1,1,2,2-Tetrachloroethane	20.0	19.47		ug/L		97	68 - 124
Tetrachloroethene	20.0	23.28		ug/L		116	71 - 130
Toluene	20.0	20.98		ug/L		105	74 - 123
trans-1,2-Dichloroethene	20.0	21.33		ug/L		107	70 - 126
trans-1,3-Dichloropropene	20.0	21.03		ug/L		105	69 - 123
1,1,1-Trichloroethane	20.0	24.09		ug/L		120	73 - 129
1,1,2-Trichloroethane	20.0	20.95		ug/L		105	73 - 123
Trichloroethene	20.0	22.29		ug/L		111	72 - 126
Xylenes, Total	40.0	40.18		ug/L		100	73 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	100		73 - 130
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: LCS 310-409731/7
Matrix: Water
Analysis Batch: 409731

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	20.26		ug/L		101	23 - 150
Chloroethane	20.0	22.22		ug/L		111	54 - 136
Chloromethane	20.0	21.93		ug/L		110	38 - 150
Vinyl chloride	20.0	24.05		ug/L		120	56 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	113		73 - 130
Toluene-d8 (Surr)	98		80 - 120

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 570-395448/4
Matrix: Water
Analysis Batch: 395448

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	<5.00		5.00		ug/L			12/21/23 16:39	1

Lab Sample ID: LCS 570-395448/2
Matrix: Water
Analysis Batch: 395448

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	562	482.7		ug/L		86	80 - 120

Lab Sample ID: LCSD 570-395448/3
Matrix: Water
Analysis Batch: 395448

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 dioxide	562	479.9		ug/L		85	80 - 120	1	20

Lab Sample ID: 310-271709-5 DU
Matrix: Water
Analysis Batch: 395448

Client Sample ID: MW-07-1223
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbon dioxide	41900		53110	F3	ug/L		24	20

Lab Sample ID: MB 570-395583/4
Matrix: Water
Analysis Batch: 395583

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	<5.00		5.00		ug/L			12/22/23 09:43	1

Lab Sample ID: LCS 570-395583/2
Matrix: Water
Analysis Batch: 395583

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	562	496.3		ug/L		88	80 - 120

Lab Sample ID: LCSD 570-395583/3
Matrix: Water
Analysis Batch: 395583

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 dioxide	562	498.5		ug/L		89	80 - 120	0	20

Lab Sample ID: 310-271709-9 DU
Matrix: Water
Analysis Batch: 395583

Client Sample ID: MW-12-1223
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbon dioxide	4870		4699		ug/L		4	20

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-598465/3
Matrix: Water
Analysis Batch: 598465

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methane	<1.00		1.00		ug/L			12/21/23 14:08	1
Ethane	<1.00		1.00		ug/L			12/21/23 14:08	1
Ethene	<1.00		1.00		ug/L			12/21/23 14:08	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
1,1,1-Trifluoroethane		118	60 - 140				12/21/23 14:08	1	

Lab Sample ID: LCS 240-598465/4
Matrix: Water
Analysis Batch: 598465

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
								Methane
Ethane	537	565.7		ug/L		105	80 - 120	
Ethene	506	531.2		ug/L		105	80 - 120	
Surrogate		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
		%Recovery Qualifier						
1,1,1-Trifluoroethane		117	60 - 140					

Lab Sample ID: MB 240-598640/3
Matrix: Water
Analysis Batch: 598640

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methane	<1.00		1.00		ug/L			12/22/23 14:55	1
Ethane	<1.00		1.00		ug/L			12/22/23 14:55	1
Ethene	<1.00		1.00		ug/L			12/22/23 14:55	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
1,1,1-Trifluoroethane		117	60 - 140				12/22/23 14:55	1	

Lab Sample ID: LCS 240-598640/4
Matrix: Water
Analysis Batch: 598640

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
								Methane
Ethane	537	566.6		ug/L		106	80 - 120	
Ethene	506	531.9		ug/L		105	80 - 120	
Surrogate		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
		%Recovery Qualifier						
1,1,1-Trifluoroethane		117	60 - 140					

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

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

Lab Sample ID: LCSD 240-598640/5
Matrix: Water
Analysis Batch: 598640

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Methane	284	298.1		ug/L		105	80 - 120	1	35	
Ethane	537	559.8		ug/L		104	80 - 120	1	35	
Ethene	506	528.9		ug/L		104	80 - 120	1	35	
Surrogate	%Recovery	LCSD Qualifier	Limits							
1,1,1-Trifluoroethane	116		60 - 140							

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-409275/18
Matrix: Water
Analysis Batch: 409275

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			12/18/23 13:30	1
Nitrate as N	<0.200		0.200		mg/L			12/18/23 13:30	1
Sulfate	<1.00		1.00		mg/L			12/18/23 13:30	1

Lab Sample ID: LCS 310-409275/4
Matrix: Water
Analysis Batch: 409275

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.04		mg/L		100	90 - 110
Nitrate as N	2.00	2.088		mg/L		104	90 - 110
Sulfate	10.0	10.38		mg/L		104	90 - 110

Lab Sample ID: 310-271709-3 MS
Matrix: Water
Analysis Batch: 409275

Client Sample ID: MW-01-1223
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	<4.00	H	1.00	1.120		mg/L		112	80 - 120

Lab Sample ID: 310-271709-3 MS
Matrix: Water
Analysis Batch: 409275

Client Sample ID: MW-01-1223
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	139		100	225.3		mg/L		86	80 - 120
Sulfate	146		100	235.8		mg/L		90	80 - 120

Lab Sample ID: 310-271709-3 MSD
Matrix: Water
Analysis Batch: 409275

Client Sample ID: MW-01-1223
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	<4.00	H	1.00	1.127		mg/L		113	80 - 120	1	15

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 310-271709-3 MSD
 Matrix: Water
 Analysis Batch: 409275

Client Sample ID: MW-01-1223
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	139		100	230.0		mg/L		91	80 - 120	2	15
Sulfate	146		100	245.0		mg/L		99	80 - 120	4	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-409235/1-A
 Matrix: Water
 Analysis Batch: 409490

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 409235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.100		0.100		mg/L		12/19/23 09:10	12/20/23 11:22	1
Manganese	<0.0100		0.0100		mg/L		12/19/23 09:10	12/20/23 11:22	1

Lab Sample ID: LCS 310-409235/2-A
 Matrix: Water
 Analysis Batch: 409490

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 409235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	0.200	0.2189		mg/L		109	80 - 120
Manganese	0.100	0.09439		mg/L		94	80 - 120

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 240-599061/5
 Matrix: Water
 Analysis Batch: 599061

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.00		1.00		mg/L			12/27/23 17:58	1

Lab Sample ID: LCS 240-599061/21
 Matrix: Water
 Analysis Batch: 599061

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	16.3	16.54		mg/L		102	85 - 115

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 310-409589/1-A
 Matrix: Water
 Analysis Batch: 409590

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 409589

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.00		2.00		mg/L		12/21/23 10:40	12/21/23 10:40	1

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Method: SM 4500 S2 F - Sulfide, Total (Continued)

Lab Sample ID: LCS 310-409589/2-A
Matrix: Water
Analysis Batch: 409590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409589

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	5.00	3.000		mg/L		60	11 - 122

Lab Sample ID: 310-271709-2 MS
Matrix: Water
Analysis Batch: 409590

Client Sample ID: DUP-001
Prep Type: Total/NA
Prep Batch: 409589

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	<2.00		5.00	3.800		mg/L		76	10 - 122

Lab Sample ID: 310-271709-2 MSD
Matrix: Water
Analysis Batch: 409590

Client Sample ID: DUP-001
Prep Type: Total/NA
Prep Batch: 409589

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<2.00		5.00	3.400		mg/L		68	10 - 122	11	26

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

QC Association Summary

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

GC/MS VOA

Analysis Batch: 409318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-1	TB-01	Total/NA	Water	8260D	
310-271709-6	MW-08-1223	Total/NA	Water	8260D	
310-271709-7	MW-09-1223	Total/NA	Water	8260D	
310-271709-8	MW-11-1223	Total/NA	Water	8260D	
310-271709-10	MW-13-1223	Total/NA	Water	8260D	
310-271709-11	MW-14-1223	Total/NA	Water	8260D	
310-271709-12	MW-15-1223	Total/NA	Water	8260D	
310-271709-13	MW-16-1223	Total/NA	Water	8260D	
310-271709-15	MW-18-1223	Total/NA	Water	8260D	
MB 310-409318/5	Method Blank	Total/NA	Water	8260D	
LCS 310-409318/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-409318/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 409419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-16	MW-19-1223	Total/NA	Water	8260D	
MB 310-409419/5	Method Blank	Total/NA	Water	8260D	
LCS 310-409419/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-409419/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 409603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-2	DUP-001	Total/NA	Water	8260D	
310-271709-3	MW-01-1223	Total/NA	Water	8260D	
310-271709-4	MW-06-1223	Total/NA	Water	8260D	
310-271709-5	MW-07-1223	Total/NA	Water	8260D	
310-271709-9	MW-12-1223	Total/NA	Water	8260D	
310-271709-10	MW-13-1223	Total/NA	Water	8260D	
310-271709-14	MW-17-1223	Total/NA	Water	8260D	
MB 310-409603/5	Method Blank	Total/NA	Water	8260D	
LCS 310-409603/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-409603/7	Lab Control Sample	Total/NA	Water	8260D	
310-271709-4 MS	MW-06-1223	Total/NA	Water	8260D	
310-271709-4 MSD	MW-06-1223	Total/NA	Water	8260D	

Analysis Batch: 409725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-16	MW-19-1223	Total/NA	Water	8260D	
MB 310-409725/5	Method Blank	Total/NA	Water	8260D	
LCS 310-409725/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-409725/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 409731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-14	MW-17-1223	Total/NA	Water	8260D	
MB 310-409731/5	Method Blank	Total/NA	Water	8260D	
LCS 310-409731/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-409731/7	Lab Control Sample	Total/NA	Water	8260D	

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

GC VOA

Analysis Batch: 395448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-2	DUP-001	Total/NA	Water	RSK-175	
310-271709-3	MW-01-1223	Total/NA	Water	RSK-175	
310-271709-5	MW-07-1223	Total/NA	Water	RSK-175	
MB 570-395448/4	Method Blank	Total/NA	Water	RSK-175	
LCS 570-395448/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 570-395448/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
310-271709-5 DU	MW-07-1223	Total/NA	Water	RSK-175	

Analysis Batch: 395583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-9	MW-12-1223	Total/NA	Water	RSK-175	
310-271709-14	MW-17-1223	Total/NA	Water	RSK-175	
MB 570-395583/4	Method Blank	Total/NA	Water	RSK-175	
LCS 570-395583/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 570-395583/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
310-271709-9 DU	MW-12-1223	Total/NA	Water	RSK-175	

Analysis Batch: 598465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-2	DUP-001	Total/NA	Water	RSK-175	
310-271709-3	MW-01-1223	Total/NA	Water	RSK-175	
310-271709-5	MW-07-1223	Total/NA	Water	RSK-175	
310-271709-9	MW-12-1223	Total/NA	Water	RSK-175	
310-271709-14	MW-17-1223	Total/NA	Water	RSK-175	
MB 240-598465/3	Method Blank	Total/NA	Water	RSK-175	
LCS 240-598465/4	Lab Control Sample	Total/NA	Water	RSK-175	

Analysis Batch: 598640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-5	MW-07-1223	Total/NA	Water	RSK-175	
310-271709-14	MW-17-1223	Total/NA	Water	RSK-175	
MB 240-598640/3	Method Blank	Total/NA	Water	RSK-175	
LCS 240-598640/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 240-598640/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 409275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-2	DUP-001	Total/NA	Water	9056A	
310-271709-2	DUP-001	Total/NA	Water	9056A	
310-271709-3	MW-01-1223	Total/NA	Water	9056A	
310-271709-3	MW-01-1223	Total/NA	Water	9056A	
310-271709-5	MW-07-1223	Total/NA	Water	9056A	
310-271709-5	MW-07-1223	Total/NA	Water	9056A	
310-271709-9	MW-12-1223	Total/NA	Water	9056A	
310-271709-9	MW-12-1223	Total/NA	Water	9056A	
310-271709-14	MW-17-1223	Total/NA	Water	9056A	
310-271709-14	MW-17-1223	Total/NA	Water	9056A	
MB 310-409275/18	Method Blank	Total/NA	Water	9056A	
LCS 310-409275/4	Lab Control Sample	Total/NA	Water	9056A	

Eurofins Cedar Falls

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

HPLC/IC (Continued)

Analysis Batch: 409275 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-3 MS	MW-01-1223	Total/NA	Water	9056A	
310-271709-3 MS	MW-01-1223	Total/NA	Water	9056A	
310-271709-3 MSD	MW-01-1223	Total/NA	Water	9056A	
310-271709-3 MSD	MW-01-1223	Total/NA	Water	9056A	

Metals

Prep Batch: 409235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-2	DUP-001	Dissolved	Water	3005A	
310-271709-5	MW-07-1223	Dissolved	Water	3005A	
310-271709-9	MW-12-1223	Dissolved	Water	3005A	
310-271709-14	MW-17-1223	Dissolved	Water	3005A	
MB 310-409235/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-409235/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 409490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-2	DUP-001	Dissolved	Water	6020B	409235
310-271709-5	MW-07-1223	Dissolved	Water	6020B	409235
310-271709-9	MW-12-1223	Dissolved	Water	6020B	409235
MB 310-409235/1-A	Method Blank	Total/NA	Water	6020B	409235
LCS 310-409235/2-A	Lab Control Sample	Total/NA	Water	6020B	409235

Analysis Batch: 409496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-5	MW-07-1223	Dissolved	Water	6020B	409235
310-271709-14	MW-17-1223	Dissolved	Water	6020B	409235

General Chemistry

Prep Batch: 409589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-2	DUP-001	Total/NA	Water	SM 4500 S2 C	
310-271709-3	MW-01-1223	Total/NA	Water	SM 4500 S2 C	
310-271709-5	MW-07-1223	Total/NA	Water	SM 4500 S2 C	
310-271709-9	MW-12-1223	Total/NA	Water	SM 4500 S2 C	
310-271709-14	MW-17-1223	Total/NA	Water	SM 4500 S2 C	
MB 310-409589/1-A	Method Blank	Total/NA	Water	SM 4500 S2 C	
LCS 310-409589/2-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 C	
310-271709-2 MS	DUP-001	Total/NA	Water	SM 4500 S2 C	
310-271709-2 MSD	DUP-001	Total/NA	Water	SM 4500 S2 C	

Analysis Batch: 409590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-2	DUP-001	Total/NA	Water	SM 4500 S2 F	409589
310-271709-3	MW-01-1223	Total/NA	Water	SM 4500 S2 F	409589
310-271709-5	MW-07-1223	Total/NA	Water	SM 4500 S2 F	409589
310-271709-9	MW-12-1223	Total/NA	Water	SM 4500 S2 F	409589
310-271709-14	MW-17-1223	Total/NA	Water	SM 4500 S2 F	409589
MB 310-409589/1-A	Method Blank	Total/NA	Water	SM 4500 S2 F	409589
LCS 310-409589/2-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	409589

Eurofins Cedar Falls

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

General Chemistry (Continued)

Analysis Batch: 409590 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-2 MS	DUP-001	Total/NA	Water	SM 4500 S2 F	409589
310-271709-2 MSD	DUP-001	Total/NA	Water	SM 4500 S2 F	409589

Analysis Batch: 599061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-271709-2	DUP-001	Total/NA	Water	9060A	
310-271709-3	MW-01-1223	Total/NA	Water	9060A	
310-271709-5	MW-07-1223	Total/NA	Water	9060A	
310-271709-9	MW-12-1223	Total/NA	Water	9060A	
310-271709-14	MW-17-1223	Total/NA	Water	9060A	
MB 240-599061/5	Method Blank	Total/NA	Water	9060A	
LCS 240-599061/21	Lab Control Sample	Total/NA	Water	9060A	

Lab Chronicle

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: TB-01

Date Collected: 12/13/23 07:00

Date Received: 12/15/23 15:05

Lab Sample ID: 310-271709-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409318	FE5V	EET CF	12/19/23 23:43

Client Sample ID: DUP-001

Date Collected: 12/15/23 01:00

Date Received: 12/15/23 15:05

Lab Sample ID: 310-271709-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409603	FE5V	EET CF	12/21/23 16:00
Total/NA	Analysis	RSK-175		10	395448	I9H5	EET CAL 4	12/21/23 19:19
Total/NA	Analysis	RSK-175		1	598465	JBN	EET CLE	12/21/23 15:33
Total/NA	Analysis	9056A		1	409275	QTZ5	EET CF	12/15/23 19:04
Total/NA	Analysis	9056A		20	409275	QTZ5	EET CF	12/18/23 15:18
Dissolved	Prep	3005A			409235	KCK5	EET CF	12/19/23 09:10
Dissolved	Analysis	6020B		1	409490	A6US	EET CF	12/20/23 12:14
Total/NA	Analysis	9060A		1	599061	QUY8	EET CLE	12/28/23 03:34
Total/NA	Prep	SM 4500 S2 C			409589	ENB7	EET CF	12/21/23 10:40
Total/NA	Analysis	SM 4500 S2 F		1	409590	ENB7	EET CF	12/21/23 10:40

Client Sample ID: MW-01-1223

Date Collected: 12/15/23 11:15

Date Received: 12/15/23 15:05

Lab Sample ID: 310-271709-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409603	FE5V	EET CF	12/21/23 16:23
Total/NA	Analysis	RSK-175		10	395448	I9H5	EET CAL 4	12/21/23 19:33
Total/NA	Analysis	RSK-175		1	598465	JBN	EET CLE	12/21/23 15:50
Total/NA	Analysis	9056A		1	409275	QTZ5	EET CF	12/15/23 17:27
Total/NA	Analysis	9056A		20	409275	QTZ5	EET CF	12/18/23 13:42
Total/NA	Analysis	9060A		1	599061	QUY8	EET CLE	12/28/23 03:58
Total/NA	Prep	SM 4500 S2 C			409589	ENB7	EET CF	12/21/23 10:40
Total/NA	Analysis	SM 4500 S2 F		1	409590	ENB7	EET CF	12/21/23 10:40

Client Sample ID: MW-06-1223

Date Collected: 12/14/23 16:15

Date Received: 12/15/23 15:05

Lab Sample ID: 310-271709-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409603	FE5V	EET CF	12/21/23 15:37

Lab Chronicle

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-07-1223

Lab Sample ID: 310-271709-5

Date Collected: 12/15/23 12:30

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409603	FE5V	EET CF	12/21/23 16:45
Total/NA	Analysis	RSK-175		10	395448	I9H5	EET CAL 4	12/21/23 20:02
Total/NA	Analysis	RSK-175		1	598465	JBN	EET CLE	12/21/23 16:07
Total/NA	Analysis	RSK-175		20	598640	JBN	EET CLE	12/22/23 16:54
Total/NA	Analysis	9056A		1	409275	QTZ5	EET CF	12/15/23 18:28
Total/NA	Analysis	9056A		20	409275	QTZ5	EET CF	12/18/23 14:42
Dissolved	Prep	3005A			409235	KCK5	EET CF	12/19/23 09:10
Dissolved	Analysis	6020B		1	409490	A6US	EET CF	12/20/23 12:16
Dissolved	Prep	3005A			409235	KCK5	EET CF	12/19/23 09:10
Dissolved	Analysis	6020B		4	409496	A6US	EET CF	12/20/23 16:05
Total/NA	Analysis	9060A		10	599061	QUY8	EET CLE	12/28/23 04:22
Total/NA	Prep	SM 4500 S2 C			409589	ENB7	EET CF	12/21/23 10:40
Total/NA	Analysis	SM 4500 S2 F		1	409590	ENB7	EET CF	12/21/23 10:40

Client Sample ID: MW-08-1223

Lab Sample ID: 310-271709-6

Date Collected: 12/14/23 08:45

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409318	FE5V	EET CF	12/20/23 02:45

Client Sample ID: MW-09-1223

Lab Sample ID: 310-271709-7

Date Collected: 12/13/23 14:45

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409318	FE5V	EET CF	12/20/23 03:08

Client Sample ID: MW-11-1223

Lab Sample ID: 310-271709-8

Date Collected: 12/13/23 15:53

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409318	FE5V	EET CF	12/20/23 03:31

Client Sample ID: MW-12-1223

Lab Sample ID: 310-271709-9

Date Collected: 12/15/23 10:10

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409603	FE5V	EET CF	12/21/23 17:08
Total/NA	Analysis	RSK-175		10	395583	I9H5	EET CAL 4	12/22/23 12:28
Total/NA	Analysis	RSK-175		1	598465	JBN	EET CLE	12/21/23 16:24
Total/NA	Analysis	9056A		1	409275	QTZ5	EET CF	12/15/23 18:40

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-12-1223

Lab Sample ID: 310-271709-9

Date Collected: 12/15/23 10:10

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		20	409275	QTZ5	EET CF	12/18/23 14:54
Dissolved	Prep	3005A			409235	KCK5	EET CF	12/19/23 09:10
Dissolved	Analysis	6020B		1	409490	A6US	EET CF	12/20/23 12:18
Total/NA	Analysis	9060A		1	599061	QUY8	EET CLE	12/28/23 04:46
Total/NA	Prep	SM 4500 S2 C			409589	ENB7	EET CF	12/21/23 10:40
Total/NA	Analysis	SM 4500 S2 F		1	409590	ENB7	EET CF	12/21/23 10:40

Client Sample ID: MW-13-1223

Lab Sample ID: 310-271709-10

Date Collected: 12/14/23 11:35

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409318	FE5V	EET CF	12/20/23 03:54
Total/NA	Analysis	8260D		1	409603	FE5V	EET CF	12/21/23 15:15

Client Sample ID: MW-14-1223

Lab Sample ID: 310-271709-11

Date Collected: 12/14/23 10:45

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409318	FE5V	EET CF	12/20/23 04:16

Client Sample ID: MW-15-1223

Lab Sample ID: 310-271709-12

Date Collected: 12/14/23 14:58

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409318	FE5V	EET CF	12/20/23 04:39

Client Sample ID: MW-16-1223

Lab Sample ID: 310-271709-13

Date Collected: 12/14/23 09:45

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409318	FE5V	EET CF	12/20/23 05:02

Client Sample ID: MW-17-1223

Lab Sample ID: 310-271709-14

Date Collected: 12/15/23 08:40

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409603	FE5V	EET CF	12/21/23 20:56
Total/NA	Analysis	8260D		10	409731	FE5V	EET CF	12/22/23 18:27
Total/NA	Analysis	RSK-175		10	395583	I9H5	EET CAL 4	12/22/23 12:57
Total/NA	Analysis	RSK-175		1	598465	JBN	EET CLE	12/21/23 16:41

Eurofins Cedar Falls

Lab Chronicle

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Client Sample ID: MW-17-1223

Lab Sample ID: 310-271709-14

Date Collected: 12/15/23 08:40

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		20	598640	JBN	EET CLE	12/22/23 17:11
Total/NA	Analysis	9056A		1	409275	QTZ5	EET CF	12/15/23 18:52
Total/NA	Analysis	9056A		20	409275	QTZ5	EET CF	12/18/23 15:06
Dissolved	Prep	3005A			409235	KCK5	EET CF	12/19/23 09:10
Dissolved	Analysis	6020B		7	409496	A6US	EET CF	12/20/23 16:08
Total/NA	Analysis	9060A		1	599061	QUY8	EET CLE	12/28/23 05:10
Total/NA	Prep	SM 4500 S2 C			409589	ENB7	EET CF	12/21/23 10:40
Total/NA	Analysis	SM 4500 S2 F		1	409590	ENB7	EET CF	12/21/23 10:40

Client Sample ID: MW-18-1223

Lab Sample ID: 310-271709-15

Date Collected: 12/14/23 13:58

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409318	FE5V	EET CF	12/20/23 05:25

Client Sample ID: MW-19-1223

Lab Sample ID: 310-271709-16

Date Collected: 12/14/23 13:00

Matrix: Water

Date Received: 12/15/23 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	409419	WSE8	EET CF	12/20/23 15:27
Total/NA	Analysis	8260D		1	409725	WSE8	EET CF	12/22/23 15:28

Laboratory References:

- EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494
- EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
- EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24
California	Los Angeles County Sanitation Districts	10109	08-01-24
California	State	3082	07-31-24
Kansas	NELAP	E-10420	08-01-24
Nevada	State	CA00111	07-31-24
Oregon	NELAP	4175	02-02-24
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-24

Laboratory: Eurofins Cleveland

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	421	06-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
RSK-175		Water	Ethane
RSK-175		Water	Ethene
RSK-175		Water	Methane

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-271709-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
RSK-175	Dissolved Gases (GC)	RSK	EET CAL 4
RSK-175	Dissolved Gases (GC)	RSK	EET CLE
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
9060A	Organic Carbon, Total (TOC)	SW846	EET CLE
SM 4500 S2 F	Sulfide, Total	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
SM 4500 S2 C	Sulfide, Sample Pretreatment/Concentration	SM	EET CF

Protocol References:

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

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

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

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



Environment Testing
America



310-271709 Chain of Custody

Cooler/Sample Receipt and Temperature

Client Information			
Client: <u>Stantec</u>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <u>12/15/23</u>	TIME <u>1505</u>	Received By: <u>EM</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input checked="" type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>2</u>	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>X</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>1.1</u>		Corrected Temp (°C): <u>1.1</u>	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE. If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>Stantec</u>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <u>12/15/23</u>	TIME <u>1505</u>	Received By: <u>EM</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee			
<input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input checked="" type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # _____ of <u>2</u>	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<u>Dup - 1, MW - 01, 06, 07, 08, 09, 11, 13, 14, 15, 16, 17, 18, 19</u>			
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID:	<u>X</u>	Correction Factor (°C):	<u>0</u>
• Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>3.2</u>	Corrected Temp (°C):	<u>3.2</u>
• Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Eurofins Cedar Falls

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

Chain of Custody Record

TestAmerica Des Moines SC



Environment Testing

214

Client Information		Sampler: ERB		Lab PM: Bindert, Zach T		Carrier Tracking No(s):		COC No: 310-87244-24434.1																																														
Client Contact: Steve Varsa		Phone: 515-253-0830		E-Mail: Zach.Bindert@et.eurofinsus.com		State of Origin:		Page: Page 1 of 2																																														
Company: Stantec Consulting Services Inc		PWSID:		Analysis Requested						Job #:																																												
Address: 11311 Aurora Avenue		Due Date Requested: STD		<table border="1"> <tr> <td>Field Filtered Sample (Yes or No)</td> <td>Perform MS/MSD (Yes or No)</td> <td>8260B - Volatile Standard Sublist</td> <td>RSK_175 - Methane, Ethane, Ethene</td> <td>9080A - TOC</td> <td>Chloride, Sulfate - 9056A_ORGFM_28D, Nitrate - 9056A_ORGFM_48H</td> <td>6020B - Dissolved Iron and Manganese</td> <td>RSK_175_CO2 - RSK-175 CO2</td> <td>SM4600_S2_F - Sulfide, Total</td> <td rowspan="5" style="text-align: center; vertical-align: middle;">KRB</td> <td rowspan="5" style="text-align: center; vertical-align: middle;">Total Number of Containers</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Volatile Standard Sublist	RSK_175 - Methane, Ethane, Ethene	9080A - TOC	Chloride, Sulfate - 9056A_ORGFM_28D, Nitrate - 9056A_ORGFM_48H	6020B - Dissolved Iron and Manganese	RSK_175_CO2 - RSK-175 CO2	SM4600_S2_F - Sulfide, Total	KRB	Total Number of Containers																																	Preservation Codes:	
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Volatile Standard Sublist	RSK_175 - Methane, Ethane, Ethene							9080A - TOC	Chloride, Sulfate - 9056A_ORGFM_28D, Nitrate - 9056A_ORGFM_48H	6020B - Dissolved Iron and Manganese	RSK_175_CO2 - RSK-175 CO2	SM4600_S2_F - Sulfide, Total	KRB	Total Number of Containers																																						
City: Des Moines		TAT Requested (days): STD		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		A - HCL		M - Hexane																																														
State Zip: IA, 50322-7904		PO #: 193709409		WO #:		B - NaOH		N - None																																														
Phone:		Project #: 31012345		SSOW#:		C - Zn Acetate		O - AsNaO2																																														
Email: steve.varsa@stantec.com		Project Name: Rockwell Collins - 35th Street				D - Nitric Acid		P - Na2O4S																																														
Site:						E - NaHSO4		Q - Na2SO3																																														
						F - MeOH		R - Na2S2O3																																														
						G - Amchlor		S - H2SO4																																														
						H - Ascorbic Acid		T - TSP Dodecahydrate																																														
						I - Ice		U - Acetone																																														
						J - DI Water		V - MCAA																																														
						K - EDTA		W - pH 4-5																																														
						L - EDA		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, ST=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Volatile Standard Sublist	RSK_175 - Methane, Ethane, Ethene	9080A - TOC	Chloride, Sulfate - 9056A_ORGFM_28D, Nitrate - 9056A_ORGFM_48H	6020B - Dissolved Iron and Manganese	RSK_175_CO2 - RSK-175 CO2	SM4600_S2_F - Sulfide, Total	Total Number of Containers	Special Instructions/Note:
TB-01	12/13/2023	0700	G	Water	N	N	X							2	Nitrate - 48 Hour Hold Time
DUP-001	12/15/2023	0100	G	Water	Y	N	X	X	X	X	X	X	X	14	
MW-01-1223	12/15/2023	1115	G	Water	N	N	X	X	X	X	-	X	X	13	
MW-06-1223	12/14/2023	1615	G	Water	N	Y	X							9	MS/MSD
MW-07-1223	12/15/2023	230	G	Water	Y	N	X	X	X	X	X	X	X	14	
MW-08-1223	12/14/2023	0845	G	Water	N	N	X							3	
MW-09-1223	12/13/2023	1445	G	Water	N	Y	X							3	
MW-11-1223	12/13/2023	1553	G	Water	N	Y	X							3	
MW-12-1223	12/15/2023	1000	G	Water	Y	N	X	X	X	X	X	X	X	14	
MW-13-1223	12/14/2023	1135	G	Water	N	N	X							3	
MW-14-1223	12/14/2023	1045	G	Water	Y	Y	X							3	

Possible Hazard Identification				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Radiological	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify)				Special Instructions/QC Requirements				
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		
Relinquished by: <i>Sam Edy</i>	Date/Time: 12/15/2023 1505	Company: STN	Received by: <i>IR</i>	Date/Time: 12/15/23 1505	Company:			
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:			
Relinquished by:	Date/Time:	Company:	Received by: <i>EM</i>	Date/Time: 12/16/23 1500	Company:			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:						

Page 65 of 71

1/2/2024



Eurofins Cedar Falls

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

Chain of Custody Record

TestAmerica Des Moines, IA

eurofins Environment Test

214

Client Information: ERB, Bindert, Zach T. Analysis Requested: Field Filtered Sample, Perform MS/MSD, 8280D - Volatile Standard Sublist, RSK_176 - Methane, Ethane, Ethene, 9060A - TOC, Chloride, Sulfate - 9066A, ORGFM_28D, Nitrate - 9066A, ORGFM_48H, 6020B - Dissolved Iron and Manganese, RSK_176_CO2 - RSK-176 CO2, SM4600_92_F - Sulfide, Total. Preservation Codes: A-HCL, B-NaOH, C-Zn Acetate, D-Nitric Acid, E-NaHSO4, F-MeOH, G-Archlor, 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). Sample Identification: MW-15-1223, MW-10-1223, MW-17-1223, MW-18-1223, MW-19-1223. Special Instructions/Note: Nitrate - 48 Hour Hold Time.

Page 66 of 71

1/2/2024



Eurofins Cedar Falls

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

1/1/2024

Chain of Custody Record



eurofins

Environ 170 1

Client Information (Sub Contract Lab)		Sampler		Lab PM. Bindert, Zach T		Carrier Tracking No(s):		COC No. 310-68421.1	
Client Contact		Phone		E-Mail: Zach.Bindert@et.eurofinsus.com		State of Origin Iowa		Page: Page 1 of 1	
Shipping/Receiving		Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State - Iowa		Job #: 310-271709-1		Preservation Codes:	
Address: 180 S. Van Buren Avenue,		Due Date Requested: 1/3/2024		Analysis Requested		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)	
City: Barberton		TAT Requested (days):						Other:	
State, Zip: OH, 44203		PO #		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers	
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #		9060A/TOC		RSK_175/ Methane, Ethane, Ethene		ASK RI	
Email:		Project #: 31012345		BT=Tissue, A=Air				Special Instructions/Note:	
Project Name Rockwell Collins - 35th Street		SSOW#:							
Site:									
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	
						Preservation Code:			
DUP-001 (310-271709-2)		12/15/23		01:00 Central		Water		X X	
MW-01-1223 (310-271709-3)		12/15/23		11:15 Central		Water		X X	
MW-07-1223 (310-271709-5)		12/15/23		12:30 Central		Water		X X	
MW-12-1223 (310-271709-9)		12/15/23		10:10 Central		Water		X X	
MW-17-1223 (310-271709-14)		12/15/23		08:40 Central		Water		X X	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2	
Empty Kit Relinquished by:		Special Instructions/QC Requirements:	
Date:	Time:	Method of Shipment:	
Relinquished by: <i>[Signature]</i>	Date/Time: 12/23/23	Received by: <i>[Signature]</i>	Date/Time: 12-20-23 10:15
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:	



Eurofins - Cleveland Sample Receipt Form/Narrative

Login # : _____

Barberton Facility

Client EIA

Site Name _____

Cooler unpacked by: Wendy Beyer

Cooler Received on 12-20-23

Opened on 12-20-23

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After (hours) Drop-off Date/Time

Storage Location

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form

IR GUN # 22 (CF +1.1 °C) Observed Cooler Temp. 11 °C Corrected Cooler Temp 22 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No

-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA

-Were tamper/custody seals intact and uncompromised? Yes No NA

3. Shippers' packing slip attached to the cooler(s)? Yes No

4. Did custody papers accompany the sample(s)? Yes No

5. Were the custody papers relinquished & signed in the appropriate place? Yes No

6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No

7. Did all bottles arrive in good condition (Unbroken)? Yes No

8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No

9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?

10. Were correct bottle(s) used for the test(s) indicated? Yes No

11. Sufficient quantity received to perform indicated analyses? Yes No

12. Are these work share samples and all listed on the COC? Yes No

If yes, Questions 13-17 have been checked at the originating laboratory.

13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC316719

14. Were VOAs on the COC? Yes No

15. Were air bubbles >6 mm in any VOA vials? Larger than this. Yes No NA

16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No

17. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page

Samples processed by: _____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Eurofins Cedar Falls

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

Chain of Custody Record



eurofins

Enviro

Loc: 310
271709

Client Information (Sub Contract Lab)				Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:					
Client Contact: Shipping/Receiving				Phone:	Bindert, Zach T		310-68416.1					
Company: Eurofins Environment Testing Southwest,				Accreditations Required (See note): State - Iowa			Page: Page 1 of 1					
Address: 2841 Dow Avenue, Suite 100,				Due Date Requested:	Analysis Requested							
City: Tustin				TAT Requested (days):								
State, Zip: CA, 92780												
Phone: 714-895-5494(Tel)				PO #:								
Email:				WO #:								
Project Name: Rockwell Collins - 35th Street				Project #:	Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)							
Site:				SSOW#:								
Sample Identification - Client ID (Lab ID)				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)	RSK_175_CO2/RSK-175_CO2	Total Number of containers	Special Instru
				Preservation Code:								
DUP-001 (310-271709-2)				12/15/23	01:00 Central		Water		X		3	
MW-01-1223 (310-271709-3)				12/15/23	11:15 Central		Water		X		3	
MW-07-1223 (310-271709-5)				12/15/23	12:30 Central		Water		X		3	
MW-12-1223 (310-271709-9)				12/15/23	10:10 Central		Water		X		3	
MW-17-1223 (310-271709-14)				12/15/23	08:40 Central		Water		X		3	
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.												
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested: I, II, III, IV, Other (specify)				Primary Deliverable Rank: 2		Special Instructions/QC Requirements:						
Empty Kit Relinquished by:				Date:	Time:	Method of Shipment:						
Relinquished by: <i>T. DeMa</i>				Date/Time: 12/18/23 11:20	Company:	Received by: <i>[Signature]</i>				Date/Time: 12/20/23 02:05	Company: E	
Relinquished by:				Date/Time:	Company:	Received by:				Date/Time:	Company:	
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: 1.7/1.6 SC12						



310-271709 Chain of Custody

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

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 310-271709-1

Login Number: 271709

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Costello, Mackenzie K

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

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 310-271709-1

Login Number: 271709

List Number: 3

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 12/20/23 03:36 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6
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?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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

Attn: Steve Varsa
Stantec Consulting Services, Inc.
11311 Aurora Avenue
Des Moines, Iowa 50322-7904

Generated 3/22/2024 3:52:28 PM

JOB DESCRIPTION

Rockwell Collins - 35th Street

JOB NUMBER

310-276156-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



Generated
3/22/2024 3:52:28 PM

Authorized for release by
Zach Bindert, Client Service Manager
Zach.Bindert@et.eurofinsus.com
(319)277-2401



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Sample Summary	6
Detection Summary	7
Client Sample Results	9
Definitions	30
Surrogate Summary	31
QC Sample Results	33
QC Association	48
Chronicle	51
Certification Summary	55
Method Summary	56
Chain of Custody	57
Receipt Checklists	65

Case Narrative

Client: Stantec Consulting Services, Inc.
Project: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Job ID: 310-276156-1

Eurofins Cedar Falls

Job Narrative 310-276156-1

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 3/6/2024 11:56 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.2°C and 3.4°C.

GC/MS VOA

Method 8260D: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-17-0324 (310-276156-14).

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

GC VOA

Method RSK_175: The following samples was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The samples was analyzed within the 7-day holding time specified for unpreserved samples: MW-17-0324 (310-276156-14).

Method RSK_175: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-17-0324 (310-276156-14).

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

HPLC/IC

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Case Narrative

Client: Stantec Consulting Services, Inc.
Project: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Job ID: 310-276156-2

Eurofins Cedar Falls

Job Narrative 310-276156-2

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 3/6/2024 11:56 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.2°C and 3.4°C.

HPLC/IC

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

Eurofins Cedar Falls

Sample Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-276156-1	TB-01	Water	03/04/24 08:00	03/06/24 11:56
310-276156-2	DUP-01	Water	03/05/24 00:00	03/06/24 11:56
310-276156-3	MW-01-0324	Water	03/06/24 09:00	03/06/24 11:56
310-276156-4	MW-06-0324	Water	03/05/24 13:10	03/06/24 11:56
310-276156-5	MW-07-0324	Water	03/05/24 14:10	03/06/24 11:56
310-276156-6	MW-08-0324	Water	03/04/24 11:55	03/06/24 11:56
310-276156-7	MW-09-0324	Water	03/04/24 13:18	03/06/24 11:56
310-276156-8	MW-11-0324	Water	03/04/24 17:25	03/06/24 11:56
310-276156-9	MW-12-0324	Water	03/05/24 17:00	03/06/24 11:56
310-276156-10	MW-13-0324	Water	03/05/24 09:45	03/06/24 11:56
310-276156-11	MW-14-0324	Water	03/05/24 08:38	03/06/24 11:56
310-276156-12	MW-15-0324	Water	03/04/24 14:49	03/06/24 11:56
310-276156-13	MW-16-0324	Water	03/04/24 14:05	03/06/24 11:56
310-276156-14	MW-17-0324	Water	03/05/24 15:41	03/06/24 11:56
310-276156-15	MW-18-0324	Water	03/05/24 11:05	03/06/24 11:56
310-276156-16	MW-19-0324	Water	03/04/24 15:50	03/06/24 11:56



Detection Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: TB-01

Lab Sample ID: 310-276156-1

No Detections.

Client Sample ID: DUP-01

Lab Sample ID: 310-276156-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	6610		5.00		ug/L	1		RSK-175	Total/NA
Methane	4.18		1.00		ug/L	1		RSK-175	Total/NA
Chloride	203		5.00		mg/L	5		9056A	Total/NA
Sulfate	53.9		1.00		mg/L	1		9056A	Total/NA
Manganese	0.159		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	1.26		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-01-0324

Lab Sample ID: 310-276156-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	15900		50.0		ug/L	10		RSK-175	Total/NA
Chloride	125		5.00		mg/L	5		9056A	Total/NA
Nitrate as N	0.509		0.200		mg/L	1		9056A	Total/NA
Sulfate	154		5.00		mg/L	5		9056A	Total/NA
Total Organic Carbon	4.50		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-06-0324

Lab Sample ID: 310-276156-4

No Detections.

Client Sample ID: MW-07-0324

Lab Sample ID: 310-276156-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	43600		50.0		ug/L	10		RSK-175	Total/NA
Methane	14900		10.0		ug/L	10		RSK-175	Total/NA
Ethane	2.74		1.00		ug/L	1		RSK-175	Total/NA
Ethene	5.09		1.00		ug/L	1		RSK-175	Total/NA
Chloride	144		5.00		mg/L	5		9056A	Total/NA
Iron	120		0.400		mg/L	4		6020B	Dissolved
Manganese	1.18		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	97.1		10.0		mg/L	10		9060A	Total/NA

Client Sample ID: MW-08-0324

Lab Sample ID: 310-276156-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	39.5		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-09-0324

Lab Sample ID: 310-276156-7

No Detections.

Client Sample ID: MW-11-0324

Lab Sample ID: 310-276156-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	32.5		10.0		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	22.0		1.00		ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.13		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-12-0324

Lab Sample ID: 310-276156-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	5590		50.0		ug/L	10		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-12-0324 (Continued)

Lab Sample ID: 310-276156-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	3.33		1.00		ug/L	1		RSK-175	Total/NA
Chloride	203		5.00		mg/L	5		9056A	Total/NA
Sulfate	53.9		1.00		mg/L	1		9056A	Total/NA
Iron	0.157		0.100		mg/L	1		6020B	Dissolved
Manganese	0.153		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	1.12		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-13-0324

Lab Sample ID: 310-276156-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.99		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-14-0324

Lab Sample ID: 310-276156-11

No Detections.

Client Sample ID: MW-15-0324

Lab Sample ID: 310-276156-12

No Detections.

Client Sample ID: MW-16-0324

Lab Sample ID: 310-276156-13

No Detections.

Client Sample ID: MW-17-0324

Lab Sample ID: 310-276156-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	29.4		10.0		ug/L	1		8260D	Total/NA
Benzene	7.18		0.500		ug/L	1		8260D	Total/NA
2-Butanone (MEK)	81.1		10.0		ug/L	1		8260D	Total/NA
Carbon disulfide	1.41		1.00		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	435		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	47.0		1.00		ug/L	1		8260D	Total/NA
Carbon dioxide	24700		50.0		ug/L	10		RSK-175	Total/NA
Methane	13800		10.0		ug/L	10		RSK-175	Total/NA
Ethane	141		1.00		ug/L	1		RSK-175	Total/NA
Ethene	381		1.00		ug/L	1		RSK-175	Total/NA
Chloride	55.8		5.00		mg/L	5		9056A	Total/NA
Iron	423		2.00		mg/L	20		6020B	Dissolved
Manganese	4.35		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	18.3		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-18-0324

Lab Sample ID: 310-276156-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6.98		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-19-0324

Lab Sample ID: 310-276156-16

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: TB-01

Lab Sample ID: 310-276156-1

Date Collected: 03/04/24 08:00

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 15:13	1
Benzene	<0.500		0.500		ug/L			03/07/24 15:13	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 15:13	1
Bromoform	<5.00		5.00		ug/L			03/07/24 15:13	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 15:13	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 15:13	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 15:13	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 15:13	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 15:13	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 15:13	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 15:13	1
Chloroform	<3.00		3.00		ug/L			03/07/24 15:13	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 15:13	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 15:13	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 15:13	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 15:13	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 15:13	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 15:13	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 15:13	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 15:13	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 15:13	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 15:13	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 15:13	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 15:13	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 15:13	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 15:13	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 15:13	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 15:13	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 15:13	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 15:13	1
Toluene	<1.00		1.00		ug/L			03/07/24 15:13	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 15:13	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 15:13	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 15:13	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 15:13	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 15:13	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 15:13	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		03/07/24 15:13	1
Dibromofluoromethane (Surr)	110		73 - 130		03/07/24 15:13	1
Toluene-d8 (Surr)	97		80 - 120		03/07/24 15:13	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: DUP-01

Lab Sample ID: 310-276156-2

Date Collected: 03/05/24 00:00

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 16:18	1
Benzene	<0.500		0.500		ug/L			03/07/24 16:18	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 16:18	1
Bromoform	<5.00		5.00		ug/L			03/07/24 16:18	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 16:18	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 16:18	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 16:18	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 16:18	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 16:18	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 16:18	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 16:18	1
Chloroform	<3.00		3.00		ug/L			03/07/24 16:18	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 16:18	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 16:18	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 16:18	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 16:18	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 16:18	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 16:18	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 16:18	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 16:18	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 16:18	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 16:18	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 16:18	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 16:18	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 16:18	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 16:18	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 16:18	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 16:18	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 16:18	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 16:18	1
Toluene	<1.00		1.00		ug/L			03/07/24 16:18	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 16:18	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 16:18	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 16:18	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 16:18	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 16:18	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 16:18	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120		03/07/24 16:18	1
Dibromofluoromethane (Surr)	107		73 - 130		03/07/24 16:18	1
Toluene-d8 (Surr)	96		80 - 120		03/07/24 16:18	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	6610		5.00		ug/L			03/12/24 11:33	1
Methane	4.18		1.00		ug/L			03/12/24 04:11	1
Ethane	<1.00		1.00		ug/L			03/12/24 04:11	1
Ethene	<1.00		1.00		ug/L			03/12/24 04:11	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: DUP-01
Date Collected: 03/05/24 00:00
Date Received: 03/06/24 11:56

Lab Sample ID: 310-276156-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	96		60 - 140					03/12/24 04:11	1
Method: SW846 9056A - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	203		5.00		mg/L			03/07/24 11:22	5
Nitrate as N	<0.200		0.200		mg/L			03/06/24 18:12	1
Sulfate	53.9		1.00		mg/L			03/06/24 18:12	1
Method: SW846 6020B - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.100		0.100		mg/L		03/07/24 08:45	03/13/24 15:23	1
Manganese	0.159		0.0100		mg/L		03/07/24 08:45	03/13/24 15:23	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	1.26		1.00		mg/L			03/08/24 05:28	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		03/12/24 11:46	03/12/24 11:46	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-01-0324

Lab Sample ID: 310-276156-3

Date Collected: 03/06/24 09:00

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 16:40	1
Benzene	<0.500		0.500		ug/L			03/07/24 16:40	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 16:40	1
Bromoform	<5.00		5.00		ug/L			03/07/24 16:40	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 16:40	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 16:40	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 16:40	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 16:40	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 16:40	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 16:40	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 16:40	1
Chloroform	<3.00		3.00		ug/L			03/07/24 16:40	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 16:40	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 16:40	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 16:40	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 16:40	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 16:40	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 16:40	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 16:40	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 16:40	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 16:40	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 16:40	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 16:40	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 16:40	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 16:40	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 16:40	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 16:40	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 16:40	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 16:40	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 16:40	1
Toluene	<1.00		1.00		ug/L			03/07/24 16:40	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 16:40	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 16:40	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 16:40	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 16:40	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 16:40	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 16:40	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		03/07/24 16:40	1
Dibromofluoromethane (Surr)	107		73 - 130		03/07/24 16:40	1
Toluene-d8 (Surr)	96		80 - 120		03/07/24 16:40	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	15900		50.0		ug/L			03/12/24 12:21	10
Methane	<1.00		1.00		ug/L			03/12/24 04:28	1
Ethane	<1.00		1.00		ug/L			03/12/24 04:28	1
Ethene	<1.00		1.00		ug/L			03/12/24 04:28	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-01-0324

Lab Sample ID: 310-276156-3

Date Collected: 03/06/24 09:00

Matrix: Water

Date Received: 03/06/24 11:56

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	96		60 - 140		03/12/24 04:28	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	125		5.00		mg/L			03/07/24 10:30	5
Nitrate as N	0.509		0.200		mg/L			03/06/24 17:19	1
Sulfate	154		5.00		mg/L			03/07/24 10:30	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.100		0.100		mg/L		03/07/24 08:45	03/13/24 15:27	1
Manganese	<0.0100		0.0100		mg/L		03/07/24 08:45	03/13/24 15:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	4.50		1.00		mg/L			03/08/24 06:03	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		03/12/24 11:46	03/12/24 11:46	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-06-0324

Lab Sample ID: 310-276156-4

Date Collected: 03/05/24 13:10

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 17:02	1
Benzene	<0.500		0.500		ug/L			03/07/24 17:02	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 17:02	1
Bromoform	<5.00		5.00		ug/L			03/07/24 17:02	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 17:02	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 17:02	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 17:02	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 17:02	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 17:02	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 17:02	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 17:02	1
Chloroform	<3.00		3.00		ug/L			03/07/24 17:02	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 17:02	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 17:02	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 17:02	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 17:02	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 17:02	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 17:02	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 17:02	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 17:02	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 17:02	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 17:02	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 17:02	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 17:02	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 17:02	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 17:02	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 17:02	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 17:02	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 17:02	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 17:02	1
Toluene	<1.00		1.00		ug/L			03/07/24 17:02	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 17:02	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 17:02	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 17:02	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 17:02	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 17:02	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 17:02	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 17:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		03/07/24 17:02	1
Dibromofluoromethane (Surr)	111		73 - 130		03/07/24 17:02	1
Toluene-d8 (Surr)	95		80 - 120		03/07/24 17:02	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-07-0324

Lab Sample ID: 310-276156-5

Date Collected: 03/05/24 14:10

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 17:23	1
Benzene	<0.500		0.500		ug/L			03/07/24 17:23	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 17:23	1
Bromoform	<5.00		5.00		ug/L			03/07/24 17:23	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 17:23	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 17:23	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 17:23	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 17:23	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 17:23	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 17:23	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 17:23	1
Chloroform	<3.00		3.00		ug/L			03/07/24 17:23	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 17:23	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 17:23	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 17:23	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 17:23	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 17:23	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 17:23	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 17:23	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 17:23	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 17:23	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 17:23	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 17:23	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 17:23	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 17:23	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 17:23	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 17:23	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 17:23	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 17:23	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 17:23	1
Toluene	<1.00		1.00		ug/L			03/07/24 17:23	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 17:23	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 17:23	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 17:23	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 17:23	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 17:23	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 17:23	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		03/07/24 17:23	1
Dibromofluoromethane (Surr)	109		73 - 130		03/07/24 17:23	1
Toluene-d8 (Surr)	97		80 - 120		03/07/24 17:23	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	43600		50.0		ug/L			03/12/24 12:37	10
Methane	14900		10.0		ug/L			03/12/24 19:55	10
Ethane	2.74		1.00		ug/L			03/12/24 04:45	1
Ethene	5.09		1.00		ug/L			03/12/24 04:45	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-07-0324

Lab Sample ID: 310-276156-5

Date Collected: 03/05/24 14:10

Matrix: Water

Date Received: 03/06/24 11:56

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	94		60 - 140		03/12/24 04:45	1
1,1,1-Trifluoroethane	99		60 - 140		03/12/24 19:55	10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	144		5.00		mg/L			03/07/24 10:43	5
Nitrate as N	<0.200		0.200		mg/L			03/06/24 17:32	1
Sulfate	<1.00		1.00		mg/L			03/06/24 17:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	120		0.400		mg/L		03/07/24 08:45	03/15/24 12:28	4
Manganese	1.18		0.0100		mg/L		03/07/24 08:45	03/13/24 15:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	97.1		10.0		mg/L			03/08/24 06:39	10
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		03/12/24 11:46	03/12/24 11:46	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-08-0324

Lab Sample ID: 310-276156-6

Date Collected: 03/04/24 11:55

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 17:45	1
Benzene	<0.500		0.500		ug/L			03/07/24 17:45	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 17:45	1
Bromoform	<5.00		5.00		ug/L			03/07/24 17:45	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 17:45	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 17:45	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 17:45	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 17:45	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 17:45	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 17:45	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 17:45	1
Chloroform	<3.00		3.00		ug/L			03/07/24 17:45	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 17:45	1
cis-1,2-Dichloroethene	39.5		1.00		ug/L			03/07/24 17:45	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 17:45	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 17:45	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 17:45	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 17:45	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 17:45	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 17:45	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 17:45	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 17:45	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 17:45	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 17:45	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 17:45	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 17:45	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 17:45	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 17:45	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 17:45	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 17:45	1
Toluene	<1.00		1.00		ug/L			03/07/24 17:45	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 17:45	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 17:45	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 17:45	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 17:45	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 17:45	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 17:45	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		03/07/24 17:45	1
Dibromofluoromethane (Surr)	110		73 - 130		03/07/24 17:45	1
Toluene-d8 (Surr)	95		80 - 120		03/07/24 17:45	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-09-0324

Lab Sample ID: 310-276156-7

Date Collected: 03/04/24 13:18

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 18:07	1
Benzene	<0.500		0.500		ug/L			03/07/24 18:07	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 18:07	1
Bromoform	<5.00		5.00		ug/L			03/07/24 18:07	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 18:07	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 18:07	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 18:07	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 18:07	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 18:07	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 18:07	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 18:07	1
Chloroform	<3.00		3.00		ug/L			03/07/24 18:07	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 18:07	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 18:07	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 18:07	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 18:07	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 18:07	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 18:07	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 18:07	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 18:07	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 18:07	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 18:07	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 18:07	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 18:07	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 18:07	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 18:07	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 18:07	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 18:07	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 18:07	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 18:07	1
Toluene	<1.00		1.00		ug/L			03/07/24 18:07	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 18:07	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 18:07	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 18:07	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 18:07	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 18:07	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 18:07	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 18:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120		03/07/24 18:07	1
Dibromofluoromethane (Surr)	110		73 - 130		03/07/24 18:07	1
Toluene-d8 (Surr)	96		80 - 120		03/07/24 18:07	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-11-0324

Lab Sample ID: 310-276156-8

Date Collected: 03/04/24 17:25

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	32.5		10.0		ug/L			03/07/24 15:35	1
Benzene	<0.500		0.500		ug/L			03/07/24 15:35	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 15:35	1
Bromoform	<5.00		5.00		ug/L			03/07/24 15:35	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 15:35	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 15:35	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 15:35	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 15:35	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 15:35	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 15:35	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 15:35	1
Chloroform	<3.00		3.00		ug/L			03/07/24 15:35	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 15:35	1
cis-1,2-Dichloroethene	22.0		1.00		ug/L			03/07/24 15:35	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 15:35	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 15:35	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 15:35	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 15:35	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 15:35	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 15:35	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 15:35	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 15:35	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 15:35	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 15:35	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 15:35	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 15:35	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 15:35	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 15:35	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 15:35	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 15:35	1
Toluene	<1.00		1.00		ug/L			03/07/24 15:35	1
trans-1,2-Dichloroethene	1.13		1.00		ug/L			03/07/24 15:35	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 15:35	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 15:35	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 15:35	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 15:35	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 15:35	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 15:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120		03/07/24 15:35	1
Dibromofluoromethane (Surr)	109		73 - 130		03/07/24 15:35	1
Toluene-d8 (Surr)	94		80 - 120		03/07/24 15:35	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-12-0324

Lab Sample ID: 310-276156-9

Date Collected: 03/05/24 17:00

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 18:29	1
Benzene	<0.500		0.500		ug/L			03/07/24 18:29	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 18:29	1
Bromoform	<5.00		5.00		ug/L			03/07/24 18:29	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 18:29	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 18:29	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 18:29	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 18:29	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 18:29	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 18:29	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 18:29	1
Chloroform	<3.00		3.00		ug/L			03/07/24 18:29	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 18:29	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 18:29	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 18:29	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 18:29	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 18:29	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 18:29	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 18:29	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 18:29	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 18:29	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 18:29	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 18:29	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 18:29	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 18:29	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 18:29	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 18:29	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 18:29	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 18:29	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 18:29	1
Toluene	<1.00		1.00		ug/L			03/07/24 18:29	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 18:29	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 18:29	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 18:29	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 18:29	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 18:29	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 18:29	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 18:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		03/07/24 18:29	1
Dibromofluoromethane (Surr)	108		73 - 130		03/07/24 18:29	1
Toluene-d8 (Surr)	94		80 - 120		03/07/24 18:29	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5590		50.0		ug/L			03/12/24 12:51	10
Methane	3.33		1.00		ug/L			03/12/24 15:23	1
Ethane	<1.00		1.00		ug/L			03/12/24 05:02	1
Ethene	<1.00		1.00		ug/L			03/12/24 05:02	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-12-0324

Lab Sample ID: 310-276156-9

Date Collected: 03/05/24 17:00

Matrix: Water

Date Received: 03/06/24 11:56

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	97		60 - 140		03/12/24 05:02	1
1,1,1-Trifluoroethane	97		60 - 140		03/12/24 15:23	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	203		5.00		mg/L			03/07/24 11:09	5
Nitrate as N	<0.200		0.200		mg/L			03/06/24 17:59	1
Sulfate	53.9		1.00		mg/L			03/06/24 17:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.157		0.100		mg/L		03/07/24 08:45	03/13/24 15:34	1
Manganese	0.153		0.0100		mg/L		03/07/24 08:45	03/13/24 15:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	1.12		1.00		mg/L			03/08/24 07:15	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		03/12/24 11:46	03/12/24 11:46	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-13-0324

Lab Sample ID: 310-276156-10

Date Collected: 03/05/24 09:45

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 18:51	1
Benzene	<0.500		0.500		ug/L			03/07/24 18:51	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 18:51	1
Bromoform	<5.00		5.00		ug/L			03/07/24 18:51	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 18:51	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 18:51	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 18:51	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 18:51	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 18:51	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 18:51	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 18:51	1
Chloroform	<3.00		3.00		ug/L			03/07/24 18:51	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 18:51	1
cis-1,2-Dichloroethene	1.99		1.00		ug/L			03/07/24 18:51	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 18:51	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 18:51	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 18:51	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 18:51	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 18:51	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 18:51	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 18:51	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 18:51	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 18:51	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 18:51	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 18:51	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 18:51	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 18:51	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 18:51	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 18:51	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 18:51	1
Toluene	<1.00		1.00		ug/L			03/07/24 18:51	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 18:51	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 18:51	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 18:51	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 18:51	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 18:51	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 18:51	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 18:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120		03/07/24 18:51	1
Dibromofluoromethane (Surr)	110		73 - 130		03/07/24 18:51	1
Toluene-d8 (Surr)	95		80 - 120		03/07/24 18:51	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-14-0324

Lab Sample ID: 310-276156-11

Date Collected: 03/05/24 08:38

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 19:12	1
Benzene	<0.500		0.500		ug/L			03/07/24 19:12	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 19:12	1
Bromoform	<5.00		5.00		ug/L			03/07/24 19:12	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 19:12	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 19:12	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 19:12	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 19:12	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 19:12	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 19:12	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 19:12	1
Chloroform	<3.00		3.00		ug/L			03/07/24 19:12	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 19:12	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 19:12	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 19:12	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 19:12	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 19:12	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 19:12	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 19:12	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 19:12	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 19:12	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 19:12	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 19:12	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 19:12	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 19:12	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 19:12	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 19:12	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 19:12	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 19:12	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 19:12	1
Toluene	<1.00		1.00		ug/L			03/07/24 19:12	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 19:12	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 19:12	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 19:12	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 19:12	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 19:12	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 19:12	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 19:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		03/07/24 19:12	1
Dibromofluoromethane (Surr)	109		73 - 130		03/07/24 19:12	1
Toluene-d8 (Surr)	97		80 - 120		03/07/24 19:12	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-15-0324

Lab Sample ID: 310-276156-12

Date Collected: 03/04/24 14:49

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 19:34	1
Benzene	<0.500		0.500		ug/L			03/07/24 19:34	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 19:34	1
Bromoform	<5.00		5.00		ug/L			03/07/24 19:34	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 19:34	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 19:34	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 19:34	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 19:34	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 19:34	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 19:34	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 19:34	1
Chloroform	<3.00		3.00		ug/L			03/07/24 19:34	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 19:34	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 19:34	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 19:34	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 19:34	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 19:34	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 19:34	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 19:34	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 19:34	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 19:34	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 19:34	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 19:34	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 19:34	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 19:34	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 19:34	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 19:34	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 19:34	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 19:34	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 19:34	1
Toluene	<1.00		1.00		ug/L			03/07/24 19:34	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 19:34	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 19:34	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 19:34	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 19:34	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 19:34	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 19:34	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 19:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		03/07/24 19:34	1
Dibromofluoromethane (Surr)	107		73 - 130		03/07/24 19:34	1
Toluene-d8 (Surr)	95		80 - 120		03/07/24 19:34	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-16-0324

Lab Sample ID: 310-276156-13

Date Collected: 03/04/24 14:05

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 19:56	1
Benzene	<0.500		0.500		ug/L			03/07/24 19:56	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 19:56	1
Bromoform	<5.00		5.00		ug/L			03/07/24 19:56	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 19:56	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 19:56	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 19:56	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 19:56	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 19:56	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 19:56	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 19:56	1
Chloroform	<3.00		3.00		ug/L			03/07/24 19:56	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 19:56	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 19:56	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 19:56	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 19:56	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 19:56	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 19:56	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 19:56	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 19:56	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 19:56	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 19:56	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 19:56	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 19:56	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 19:56	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 19:56	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 19:56	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 19:56	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 19:56	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 19:56	1
Toluene	<1.00		1.00		ug/L			03/07/24 19:56	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 19:56	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 19:56	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 19:56	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 19:56	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 19:56	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 19:56	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 19:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		03/07/24 19:56	1
Dibromofluoromethane (Surr)	107		73 - 130		03/07/24 19:56	1
Toluene-d8 (Surr)	96		80 - 120		03/07/24 19:56	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-17-0324

Lab Sample ID: 310-276156-14

Date Collected: 03/05/24 15:41

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	29.4		10.0		ug/L			03/08/24 15:59	1
Benzene	7.18		0.500		ug/L			03/08/24 15:59	1
Bromodichloromethane	<1.00		1.00		ug/L			03/08/24 15:59	1
Bromoform	<5.00		5.00		ug/L			03/08/24 15:59	1
Bromomethane	<4.00		4.00		ug/L			03/08/24 15:59	1
2-Butanone (MEK)	81.1		10.0		ug/L			03/08/24 15:59	1
Carbon disulfide	1.41		1.00		ug/L			03/08/24 15:59	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/08/24 15:59	1
Chlorobenzene	<1.00		1.00		ug/L			03/08/24 15:59	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/08/24 15:59	1
Chloroethane	<4.00		4.00		ug/L			03/08/24 15:59	1
Chloroform	<3.00		3.00		ug/L			03/08/24 15:59	1
Chloromethane	<3.00		3.00		ug/L			03/08/24 15:59	1
cis-1,2-Dichloroethene	435		1.00		ug/L			03/08/24 15:59	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/08/24 15:59	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/08/24 15:59	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/08/24 15:59	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/08/24 15:59	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/08/24 15:59	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/08/24 15:59	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/08/24 15:59	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/08/24 15:59	1
Ethylbenzene	<1.00		1.00		ug/L			03/08/24 15:59	1
2-Hexanone	<10.0		10.0		ug/L			03/08/24 15:59	1
Methylene Chloride	<5.00		5.00		ug/L			03/08/24 15:59	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/08/24 15:59	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/08/24 15:59	1
Naphthalene	<5.00		5.00		ug/L			03/08/24 15:59	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/08/24 15:59	1
Tetrachloroethene	<1.00		1.00		ug/L			03/08/24 15:59	1
Toluene	<1.00		1.00		ug/L			03/08/24 15:59	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/08/24 15:59	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/08/24 15:59	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/08/24 15:59	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/08/24 15:59	1
Trichloroethene	<1.00		1.00		ug/L			03/08/24 15:59	1
Vinyl chloride	47.0		1.00		ug/L			03/08/24 15:59	1
Xylenes, Total	<3.00		3.00		ug/L			03/08/24 15:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		03/08/24 15:59	1
Dibromofluoromethane (Surr)	104		73 - 130		03/08/24 15:59	1
Toluene-d8 (Surr)	98		80 - 120		03/08/24 15:59	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	24700		50.0		ug/L			03/12/24 13:06	10
Methane	13800		10.0		ug/L			03/12/24 20:12	10
Ethane	141		1.00		ug/L			03/12/24 05:19	1
Ethene	381		1.00		ug/L			03/12/24 05:19	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-17-0324

Lab Sample ID: 310-276156-14

Date Collected: 03/05/24 15:41

Matrix: Water

Date Received: 03/06/24 11:56

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	96		60 - 140		03/12/24 05:19	1
1,1,1-Trifluoroethane	99		60 - 140		03/12/24 20:12	10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.8		5.00		mg/L			03/07/24 10:56	5
Nitrate as N	<0.200		0.200		mg/L			03/06/24 17:46	1
Sulfate	<1.00		1.00		mg/L			03/06/24 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	423		2.00		mg/L		03/07/24 08:45	03/15/24 12:32	20
Manganese	4.35		0.0100		mg/L		03/07/24 08:45	03/13/24 15:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	18.3		1.00		mg/L			03/08/24 07:51	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		03/12/24 11:46	03/12/24 11:46	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-18-0324

Lab Sample ID: 310-276156-15

Date Collected: 03/05/24 11:05

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 15:47	1
Benzene	<0.500		0.500		ug/L			03/07/24 15:47	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 15:47	1
Bromoform	<5.00		5.00		ug/L			03/07/24 15:47	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 15:47	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 15:47	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 15:47	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 15:47	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 15:47	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 15:47	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 15:47	1
Chloroform	<3.00		3.00		ug/L			03/07/24 15:47	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 15:47	1
cis-1,2-Dichloroethene	6.98		1.00		ug/L			03/07/24 15:47	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 15:47	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 15:47	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 15:47	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 15:47	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 15:47	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 15:47	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 15:47	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 15:47	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 15:47	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 15:47	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 15:47	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 15:47	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 15:47	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 15:47	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 15:47	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 15:47	1
Toluene	<1.00		1.00		ug/L			03/07/24 15:47	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 15:47	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 15:47	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 15:47	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 15:47	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 15:47	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 15:47	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		03/07/24 15:47	1
Dibromofluoromethane (Surr)	106		73 - 130		03/07/24 15:47	1
Toluene-d8 (Surr)	102		80 - 120		03/07/24 15:47	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-19-0324

Lab Sample ID: 310-276156-16

Date Collected: 03/04/24 15:50

Matrix: Water

Date Received: 03/06/24 11:56

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/12/24 06:15	1
Benzene	<0.500		0.500		ug/L			03/12/24 06:15	1
Bromodichloromethane	<1.00		1.00		ug/L			03/12/24 06:15	1
Bromoform	<5.00		5.00		ug/L			03/12/24 06:15	1
Bromomethane	<4.00		4.00		ug/L			03/12/24 06:15	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/12/24 06:15	1
Carbon disulfide	<1.00		1.00		ug/L			03/12/24 06:15	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/12/24 06:15	1
Chlorobenzene	<1.00		1.00		ug/L			03/12/24 06:15	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/12/24 06:15	1
Chloroethane	<4.00		4.00		ug/L			03/12/24 06:15	1
Chloroform	<3.00		3.00		ug/L			03/12/24 06:15	1
Chloromethane	<3.00		3.00		ug/L			03/12/24 06:15	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/12/24 06:15	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/12/24 06:15	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/12/24 06:15	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/12/24 06:15	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/12/24 06:15	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/12/24 06:15	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/12/24 06:15	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/12/24 06:15	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/12/24 06:15	1
Ethylbenzene	<1.00		1.00		ug/L			03/12/24 06:15	1
2-Hexanone	<10.0		10.0		ug/L			03/12/24 06:15	1
Methylene Chloride	<5.00		5.00		ug/L			03/12/24 06:15	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/12/24 06:15	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/12/24 06:15	1
Naphthalene	<5.00		5.00		ug/L			03/12/24 06:15	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/12/24 06:15	1
Tetrachloroethene	<1.00		1.00		ug/L			03/12/24 06:15	1
Toluene	<1.00		1.00		ug/L			03/12/24 06:15	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/12/24 06:15	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/12/24 06:15	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/12/24 06:15	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/12/24 06:15	1
Trichloroethene	<1.00		1.00		ug/L			03/12/24 06:15	1
Vinyl chloride	<1.00		1.00		ug/L			03/12/24 06:15	1
Xylenes, Total	<3.00		3.00		ug/L			03/12/24 06:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		03/12/24 06:15	1
Dibromofluoromethane (Surr)	108		73 - 130		03/12/24 06:15	1
Toluene-d8 (Surr)	99		80 - 120		03/12/24 06:15	1

Definitions/Glossary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Glossary

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

Surrogate Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DBFM (73-130)	TOL (80-120)
310-276156-1	TB-01	106	110	97
310-276156-2	DUP-01	107	107	96
310-276156-3	MW-01-0324	103	107	96
310-276156-4	MW-06-0324	108	111	95
310-276156-5	MW-07-0324	104	109	97
310-276156-6	MW-08-0324	108	110	95
310-276156-7	MW-09-0324	105	110	96
310-276156-8	MW-11-0324	107	109	94
310-276156-8 MS	MW-11-0324	107	106	97
310-276156-8 MSD	MW-11-0324	102	107	97
310-276156-9	MW-12-0324	108	108	94
310-276156-10	MW-13-0324	105	110	95
310-276156-11	MW-14-0324	104	109	97
310-276156-12	MW-15-0324	108	107	95
310-276156-13	MW-16-0324	103	107	96
310-276156-14	MW-17-0324	104	104	98
310-276156-15	MW-18-0324	104	106	102
310-276156-16	MW-19-0324	106	108	99
LCS 310-415410/6	Lab Control Sample	105	107	97
LCS 310-415410/7	Lab Control Sample	107	111	97
LCS 310-415428/6	Lab Control Sample	109	91	99
LCS 310-415428/7	Lab Control Sample	106	107	99
LCS 310-415563/6	Lab Control Sample	98	101	100
LCS 310-415563/7	Lab Control Sample	108	108	98
LCS 310-415683/6	Lab Control Sample	100	98	100
LCS 310-415683/7	Lab Control Sample	105	110	98
MB 310-415410/5	Method Blank	105	107	95
MB 310-415428/5	Method Blank	108	105	99
MB 310-415563/5	Method Blank	104	104	95
MB 310-415683/5	Method Blank	103	112	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: RSK-175 - Dissolved Gases (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		TFE1 (60-140)
310-276156-2	DUP-01	96
310-276156-3	MW-01-0324	96
310-276156-5	MW-07-0324	94
310-276156-5	MW-07-0324	99
310-276156-9	MW-12-0324	97
310-276156-9	MW-12-0324	97
310-276156-14	MW-17-0324	96
310-276156-14	MW-17-0324	99

Eurofins Cedar Falls

Surrogate Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TFE1 (60-140)
LCS 240-605651/34	Lab Control Sample	100
LCS 240-605815/4	Lab Control Sample	100
MB 240-605651/33	Method Blank	100
MB 240-605815/3	Method Blank	104

Surrogate Legend

TFE = 1,1,1-Trifluoroethane

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

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: MB 310-415410/5
Matrix: Water
Analysis Batch: 415410

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0		10.0		ug/L			03/07/24 14:07	1
Benzene	<0.500		0.500		ug/L			03/07/24 14:07	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 14:07	1
Bromoform	<5.00		5.00		ug/L			03/07/24 14:07	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 14:07	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 14:07	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 14:07	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 14:07	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 14:07	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 14:07	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 14:07	1
Chloroform	<3.00		3.00		ug/L			03/07/24 14:07	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 14:07	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 14:07	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 14:07	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 14:07	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 14:07	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 14:07	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 14:07	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 14:07	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 14:07	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 14:07	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 14:07	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 14:07	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 14:07	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 14:07	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 14:07	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 14:07	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 14:07	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 14:07	1
Toluene	<1.00		1.00		ug/L			03/07/24 14:07	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 14:07	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 14:07	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 14:07	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 14:07	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 14:07	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 14:07	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 14:07	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	105		80 - 120		03/07/24 14:07	1
Dibromofluoromethane (Surr)	107		73 - 130		03/07/24 14:07	1
Toluene-d8 (Surr)	95		80 - 120		03/07/24 14:07	1

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: LCS 310-415410/6
Matrix: Water
Analysis Batch: 415410

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	32.66		ug/L		82	50 - 150
Benzene	20.0	17.69		ug/L		88	72 - 124
Bromodichloromethane	20.0	18.73		ug/L		94	74 - 122
Bromoform	20.0	19.74		ug/L		99	61 - 122
2-Butanone (MEK)	40.0	29.84		ug/L		75	50 - 150
Carbon disulfide	20.0	16.47		ug/L		82	59 - 135
Carbon tetrachloride	20.0	22.22		ug/L		111	67 - 132
Chlorobenzene	20.0	18.53		ug/L		93	76 - 120
Chlorodibromomethane	20.0	19.84		ug/L		99	71 - 121
Chloroform	20.0	19.90		ug/L		100	72 - 125
cis-1,2-Dichloroethene	20.0	17.98		ug/L		90	74 - 123
cis-1,3-Dichloropropene	20.0	18.68		ug/L		93	71 - 125
1,2-Dichlorobenzene	20.0	18.54		ug/L		93	74 - 120
1,3-Dichlorobenzene	20.0	20.11		ug/L		101	72 - 120
1,4-Dichlorobenzene	20.0	18.29		ug/L		91	72 - 120
1,1-Dichloroethane	20.0	16.46		ug/L		82	70 - 127
1,2-Dichloroethane	20.0	18.88		ug/L		94	71 - 125
1,1-Dichloroethene	20.0	18.69		ug/L		93	63 - 132
1,2-Dichloropropane	20.0	16.30		ug/L		81	73 - 124
Ethylbenzene	20.0	18.47		ug/L		92	74 - 122
2-Hexanone	40.0	37.99		ug/L		95	60 - 140
Methylene Chloride	20.0	17.97		ug/L		90	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	39.20		ug/L		98	60 - 139
Methyl tert-butyl ether	20.0	19.38		ug/L		97	68 - 130
Naphthalene	20.0	18.12		ug/L		91	50 - 150
1,1,2,2-Tetrachloroethane	20.0	17.63		ug/L		88	68 - 124
Tetrachloroethene	20.0	22.53		ug/L		113	71 - 130
Toluene	20.0	18.63		ug/L		93	74 - 123
trans-1,2-Dichloroethene	20.0	17.85		ug/L		89	70 - 126
trans-1,3-Dichloropropene	20.0	19.47		ug/L		97	69 - 123
1,1,1-Trichloroethane	20.0	20.66		ug/L		103	73 - 129
1,1,2-Trichloroethane	20.0	18.64		ug/L		93	73 - 123
Trichloroethene	20.0	18.69		ug/L		93	72 - 126
Xylenes, Total	40.0	37.27		ug/L		93	73 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	107		73 - 130
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCS 310-415410/7
Matrix: Water
Analysis Batch: 415410

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	12.52		ug/L		63	23 - 150
Chloroethane	20.0	18.60		ug/L		93	54 - 136
Chloromethane	20.0	15.34		ug/L		77	38 - 150

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: LCS 310-415410/7

Matrix: Water

Analysis Batch: 415410

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Vinyl chloride	20.0	17.42		ug/L		87	56 - 140	
Surrogate								
	LCS %Recovery	LCS Qualifier						Limits
4-Bromofluorobenzene (Surr)	107							80 - 120
Dibromofluoromethane (Surr)	111							73 - 130
Toluene-d8 (Surr)	97							80 - 120

Lab Sample ID: 310-276156-8 MS

Matrix: Water

Analysis Batch: 415410

Client Sample ID: MW-11-0324

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	32.5		50.0	79.27		ug/L		94	31 - 150
Benzene	<0.500		25.0	21.26		ug/L		85	46 - 130
Bromodichloromethane	<1.00		25.0	22.71		ug/L		91	57 - 130
Bromoform	<5.00		25.0	23.87		ug/L		95	44 - 130
2-Butanone (MEK)	<10.0		50.0	44.95		ug/L		81	38 - 150
Carbon disulfide	<1.00		25.0	20.73		ug/L		83	38 - 135
Carbon tetrachloride	<2.00		25.0	24.58		ug/L		98	45 - 132
Chlorobenzene	<1.00		25.0	22.23		ug/L		89	59 - 130
Chlorodibromomethane	<5.00		25.0	24.60		ug/L		98	54 - 130
Chloroform	<3.00		25.0	23.89		ug/L		96	51 - 130
cis-1,2-Dichloroethene	22.0		25.0	41.49		ug/L		78	45 - 130
cis-1,3-Dichloropropene	<5.00		25.0	22.12		ug/L		88	53 - 130
1,2-Dichlorobenzene	<1.00		25.0	22.50		ug/L		90	59 - 130
1,3-Dichlorobenzene	<1.00		25.0	23.69		ug/L		95	57 - 130
1,4-Dichlorobenzene	<1.00		25.0	22.19		ug/L		89	57 - 130
1,1-Dichloroethane	<1.00		25.0	20.38		ug/L		82	49 - 130
1,2-Dichloroethane	<1.00		25.0	23.07		ug/L		92	51 - 130
1,1-Dichloroethene	<2.00		25.0	22.21		ug/L		89	37 - 132
1,2-Dichloropropane	<1.00		25.0	20.14		ug/L		81	57 - 130
Ethylbenzene	<1.00		25.0	21.70		ug/L		87	45 - 130
2-Hexanone	<10.0		50.0	46.78		ug/L		94	46 - 140
Methylene Chloride	<5.00		25.0	21.99		ug/L		88	37 - 150
Methyl isobutyl ketone (MIBK)	<10.0		50.0	48.70		ug/L		97	47 - 139
Methyl tert-butyl ether	<1.00		25.0	23.83		ug/L		95	52 - 130
Naphthalene	<5.00		25.0	23.06		ug/L		92	40 - 150
1,1,2,2-Tetrachloroethane	<1.00		25.0	22.15		ug/L		89	54 - 130
Tetrachloroethene	<1.00		25.0	25.65		ug/L		103	47 - 130
Toluene	<1.00		25.0	21.72		ug/L		87	51 - 130
trans-1,2-Dichloroethene	1.13		25.0	22.77		ug/L		87	48 - 130
trans-1,3-Dichloropropene	<5.00		25.0	23.33		ug/L		93	50 - 130
1,1,1-Trichloroethane	<1.00		25.0	24.50		ug/L		98	52 - 130
1,1,2-Trichloroethane	<1.00		25.0	22.56		ug/L		90	58 - 130
Trichloroethene	<1.00		25.0	23.02		ug/L		90	51 - 130
Xylenes, Total	<3.00		50.0	44.67		ug/L		89	43 - 130

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: 310-276156-8 MS
Matrix: Water
Analysis Batch: 415410

Client Sample ID: MW-11-0324
Prep Type: Total/NA

<u>Surrogate</u>	<u>MS</u> <u>%Recovery</u>	<u>MS</u> <u>Qualifier</u>	<u>Limits</u>
4-Bromofluorobenzene (Surr)	107		80 - 120
Dibromofluoromethane (Surr)	106		73 - 130
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: 310-276156-8 MSD
Matrix: Water
Analysis Batch: 415410

Client Sample ID: MW-11-0324
Prep Type: Total/NA

<u>Analyte</u>	<u>Sample</u> <u>Result</u>	<u>Sample</u> <u>Qualifier</u>	<u>Spike</u> <u>Added</u>	<u>MSD</u> <u>Result</u>	<u>MSD</u> <u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>Limit</u>
Acetone	32.5		50.0	72.05		ug/L		79	31 - 150	10	29
Benzene	<0.500		25.0	20.69		ug/L		83	46 - 130	3	20
Bromodichloromethane	<1.00		25.0	22.43		ug/L		90	57 - 130	1	20
Bromoform	<5.00		25.0	22.74		ug/L		91	44 - 130	5	20
2-Butanone (MEK)	<10.0		50.0	46.73		ug/L		85	38 - 150	4	20
Carbon disulfide	<1.00		25.0	19.30		ug/L		77	38 - 135	7	30
Carbon tetrachloride	<2.00		25.0	24.61		ug/L		98	45 - 132	0	20
Chlorobenzene	<1.00		25.0	21.77		ug/L		87	59 - 130	2	20
Chlorodibromomethane	<5.00		25.0	24.20		ug/L		97	54 - 130	2	20
Chloroform	<3.00		25.0	23.35		ug/L		93	51 - 130	2	20
cis-1,2-Dichloroethene	22.0		25.0	40.71		ug/L		75	45 - 130	2	20
cis-1,3-Dichloropropene	<5.00		25.0	21.74		ug/L		87	53 - 130	2	20
1,2-Dichlorobenzene	<1.00		25.0	22.09		ug/L		88	59 - 130	2	20
1,3-Dichlorobenzene	<1.00		25.0	23.94		ug/L		96	57 - 130	1	20
1,4-Dichlorobenzene	<1.00		25.0	21.59		ug/L		86	57 - 130	3	20
1,1-Dichloroethane	<1.00		25.0	19.53		ug/L		78	49 - 130	4	20
1,2-Dichloroethane	<1.00		25.0	22.97		ug/L		92	51 - 130	0	20
1,1-Dichloroethene	<2.00		25.0	20.92		ug/L		84	37 - 132	6	26
1,2-Dichloropropane	<1.00		25.0	19.88		ug/L		80	57 - 130	1	20
Ethylbenzene	<1.00		25.0	21.70		ug/L		87	45 - 130	0	20
2-Hexanone	<10.0		50.0	46.64		ug/L		93	46 - 140	0	20
Methylene Chloride	<5.00		25.0	21.49		ug/L		86	37 - 150	2	24
Methyl isobutyl ketone (MIBK)	<10.0		50.0	47.34		ug/L		95	47 - 139	3	20
Methyl tert-butyl ether	<1.00		25.0	24.07		ug/L		96	52 - 130	1	20
Naphthalene	<5.00		25.0	22.03		ug/L		88	40 - 150	5	30
1,1,2,2-Tetrachloroethane	<1.00		25.0	21.78		ug/L		87	54 - 130	2	20
Tetrachloroethene	<1.00		25.0	25.51		ug/L		102	47 - 130	1	20
Toluene	<1.00		25.0	21.46		ug/L		86	51 - 130	1	20
trans-1,2-Dichloroethene	1.13		25.0	21.82		ug/L		83	48 - 130	4	22
trans-1,3-Dichloropropene	<5.00		25.0	23.00		ug/L		92	50 - 130	1	20
1,1,1-Trichloroethane	<1.00		25.0	23.42		ug/L		94	52 - 130	5	20
1,1,2-Trichloroethane	<1.00		25.0	22.42		ug/L		90	58 - 130	1	20
Trichloroethene	<1.00		25.0	22.11		ug/L		87	51 - 130	4	20
Xylenes, Total	<3.00		50.0	43.92		ug/L		88	43 - 130	2	20

<u>Surrogate</u>	<u>MSD</u> <u>%Recovery</u>	<u>MSD</u> <u>Qualifier</u>	<u>Limits</u>
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	107		73 - 130
Toluene-d8 (Surr)	97		80 - 120

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: MB 310-415428/5
Matrix: Water
Analysis Batch: 415428

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/07/24 12:22	1
Benzene	<0.500		0.500		ug/L			03/07/24 12:22	1
Bromodichloromethane	<1.00		1.00		ug/L			03/07/24 12:22	1
Bromoform	<5.00		5.00		ug/L			03/07/24 12:22	1
Bromomethane	<4.00		4.00		ug/L			03/07/24 12:22	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/07/24 12:22	1
Carbon disulfide	<1.00		1.00		ug/L			03/07/24 12:22	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/07/24 12:22	1
Chlorobenzene	<1.00		1.00		ug/L			03/07/24 12:22	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/07/24 12:22	1
Chloroethane	<4.00		4.00		ug/L			03/07/24 12:22	1
Chloroform	<3.00		3.00		ug/L			03/07/24 12:22	1
Chloromethane	<3.00		3.00		ug/L			03/07/24 12:22	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 12:22	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 12:22	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 12:22	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 12:22	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/07/24 12:22	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/07/24 12:22	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/07/24 12:22	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/07/24 12:22	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/07/24 12:22	1
Ethylbenzene	<1.00		1.00		ug/L			03/07/24 12:22	1
2-Hexanone	<10.0		10.0		ug/L			03/07/24 12:22	1
Methylene Chloride	<5.00		5.00		ug/L			03/07/24 12:22	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/07/24 12:22	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/07/24 12:22	1
Naphthalene	<5.00		5.00		ug/L			03/07/24 12:22	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/07/24 12:22	1
Tetrachloroethene	<1.00		1.00		ug/L			03/07/24 12:22	1
Toluene	<1.00		1.00		ug/L			03/07/24 12:22	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/07/24 12:22	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/07/24 12:22	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/07/24 12:22	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/07/24 12:22	1
Trichloroethene	<1.00		1.00		ug/L			03/07/24 12:22	1
Vinyl chloride	<1.00		1.00		ug/L			03/07/24 12:22	1
Xylenes, Total	<3.00		3.00		ug/L			03/07/24 12:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		03/07/24 12:22	1
Dibromofluoromethane (Surr)	105		73 - 130		03/07/24 12:22	1
Toluene-d8 (Surr)	99		80 - 120		03/07/24 12:22	1

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: LCS 310-415428/6
Matrix: Water
Analysis Batch: 415428

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	35.87		ug/L		90	50 - 150
Benzene	20.0	18.33		ug/L		92	72 - 124
Bromodichloromethane	20.0	19.42		ug/L		97	74 - 122
Bromoform	20.0	18.92		ug/L		95	61 - 122
2-Butanone (MEK)	40.0	43.76		ug/L		109	50 - 150
Carbon disulfide	20.0	16.44		ug/L		82	59 - 135
Carbon tetrachloride	20.0	18.46		ug/L		92	67 - 132
Chlorobenzene	20.0	18.27		ug/L		91	76 - 120
Chlorodibromomethane	20.0	19.77		ug/L		99	71 - 121
Chloroform	20.0	16.55		ug/L		83	72 - 125
cis-1,2-Dichloroethene	20.0	17.26		ug/L		86	74 - 123
cis-1,3-Dichloropropene	20.0	19.09		ug/L		95	71 - 125
1,2-Dichlorobenzene	20.0	20.02		ug/L		100	74 - 120
1,3-Dichlorobenzene	20.0	20.18		ug/L		101	72 - 120
1,4-Dichlorobenzene	20.0	20.98		ug/L		105	72 - 120
1,1-Dichloroethane	20.0	17.57		ug/L		88	70 - 127
1,2-Dichloroethane	20.0	17.95		ug/L		90	71 - 125
1,1-Dichloroethene	20.0	17.17		ug/L		86	63 - 132
1,2-Dichloropropane	20.0	19.04		ug/L		95	73 - 124
Ethylbenzene	20.0	18.22		ug/L		91	74 - 122
2-Hexanone	40.0	48.14		ug/L		120	60 - 140
Methylene Chloride	20.0	17.53		ug/L		88	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	44.74		ug/L		112	60 - 139
Methyl tert-butyl ether	20.0	20.37		ug/L		102	68 - 130
Naphthalene	20.0	23.52		ug/L		118	50 - 150
1,1,2,2-Tetrachloroethane	20.0	21.85		ug/L		109	68 - 124
Tetrachloroethene	20.0	18.22		ug/L		91	71 - 130
Toluene	20.0	17.77		ug/L		89	74 - 123
trans-1,2-Dichloroethene	20.0	17.17		ug/L		86	70 - 126
trans-1,3-Dichloropropene	20.0	19.04		ug/L		95	69 - 123
1,1,1-Trichloroethane	20.0	17.81		ug/L		89	73 - 129
1,1,2-Trichloroethane	20.0	19.67		ug/L		98	73 - 123
Trichloroethene	20.0	18.83		ug/L		94	72 - 126
Xylenes, Total	40.0	35.81		ug/L		90	73 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	109		80 - 120
Dibromofluoromethane (Surr)	91		73 - 130
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCS 310-415428/7
Matrix: Water
Analysis Batch: 415428

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	16.68		ug/L		83	23 - 150
Chloroethane	20.0	19.33		ug/L		97	54 - 136
Chloromethane	20.0	19.26		ug/L		96	38 - 150

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: LCS 310-415428/7
Matrix: Water
Analysis Batch: 415428

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	20.0	19.83		ug/L		99	56 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	107		73 - 130
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: MB 310-415563/5
Matrix: Water
Analysis Batch: 415563

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			03/08/24 12:13	1
Benzene	<0.500		0.500		ug/L			03/08/24 12:13	1
Bromodichloromethane	<1.00		1.00		ug/L			03/08/24 12:13	1
Bromoform	<5.00		5.00		ug/L			03/08/24 12:13	1
Bromomethane	<4.00		4.00		ug/L			03/08/24 12:13	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/08/24 12:13	1
Carbon disulfide	<1.00		1.00		ug/L			03/08/24 12:13	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/08/24 12:13	1
Chlorobenzene	<1.00		1.00		ug/L			03/08/24 12:13	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/08/24 12:13	1
Chloroethane	<4.00		4.00		ug/L			03/08/24 12:13	1
Chloroform	<3.00		3.00		ug/L			03/08/24 12:13	1
Chloromethane	<3.00		3.00		ug/L			03/08/24 12:13	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/08/24 12:13	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/08/24 12:13	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/08/24 12:13	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/08/24 12:13	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/08/24 12:13	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/08/24 12:13	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/08/24 12:13	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/08/24 12:13	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/08/24 12:13	1
Ethylbenzene	<1.00		1.00		ug/L			03/08/24 12:13	1
2-Hexanone	<10.0		10.0		ug/L			03/08/24 12:13	1
Methylene Chloride	<5.00		5.00		ug/L			03/08/24 12:13	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/08/24 12:13	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/08/24 12:13	1
Naphthalene	<5.00		5.00		ug/L			03/08/24 12:13	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/08/24 12:13	1
Tetrachloroethene	<1.00		1.00		ug/L			03/08/24 12:13	1
Toluene	<1.00		1.00		ug/L			03/08/24 12:13	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/08/24 12:13	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/08/24 12:13	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/08/24 12:13	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/08/24 12:13	1
Trichloroethene	<1.00		1.00		ug/L			03/08/24 12:13	1

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: MB 310-415563/5
Matrix: Water
Analysis Batch: 415563

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<1.00		1.00		ug/L			03/08/24 12:13	1
Xylenes, Total	<3.00		3.00		ug/L			03/08/24 12:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		03/08/24 12:13	1
Dibromofluoromethane (Surr)	104		73 - 130		03/08/24 12:13	1
Toluene-d8 (Surr)	95		80 - 120		03/08/24 12:13	1

Lab Sample ID: LCS 310-415563/6
Matrix: Water
Analysis Batch: 415563

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	40.10		ug/L		100	50 - 150
Benzene	20.0	21.11		ug/L		106	72 - 124
Bromodichloromethane	20.0	21.40		ug/L		107	74 - 122
Bromoform	20.0	19.26		ug/L		96	61 - 122
2-Butanone (MEK)	40.0	36.28		ug/L		91	50 - 150
Carbon disulfide	20.0	21.31		ug/L		107	59 - 135
Carbon tetrachloride	20.0	22.45		ug/L		112	67 - 132
Chlorobenzene	20.0	21.28		ug/L		106	76 - 120
Chlorodibromomethane	20.0	20.81		ug/L		104	71 - 121
Chloroform	20.0	21.19		ug/L		106	72 - 125
cis-1,2-Dichloroethene	20.0	20.28		ug/L		101	74 - 123
cis-1,3-Dichloropropene	20.0	20.50		ug/L		102	71 - 125
1,2-Dichlorobenzene	20.0	22.39		ug/L		112	74 - 120
1,3-Dichlorobenzene	20.0	21.43		ug/L		107	72 - 120
1,4-Dichlorobenzene	20.0	21.84		ug/L		109	72 - 120
1,1-Dichloroethane	20.0	19.43		ug/L		97	70 - 127
1,2-Dichloroethane	20.0	20.64		ug/L		103	71 - 125
1,1-Dichloroethene	20.0	20.76		ug/L		104	63 - 132
1,2-Dichloropropane	20.0	20.52		ug/L		103	73 - 124
Ethylbenzene	20.0	21.46		ug/L		107	74 - 122
2-Hexanone	40.0	39.84		ug/L		100	60 - 140
Methylene Chloride	20.0	21.52		ug/L		108	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	41.16		ug/L		103	60 - 139
Methyl tert-butyl ether	20.0	20.68		ug/L		103	68 - 130
Naphthalene	20.0	20.15		ug/L		101	50 - 150
1,1,2,2-Tetrachloroethane	20.0	20.78		ug/L		104	68 - 124
Tetrachloroethene	20.0	20.78		ug/L		104	71 - 130
Toluene	20.0	21.08		ug/L		105	74 - 123
trans-1,2-Dichloroethene	20.0	21.34		ug/L		107	70 - 126
trans-1,3-Dichloropropene	20.0	20.37		ug/L		102	69 - 123
1,1,1-Trichloroethane	20.0	20.92		ug/L		105	73 - 129
1,1,2-Trichloroethane	20.0	20.63		ug/L		103	73 - 123
Trichloroethene	20.0	21.28		ug/L		106	72 - 126
Xylenes, Total	40.0	42.56		ug/L		106	73 - 123

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: LCS 310-415563/6
Matrix: Water
Analysis Batch: 415563

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

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	101		73 - 130
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 310-415563/7
Matrix: Water
Analysis Batch: 415563

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Bromomethane	20.0	16.78		ug/L		84	23 - 150
Chloroethane	20.0	18.56		ug/L		93	54 - 136
Chloromethane	20.0	20.72		ug/L		104	38 - 150
Vinyl chloride	20.0	23.66		ug/L		118	56 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		80 - 120
Dibromofluoromethane (Surr)	108		73 - 130
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 310-415683/5
Matrix: Water
Analysis Batch: 415683

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0		10.0		ug/L			03/11/24 23:25	1
Benzene	<0.500		0.500		ug/L			03/11/24 23:25	1
Bromodichloromethane	<1.00		1.00		ug/L			03/11/24 23:25	1
Bromoform	<5.00		5.00		ug/L			03/11/24 23:25	1
Bromomethane	<4.00		4.00		ug/L			03/11/24 23:25	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/11/24 23:25	1
Carbon disulfide	<1.00		1.00		ug/L			03/11/24 23:25	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/11/24 23:25	1
Chlorobenzene	<1.00		1.00		ug/L			03/11/24 23:25	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/11/24 23:25	1
Chloroethane	<4.00		4.00		ug/L			03/11/24 23:25	1
Chloroform	<3.00		3.00		ug/L			03/11/24 23:25	1
Chloromethane	<3.00		3.00		ug/L			03/11/24 23:25	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/11/24 23:25	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/11/24 23:25	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/11/24 23:25	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			03/11/24 23:25	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/11/24 23:25	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/11/24 23:25	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/11/24 23:25	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/11/24 23:25	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/11/24 23:25	1
Ethylbenzene	<1.00		1.00		ug/L			03/11/24 23:25	1
2-Hexanone	<10.0		10.0		ug/L			03/11/24 23:25	1

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: MB 310-415683/5
Matrix: Water
Analysis Batch: 415683

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<5.00		5.00		ug/L			03/11/24 23:25	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			03/11/24 23:25	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			03/11/24 23:25	1
Naphthalene	<5.00		5.00		ug/L			03/11/24 23:25	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/11/24 23:25	1
Tetrachloroethene	<1.00		1.00		ug/L			03/11/24 23:25	1
Toluene	<1.00		1.00		ug/L			03/11/24 23:25	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/11/24 23:25	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/11/24 23:25	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/11/24 23:25	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/11/24 23:25	1
Trichloroethene	<1.00		1.00		ug/L			03/11/24 23:25	1
Vinyl chloride	<1.00		1.00		ug/L			03/11/24 23:25	1
Xylenes, Total	<3.00		3.00		ug/L			03/11/24 23:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		03/11/24 23:25	1
Dibromofluoromethane (Surr)	112		73 - 130		03/11/24 23:25	1
Toluene-d8 (Surr)	101		80 - 120		03/11/24 23:25	1

Lab Sample ID: LCS 310-415683/6
Matrix: Water
Analysis Batch: 415683

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	33.35		ug/L		83	50 - 150
Benzene	20.0	19.91		ug/L		100	72 - 124
Bromodichloromethane	20.0	19.60		ug/L		98	74 - 122
Bromoform	20.0	16.20		ug/L		81	61 - 122
2-Butanone (MEK)	40.0	35.95		ug/L		90	50 - 150
Carbon disulfide	20.0	17.92		ug/L		90	59 - 135
Carbon tetrachloride	20.0	20.33		ug/L		102	67 - 132
Chlorobenzene	20.0	18.10		ug/L		91	76 - 120
Chlorodibromomethane	20.0	19.43		ug/L		97	71 - 121
Chloroform	20.0	17.71		ug/L		89	72 - 125
cis-1,2-Dichloroethene	20.0	19.71		ug/L		99	74 - 123
cis-1,3-Dichloropropene	20.0	18.16		ug/L		91	71 - 125
1,2-Dichlorobenzene	20.0	17.10		ug/L		85	74 - 120
1,3-Dichlorobenzene	20.0	18.36		ug/L		92	72 - 120
1,4-Dichlorobenzene	20.0	18.15		ug/L		91	72 - 120
1,1-Dichloroethane	20.0	19.22		ug/L		96	70 - 127
1,2-Dichloroethane	20.0	18.88		ug/L		94	71 - 125
1,1-Dichloroethene	20.0	18.39		ug/L		92	63 - 132
1,2-Dichloropropane	20.0	20.06		ug/L		100	73 - 124
Ethylbenzene	20.0	18.04		ug/L		90	74 - 122
2-Hexanone	40.0	39.74		ug/L		99	60 - 140
Methylene Chloride	20.0	18.82		ug/L		94	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	39.10		ug/L		98	60 - 139

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: LCS 310-415683/6

Matrix: Water

Analysis Batch: 415683

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl tert-butyl ether	20.0	20.77		ug/L		104	68 - 130
Naphthalene	20.0	18.76		ug/L		94	50 - 150
1,1,2,2-Tetrachloroethane	20.0	19.02		ug/L		95	68 - 124
Tetrachloroethene	20.0	18.68		ug/L		93	71 - 130
Toluene	20.0	18.37		ug/L		92	74 - 123
trans-1,2-Dichloroethene	20.0	18.61		ug/L		93	70 - 126
trans-1,3-Dichloropropene	20.0	17.82		ug/L		89	69 - 123
1,1,1-Trichloroethane	20.0	19.58		ug/L		98	73 - 129
1,1,2-Trichloroethane	20.0	18.83		ug/L		94	73 - 123
Trichloroethene	20.0	19.91		ug/L		100	72 - 126
Xylenes, Total	40.0	34.26		ug/L		86	73 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	98		73 - 130
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 310-415683/7

Matrix: Water

Analysis Batch: 415683

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	15.40		ug/L		77	23 - 150
Chloroethane	20.0	20.62		ug/L		103	54 - 136
Chloromethane	20.0	19.59		ug/L		98	38 - 150
Vinyl chloride	20.0	21.04		ug/L		105	56 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	110		73 - 130
Toluene-d8 (Surr)	98		80 - 120

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 570-419217/4

Matrix: Water

Analysis Batch: 419217

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	<5.00		5.00		ug/L			03/12/24 09:39	1

Lab Sample ID: LCS 570-419217/2

Matrix: Water

Analysis Batch: 419217

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	562	535.3		ug/L		95	80 - 120

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: LCSD 570-419217/3
Matrix: Water
Analysis Batch: 419217

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 dioxide	562	529.9		ug/L		94	80 - 120	1	20

Lab Sample ID: 310-276156-2 DU
Matrix: Water
Analysis Batch: 419217

Client Sample ID: DUP-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbon dioxide	6610		6698		ug/L		1	20

Lab Sample ID: MB 240-605651/33
Matrix: Water
Analysis Batch: 605651

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	<1.00		1.00		ug/L			03/11/24 22:48	1
Ethane	<1.00		1.00		ug/L			03/11/24 22:48	1
Ethene	<1.00		1.00		ug/L			03/11/24 22:48	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	100		60 - 140					03/11/24 22:48	1

Lab Sample ID: LCS 240-605651/34
Matrix: Water
Analysis Batch: 605651

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methane	284	298.8		ug/L		105	80 - 120
Ethane	537	536.7		ug/L		100	80 - 120
Ethene	506	509.6		ug/L		101	80 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,1,1-Trifluoroethane	100		60 - 140				

Lab Sample ID: MB 240-605815/3
Matrix: Water
Analysis Batch: 605815

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	<1.00		1.00		ug/L			03/12/24 14:15	1
Ethane	<1.00		1.00		ug/L			03/12/24 14:15	1
Ethene	<1.00		1.00		ug/L			03/12/24 14:15	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	104		60 - 140					03/12/24 14:15	1

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

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

Lab Sample ID: LCS 240-605815/4
Matrix: Water
Analysis Batch: 605815

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methane	284	293.0		ug/L		103	80 - 120
Ethane	537	538.7		ug/L		100	80 - 120
Ethene	506	509.5		ug/L		101	80 - 120
Surrogate		LCS %Recovery	LCS Qualifier			Limits	
1,1,1-Trifluoroethane		100				60 - 140	

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-415559/3
Matrix: Water
Analysis Batch: 415559

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			03/06/24 12:19	1
Nitrate as N	<0.200		0.200		mg/L			03/06/24 12:19	1
Sulfate	<1.00		1.00		mg/L			03/06/24 12:19	1

Lab Sample ID: LCS 310-415559/31
Matrix: Water
Analysis Batch: 415559

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.939		mg/L		99	90 - 110
Nitrate as N	2.00	2.080		mg/L		104	90 - 110
Sulfate	10.0	10.32		mg/L		103	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: 310-276156-14 DU
Matrix: Water
Analysis Batch: 415916

Client Sample ID: MW-17-0324
Prep Type: Dissolved
Prep Batch: 415367

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Manganese	4.35		4.323		mg/L		0.5	20

Lab Sample ID: 310-276156-14 DU
Matrix: Water
Analysis Batch: 416129

Client Sample ID: MW-17-0324
Prep Type: Dissolved
Prep Batch: 415367

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Iron	423		420.5		mg/L		0.7	20

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 310-415742/16
Matrix: Water
Analysis Batch: 415742

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.00		1.00		mg/L			03/07/24 19:18	1

Lab Sample ID: MB 310-415742/55
Matrix: Water
Analysis Batch: 415742

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.00		1.00		mg/L			03/09/24 15:31	1

Lab Sample ID: LCS 310-415742/17
Matrix: Water
Analysis Batch: 415742

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	9.99	10.19		mg/L		102	85 - 115

Lab Sample ID: LCS 310-415742/56
Matrix: Water
Analysis Batch: 415742

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	9.99	10.33		mg/L		103	85 - 115

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 310-415784/1-A
Matrix: Water
Analysis Batch: 415787

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 415784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.00		2.00		mg/L		03/12/24 11:46	03/12/24 11:46	1

Lab Sample ID: LCS 310-415784/2-A
Matrix: Water
Analysis Batch: 415787

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 415784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	5.00	3.200		mg/L		64	11 - 122

Lab Sample ID: 310-276156-9 MS
Matrix: Water
Analysis Batch: 415787

Client Sample ID: MW-12-0324
Prep Type: Total/NA
Prep Batch: 415784

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	<2.00		5.00	3.600		mg/L		72	10 - 122

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Method: SM 4500 S2 F - Sulfide, Total (Continued)

Lab Sample ID: 310-276156-9 MSD
 Matrix: Water
 Analysis Batch: 415787

Client Sample ID: MW-12-0324
 Prep Type: Total/NA
 Prep Batch: 415784

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<2.00		5.00	3.800		mg/L		76	10 - 122	5	26

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

QC Association Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

GC/MS VOA

Analysis Batch: 415410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-1	TB-01	Total/NA	Water	8260D	
310-276156-2	DUP-01	Total/NA	Water	8260D	
310-276156-3	MW-01-0324	Total/NA	Water	8260D	
310-276156-4	MW-06-0324	Total/NA	Water	8260D	
310-276156-5	MW-07-0324	Total/NA	Water	8260D	
310-276156-6	MW-08-0324	Total/NA	Water	8260D	
310-276156-7	MW-09-0324	Total/NA	Water	8260D	
310-276156-8	MW-11-0324	Total/NA	Water	8260D	
310-276156-9	MW-12-0324	Total/NA	Water	8260D	
310-276156-10	MW-13-0324	Total/NA	Water	8260D	
310-276156-11	MW-14-0324	Total/NA	Water	8260D	
310-276156-12	MW-15-0324	Total/NA	Water	8260D	
310-276156-13	MW-16-0324	Total/NA	Water	8260D	
MB 310-415410/5	Method Blank	Total/NA	Water	8260D	
LCS 310-415410/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-415410/7	Lab Control Sample	Total/NA	Water	8260D	
310-276156-8 MS	MW-11-0324	Total/NA	Water	8260D	
310-276156-8 MSD	MW-11-0324	Total/NA	Water	8260D	

Analysis Batch: 415428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-15	MW-18-0324	Total/NA	Water	8260D	
MB 310-415428/5	Method Blank	Total/NA	Water	8260D	
LCS 310-415428/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-415428/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 415563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-14	MW-17-0324	Total/NA	Water	8260D	
MB 310-415563/5	Method Blank	Total/NA	Water	8260D	
LCS 310-415563/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-415563/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 415683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-16	MW-19-0324	Total/NA	Water	8260D	
MB 310-415683/5	Method Blank	Total/NA	Water	8260D	
LCS 310-415683/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-415683/7	Lab Control Sample	Total/NA	Water	8260D	

GC VOA

Analysis Batch: 419217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-2	DUP-01	Total/NA	Water	RSK-175	
310-276156-3	MW-01-0324	Total/NA	Water	RSK-175	
310-276156-5	MW-07-0324	Total/NA	Water	RSK-175	
310-276156-9	MW-12-0324	Total/NA	Water	RSK-175	
310-276156-14	MW-17-0324	Total/NA	Water	RSK-175	
MB 570-419217/4	Method Blank	Total/NA	Water	RSK-175	
LCS 570-419217/2	Lab Control Sample	Total/NA	Water	RSK-175	

Eurofins Cedar Falls

QC Association Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

GC VOA (Continued)

Analysis Batch: 419217 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 570-419217/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
310-276156-2 DU	DUP-01	Total/NA	Water	RSK-175	

Analysis Batch: 605651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-2	DUP-01	Total/NA	Water	RSK-175	
310-276156-3	MW-01-0324	Total/NA	Water	RSK-175	
310-276156-5	MW-07-0324	Total/NA	Water	RSK-175	
310-276156-9	MW-12-0324	Total/NA	Water	RSK-175	
310-276156-14	MW-17-0324	Total/NA	Water	RSK-175	
MB 240-605651/33	Method Blank	Total/NA	Water	RSK-175	
LCS 240-605651/34	Lab Control Sample	Total/NA	Water	RSK-175	

Analysis Batch: 605815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-5	MW-07-0324	Total/NA	Water	RSK-175	
310-276156-9	MW-12-0324	Total/NA	Water	RSK-175	
310-276156-14	MW-17-0324	Total/NA	Water	RSK-175	
MB 240-605815/3	Method Blank	Total/NA	Water	RSK-175	
LCS 240-605815/4	Lab Control Sample	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 415559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-2	DUP-01	Total/NA	Water	9056A	
310-276156-2	DUP-01	Total/NA	Water	9056A	
310-276156-3	MW-01-0324	Total/NA	Water	9056A	
310-276156-3	MW-01-0324	Total/NA	Water	9056A	
310-276156-5	MW-07-0324	Total/NA	Water	9056A	
310-276156-5	MW-07-0324	Total/NA	Water	9056A	
310-276156-9	MW-12-0324	Total/NA	Water	9056A	
310-276156-9	MW-12-0324	Total/NA	Water	9056A	
310-276156-14	MW-17-0324	Total/NA	Water	9056A	
310-276156-14	MW-17-0324	Total/NA	Water	9056A	
MB 310-415559/3	Method Blank	Total/NA	Water	9056A	
LCS 310-415559/31	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 415367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-2	DUP-01	Dissolved	Water	3005A	
310-276156-3	MW-01-0324	Dissolved	Water	3005A	
310-276156-5	MW-07-0324	Dissolved	Water	3005A	
310-276156-9	MW-12-0324	Dissolved	Water	3005A	
310-276156-14	MW-17-0324	Dissolved	Water	3005A	
310-276156-14 DU	MW-17-0324	Dissolved	Water	3005A	

Analysis Batch: 415916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-2	DUP-01	Dissolved	Water	6020B	415367

Eurofins Cedar Falls

QC Association Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Metals (Continued)

Analysis Batch: 415916 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-3	MW-01-0324	Dissolved	Water	6020B	415367
310-276156-5	MW-07-0324	Dissolved	Water	6020B	415367
310-276156-9	MW-12-0324	Dissolved	Water	6020B	415367
310-276156-14	MW-17-0324	Dissolved	Water	6020B	415367
310-276156-14 DU	MW-17-0324	Dissolved	Water	6020B	415367

Analysis Batch: 416129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-5	MW-07-0324	Dissolved	Water	6020B	415367
310-276156-14	MW-17-0324	Dissolved	Water	6020B	415367
310-276156-14 DU	MW-17-0324	Dissolved	Water	6020B	415367

General Chemistry

Analysis Batch: 415742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-2	DUP-01	Total/NA	Water	9060A	
310-276156-3	MW-01-0324	Total/NA	Water	9060A	
310-276156-5	MW-07-0324	Total/NA	Water	9060A	
310-276156-9	MW-12-0324	Total/NA	Water	9060A	
310-276156-14	MW-17-0324	Total/NA	Water	9060A	
MB 310-415742/16	Method Blank	Total/NA	Water	9060A	
MB 310-415742/55	Method Blank	Total/NA	Water	9060A	
LCS 310-415742/17	Lab Control Sample	Total/NA	Water	9060A	
LCS 310-415742/56	Lab Control Sample	Total/NA	Water	9060A	

Prep Batch: 415784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-2	DUP-01	Total/NA	Water	SM 4500 S2 C	
310-276156-3	MW-01-0324	Total/NA	Water	SM 4500 S2 C	
310-276156-5	MW-07-0324	Total/NA	Water	SM 4500 S2 C	
310-276156-9	MW-12-0324	Total/NA	Water	SM 4500 S2 C	
310-276156-14	MW-17-0324	Total/NA	Water	SM 4500 S2 C	
MB 310-415784/1-A	Method Blank	Total/NA	Water	SM 4500 S2 C	
LCS 310-415784/2-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 C	
310-276156-9 MS	MW-12-0324	Total/NA	Water	SM 4500 S2 C	
310-276156-9 MSD	MW-12-0324	Total/NA	Water	SM 4500 S2 C	

Analysis Batch: 415787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276156-2	DUP-01	Total/NA	Water	SM 4500 S2 F	415784
310-276156-3	MW-01-0324	Total/NA	Water	SM 4500 S2 F	415784
310-276156-5	MW-07-0324	Total/NA	Water	SM 4500 S2 F	415784
310-276156-9	MW-12-0324	Total/NA	Water	SM 4500 S2 F	415784
310-276156-14	MW-17-0324	Total/NA	Water	SM 4500 S2 F	415784
MB 310-415784/1-A	Method Blank	Total/NA	Water	SM 4500 S2 F	415784
LCS 310-415784/2-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	415784
310-276156-9 MS	MW-12-0324	Total/NA	Water	SM 4500 S2 F	415784
310-276156-9 MSD	MW-12-0324	Total/NA	Water	SM 4500 S2 F	415784

Eurofins Cedar Falls

Lab Chronicle

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: TB-01
Date Collected: 03/04/24 08:00
Date Received: 03/06/24 11:56

Lab Sample ID: 310-276156-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 15:13

Client Sample ID: DUP-01
Date Collected: 03/05/24 00:00
Date Received: 03/06/24 11:56

Lab Sample ID: 310-276156-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 16:18
Total/NA	Analysis	RSK-175		1	419217	I9H5	EET CAL 4	03/12/24 11:33
Total/NA	Analysis	RSK-175		1	605651	JBN	EET CLE	03/12/24 04:11
Total/NA	Analysis	9056A		1	415559	QTZ5	EET CF	03/06/24 18:12
Total/NA	Analysis	9056A		5	415559	QTZ5	EET CF	03/07/24 11:22
Dissolved	Prep	3005A			415367	QTZ5	EET CF	03/07/24 08:45
Dissolved	Analysis	6020B		1	415916	A6US	EET CF	03/13/24 15:23
Total/NA	Analysis	9060A		1	415742	WZC8	EET CF	03/08/24 05:28
Total/NA	Prep	SM 4500 S2 C			415784	ENB7	EET CF	03/12/24 11:46
Total/NA	Analysis	SM 4500 S2 F		1	415787	ENB7	EET CF	03/12/24 11:46

Client Sample ID: MW-01-0324
Date Collected: 03/06/24 09:00
Date Received: 03/06/24 11:56

Lab Sample ID: 310-276156-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 16:40
Total/NA	Analysis	RSK-175		10	419217	I9H5	EET CAL 4	03/12/24 12:21
Total/NA	Analysis	RSK-175		1	605651	JBN	EET CLE	03/12/24 04:28
Total/NA	Analysis	9056A		1	415559	QTZ5	EET CF	03/06/24 17:19
Total/NA	Analysis	9056A		5	415559	QTZ5	EET CF	03/07/24 10:30
Dissolved	Prep	3005A			415367	QTZ5	EET CF	03/07/24 08:45
Dissolved	Analysis	6020B		1	415916	A6US	EET CF	03/13/24 15:27
Total/NA	Analysis	9060A		1	415742	WZC8	EET CF	03/08/24 06:03
Total/NA	Prep	SM 4500 S2 C			415784	ENB7	EET CF	03/12/24 11:46
Total/NA	Analysis	SM 4500 S2 F		1	415787	ENB7	EET CF	03/12/24 11:46

Client Sample ID: MW-06-0324
Date Collected: 03/05/24 13:10
Date Received: 03/06/24 11:56

Lab Sample ID: 310-276156-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 17:02

Lab Chronicle

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-07-0324

Lab Sample ID: 310-276156-5

Date Collected: 03/05/24 14:10

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 17:23
Total/NA	Analysis	RSK-175		10	419217	I9H5	EET CAL 4	03/12/24 12:37
Total/NA	Analysis	RSK-175		1	605651	JBN	EET CLE	03/12/24 04:45
Total/NA	Analysis	RSK-175		10	605815	JBN	EET CLE	03/12/24 19:55
Total/NA	Analysis	9056A		1	415559	QTZ5	EET CF	03/06/24 17:32
Total/NA	Analysis	9056A		5	415559	QTZ5	EET CF	03/07/24 10:43
Dissolved	Prep	3005A			415367	QTZ5	EET CF	03/07/24 08:45
Dissolved	Analysis	6020B		1	415916	A6US	EET CF	03/13/24 15:30
Dissolved	Prep	3005A			415367	QTZ5	EET CF	03/07/24 08:45
Dissolved	Analysis	6020B		4	416129	A6US	EET CF	03/15/24 12:28
Total/NA	Analysis	9060A		10	415742	WZC8	EET CF	03/08/24 06:39
Total/NA	Prep	SM 4500 S2 C			415784	ENB7	EET CF	03/12/24 11:46
Total/NA	Analysis	SM 4500 S2 F		1	415787	ENB7	EET CF	03/12/24 11:46

Client Sample ID: MW-08-0324

Lab Sample ID: 310-276156-6

Date Collected: 03/04/24 11:55

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 17:45

Client Sample ID: MW-09-0324

Lab Sample ID: 310-276156-7

Date Collected: 03/04/24 13:18

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 18:07

Client Sample ID: MW-11-0324

Lab Sample ID: 310-276156-8

Date Collected: 03/04/24 17:25

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 15:35

Client Sample ID: MW-12-0324

Lab Sample ID: 310-276156-9

Date Collected: 03/05/24 17:00

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 18:29
Total/NA	Analysis	RSK-175		10	419217	I9H5	EET CAL 4	03/12/24 12:51
Total/NA	Analysis	RSK-175		1	605651	JBN	EET CLE	03/12/24 05:02
Total/NA	Analysis	RSK-175		1	605815	JBN	EET CLE	03/12/24 15:23

Eurofins Cedar Falls

Lab Chronicle

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-12-0324

Lab Sample ID: 310-276156-9

Date Collected: 03/05/24 17:00

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		1	415559	QTZ5	EET CF	03/06/24 17:59
Total/NA	Analysis	9056A		5	415559	QTZ5	EET CF	03/07/24 11:09
Dissolved	Prep	3005A			415367	QTZ5	EET CF	03/07/24 08:45
Dissolved	Analysis	6020B		1	415916	A6US	EET CF	03/13/24 15:34
Total/NA	Analysis	9060A		1	415742	WZC8	EET CF	03/08/24 07:15
Total/NA	Prep	SM 4500 S2 C			415784	ENB7	EET CF	03/12/24 11:46
Total/NA	Analysis	SM 4500 S2 F		1	415787	ENB7	EET CF	03/12/24 11:46

Client Sample ID: MW-13-0324

Lab Sample ID: 310-276156-10

Date Collected: 03/05/24 09:45

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 18:51

Client Sample ID: MW-14-0324

Lab Sample ID: 310-276156-11

Date Collected: 03/05/24 08:38

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 19:12

Client Sample ID: MW-15-0324

Lab Sample ID: 310-276156-12

Date Collected: 03/04/24 14:49

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 19:34

Client Sample ID: MW-16-0324

Lab Sample ID: 310-276156-13

Date Collected: 03/04/24 14:05

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415410	WSE8	EET CF	03/07/24 19:56

Client Sample ID: MW-17-0324

Lab Sample ID: 310-276156-14

Date Collected: 03/05/24 15:41

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415563	FE5V	EET CF	03/08/24 15:59
Total/NA	Analysis	RSK-175		10	419217	I9H5	EET CAL 4	03/12/24 13:06
Total/NA	Analysis	RSK-175		1	605651	JBN	EET CLE	03/12/24 05:19
Total/NA	Analysis	RSK-175		10	605815	JBN	EET CLE	03/12/24 20:12

Eurofins Cedar Falls

Lab Chronicle

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Client Sample ID: MW-17-0324

Lab Sample ID: 310-276156-14

Date Collected: 03/05/24 15:41

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		1	415559	QTZ5	EET CF	03/06/24 17:46
Total/NA	Analysis	9056A		5	415559	QTZ5	EET CF	03/07/24 10:56
Dissolved	Prep	3005A			415367	QTZ5	EET CF	03/07/24 08:45
Dissolved	Analysis	6020B		1	415916	A6US	EET CF	03/13/24 15:37
Dissolved	Prep	3005A			415367	QTZ5	EET CF	03/07/24 08:45
Dissolved	Analysis	6020B		20	416129	A6US	EET CF	03/15/24 12:32
Total/NA	Analysis	9060A		1	415742	WZC8	EET CF	03/08/24 07:51
Total/NA	Prep	SM 4500 S2 C			415784	ENB7	EET CF	03/12/24 11:46
Total/NA	Analysis	SM 4500 S2 F		1	415787	ENB7	EET CF	03/12/24 11:46

Client Sample ID: MW-18-0324

Lab Sample ID: 310-276156-15

Date Collected: 03/05/24 11:05

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415428	FE5V	EET CF	03/07/24 15:47

Client Sample ID: MW-19-0324

Lab Sample ID: 310-276156-16

Date Collected: 03/04/24 15:50

Matrix: Water

Date Received: 03/06/24 11:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	415683	FE5V	EET CF	03/12/24 06:15

Laboratory References:

- EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494
- EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
- EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24
California	Los Angeles County Sanitation Districts	10109	08-01-24
California	State	3082	07-31-24
Kansas	NELAP	E-10420	08-01-24
Nevada	State	CA00111	07-31-24
Oregon	NELAP	4175	02-03-25
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-24

Laboratory: Eurofins Cleveland

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	421	06-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
RSK-175		Water	Ethane
RSK-175		Water	Ethene
RSK-175		Water	Methane

Method Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-276156-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
RSK-175	Dissolved Gases (GC)	RSK	EET CAL 4
RSK-175	Dissolved Gases (GC)	RSK	EET CLE
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
9060A	Organic Carbon, Total (TOC)	SW846	EET CF
SM 4500 S2 F	Sulfide, Total	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
SM 4500 S2 C	Sulfide, Sample Pretreatment/Concentration	SM	EET CF

Protocol References:

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

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

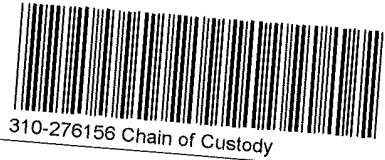
EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

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

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



Environment Testing
America



Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>STATAC</u>			
City/State: <u>DES MOINES</u>	CITY STATE: <u>IA</u>	Project: <u>Rockwell Collins</u>	
Receipt Information			
Date/Time Received: <u>3/8/24</u>	DATE	TIME: <u>1156</u>	Received By: <u>[Signature]</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input checked="" type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID: _____			
Multiple Coolers? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler # <u>1</u> of <u>2</u>			
Cooler Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Which VOA samples are in cooler? ↓			
<u>All vials for VOL analysis</u>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>4</u>		Correction Factor (°C): <u>0.0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>2.2</u>		Corrected Temp (°C): <u>2.2</u>	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE. If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			
<u>All V.O/S From Cooler 1 - 1 "OFF WHITE/CREAM" racks.</u>			





Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>STANEC</u>			
City/State: <u>DES MOINES</u>	CITY	STATE <u>IA</u>	Project: <u>Rockwell Collins</u>
Receipt Information			
Date/Time Received: <u>3/8/24</u>	DATE	TIME <u>1156</u>	Received By: <u>LO</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input checked="" type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID: _____			
Multiple Coolers? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler # <u>2</u> of <u>2</u>			
Cooler Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Trip Blank Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Which VOA samples are in cooler? ↓			
<u>All BSK and TOC vials</u>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>4</u>		Correction Factor (°C): <u>0.0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>3.4</u>		Corrected Temp (°C): <u>3.4</u>	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			
<u>All Vials from Cooler 2 in blue racks. These came in bagged sets w/ plastics.</u>			

Eurofins Cedar Falls

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

Chain of Custody Record

TestAmerica Des Moines SC

21



Environmental Testing

Client Information		Sampler: ERB		Lab PM: Bindert, Zach T		Carrier Tracking No(s):		COC No: 310-87244-24434 1									
Client Contact: Steve Varsa		Phone: 515-253-0630		E-Mail: Zach.Bindert@et.eurofinsus.com		State of Origin: Iowa		Page: Page 1 of 2									
Company: Stantec Consulting Services Inc				PWSID:		Analysis Requested											
Address: 11311 Aurora Avenue		Due Date Requested: STD		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8260D - Volatile Standard Sublist RSK_176 - Methane, Ethane, Ethene 9060A - TOC Chloride, Sulfate - 9066A_ORGFM_28D, Nitrate - 9066A_ORGFM_48H 6020B - Dissolved Iron and Manganese RSK_176_CO2 - RSK-176 CO2 SM4600_S2_F - Sulfide, Total		Total Number of Containers		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)									
City: Des Moines		TAT Requested (days): STD															
State Zip: IA, 50322-7904		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No															
Phone:		PO #: 193709909 100 001															
Email: steve.varsa@stantec.com		WO #:															
Project Name: Rockwell Collins - 35th Street		Project #: 31012345		Other:		Special Instructions/Note:		Nitrate - 48 Hour Hold Time									
Site: Cedar Rapids IA		SSOW#:															
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - Volatile Standard Sublist	RSK_176 - Methane, Ethane, Ethene	9060A - TOC	Chloride, Sulfate - 9066A_ORGFM_28D, Nitrate - 9066A_ORGFM_48H	6020B - Dissolved Iron and Manganese	RSK_176_CO2 - RSK-176 CO2	SM4600_S2_F - Sulfide, Total	Total Number of Containers	Special Instructions/Note	
				Preservation Code:		X	X	A	A	S	N	D	N	CB			
TB-01		3/4/2024	0800	G	Water	N	N	X								2	
DUP-01		3/5/2024		G	Water	Y	N	X	X	X	X	X	X	X		14	
MW-01-0324		3/6/2024	0400	G	Water	Y	N	X	X	X	X	X	X	X		14	
MW-06-0324		3/5/2024	1310	G	Water	N	N	X								3	
MW-07-0324		3/5/2024	1410	G	Water	Y	N	X	X	X	X	X	X	X		14	
MW-08-0324		3/4/2024	1155	G	Water	N	N	X								3	
MW-09-0324		3/4/2024	1318	G	Water	N	N	X								3	
MW-11-0324		3/4/2024	1725	G	Water	N	Y	X								9	MS/MSD
MW-12-0324		3/5/2024	1700	G	Water	Y	N	X	X	X	X	X	X	X		14	
MW-13-0324		3/5/2024	0945	G	Water	N	N	X								3	
MW-14-0324		3/5/2024	0838	G	Water	N	N	X								3	
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> 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: Emma Brady		Date/Time: 3/6/2023 1156		Company: STN		Received by: [Signature]		Date/Time: 3/6/24 1156		Company:							
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:							
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:							
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks:													

Page 59 of 66

3/22/2024



Eurofins Cedar Falls

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

Chain of Custody Record

TestAmerica Des
21-

eurofins | Environment Testing

Client Information		Sampler: ERB		Lab PM: Bindert, Zach T		Carrier Tracking No(s):		COC No: 310-87244-24434.2	
Client Contact: Steve Varsa		Phone: 515-253-0830		E-Mail: Zach.Bindert@et.eurofinsus.com		State of Origin: Iowa		Page: Page 2 of 2	
Company: Stantec Consulting Services Inc				PWSID:		Analysis Requested			
Address: 11311 Aurora Avenue		Due Date Requested: STD		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8280D - Volatile Standard Sublist RSK_176 - Methane, Ethane, Ethene 9060A - TOC Chloride, Sulfate - 9066A_ORGFM_28D, Nitrate - 9068A_ORGFM_48H 9020B - Dissolved Iron and Manganese RSK_175_CO2 - RSK-175 CO2 SM4600_S2_F - Sulfide, Total		Total Number of containers		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)	
City: Des Moines		TAT Requested (days): STD							
State, Zip: IA, 50322-7904		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Phone:		PO #: 193709909 100 001							
Email: steve.varsa@stantec.com		WO #:							
Project Name: Rockwell Collins - 35th Street		Project #: 31012345		Site: Cedar Rapids IA SOW#:		Other:		Special Instructions/Note:	
Sample Identification		Sample Date							
						Preservation Code:		<input checked="" type="checkbox"/> A <input type="checkbox"/> S <input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> CB	
MW-15-0324		3/4/2024		1444		G		Water	
MW-16-0324		3/4/2024		1405		G		Water	
MW-17-0324		3/5/2024		1541		G		Water	
MW-18-0324		3/5/2024		1105		G		Water	
MW-14-0324		3/4/2024		1550		G		Water	
Water									
Water									
Water									
Water									
Water									
Water									
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> 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: Emma Brady			Date/Time: 3/6/2023 1156		Company: STN		Received by: [Signature]		Date/Time: 3/6/23 1156
Relinquished by:			Date/Time:		Company:		Received by:		Date/Time:
Relinquished by:			Date/Time:		Company:		Received by:		Date/Time:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:				

Page 60 of 66

3/22/2024



Eurofins Cedar Falls

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

2-1/3.0

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler		Lab PM: Bindert, Zach T		Carrier Tracking No(s):		COC No: 310-70188.1		
Client Contact Shipping/Receiving		Phone:		E-Mail: Zach.Bindert@et.eurofinsus.com		State of Origin: Iowa		Page: Page 1 of 1		
Company: Eurofins Environment Testing North Centr				Accreditations Required (See note): State Iowa				Job #: 310-276156-1		
Address: 180 S. Van Buren Avenue, City: Barberton State, Zip: OH, 44203 Phone: 330-497-9396(Tel) 330-497-0772(Fax) Email:		Due Date Requested: 3/19/2024 TAT Requested (days):		Analysis Requested				Preservation Codes: A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Y Trizma Z other (specify) Other:		
Project Name: Rockwell Collins 35th Street Site:		PO #: WO #: Project #: 31012345 SSOW#:								
Sample Identification Client ID (Lab ID)		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 MBMSD (Yes or No)	RSK_175 Methane, Ethane, Ethene	Total Number of Containers	Special Instructions/Note:
DUP-01 (310-276156-2)		3/5/24	Central		Water		X		3	RSK
MW-01-0324 (310-276156-3)		3/6/24	09:00 Central		Water		X		3	
MW-07-0324 (310-276156-5)		3/5/24	14:10 Central		Water		X		3	
MW-12-0324 (310-276156-9)		3/5/24	17:00 Central		Water		X		3	
MW-17-0324 (310-276156-14)		3/5/24	15:41 Central		Water		X		3	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.</p>										
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested: I, II, III, IV Other (specify)			Primary Deliverable Rank: 2			Special Instructions/QC Requirements:				
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:				
Relinquished by: <i>[Signature]</i>		Date/Time: 3/6/24 1550		Company:		Received by: <i>[Signature]</i>		Date/Time: 3-7-24 0915		Company: BETWC
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:
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
3
4
5
6
7
8
9
10
11
12
13
14
15

Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Eurofins - CF Site Name _____ Cooler unpacked by OMC
Cooler Received on 3-7-24 Opened on 3-7-24
FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____
Receipt After-hours Drop-off Date/Time _____ Storage Location _____
Eurofins Cooler # EC Foam Box Client Cooler Box Other _____
Packing material used. Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None
1 Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # 19 (CF +0.9 °C) Observed Cooler Temp. 2.1 °C Corrected Cooler Temp 3.0 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
-Were tamper/custody seals intact and uncompromised? Yes No NA

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

13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC316719
14 Were VOAs on the COC? Yes No
15 Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
17 Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
Concerning _____


Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by _____

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

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

eurofins | Environment Testing **Temperature Controlled**



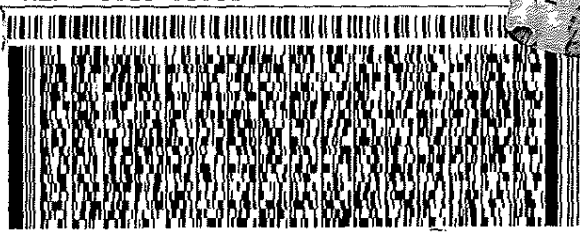
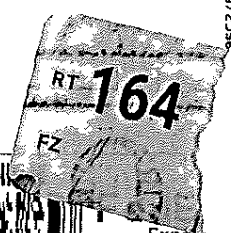
**IF THIS SHIPMENT IS DELAYED IN TRANSIT,
STORE REFRIGERATED (2° TO 8° C / 36° TO 47° F)**

TAL-0090(1016)

ORIGIN ID ALOA (319) 277 2401
 SAMPLE RECEIVING
 EUROFINS TESTAMERICA
 3019 VENTURE WAY
 CEDAR FALLS, IA 50613
 UNITED STATES US

SHIP DATE 06MAR24
 ACTWGT 14 10 LB
 CAD 0870970/CAFE3755
 BILL SENDER

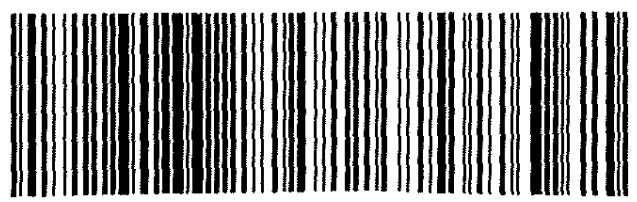
TO SHIPPING/RECEIVING
 EUROFINS ENVIRONMENT TESTING NORTH
 180 S. VAN BUREN AVENUE
 BARBERTON OH 44203
 (330) 497-9396
 REF S310-90880



TRK# 7008 5806 7691
 THU - 07 MAR 10:30A
 PRIORITY OVERNIGHT

NX CAKA

44203
 OH-US CLE



Eurofins Cedar Falls

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

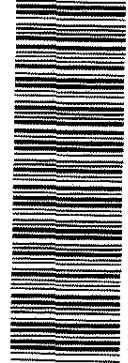
Chain of Custody Record



eurofins En Loc 310
276156

Client Information (Sub Contract Lab)		Sampler: Bindert, Zach T	Lab PM: Bindert, Zach T	Carrier Tracking No(s):	COC No: 310-70189.1
Client Contact: Shipping/Receiving		Phone:	E-Mail: Zach.Bindert@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,			Accreditations Required (See note): State Iowa		Job #: 10-276156-1
Address: 2841 Dow Avenue, Suite 100,		Due Date Requested: 3/19/2024	Analysis Requested		
City: Tustin		TAT Requested (days):			
State, Zip: CA, 92780		PO #:			
Phone: 714-895-5494(Tel)		WO #:			
Email:		Project #: 31012345	Project Name: Rockwell Collins 35th Street		Other:
Site: SSOW#:		SSOW#:	Site:		Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oi, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RSK_175_CO2/RSK-176_CO2	Total Number of Containers	Special Instruc
									Preservation Code:
DUP-01 (310-276156-2)	3/5/24	Central		Water		X			
MW-01-0324 (310-276156-3)	3/6/24	09:00 Central		Water		X			
MW-07-0324 (310-276156-5)	3/5/24	14:10 Central		Water		X			
MW-12-0324 (310-276156-9)	3/5/24	17:00 Central		Water		X			
MW-17-0324 (310-276156-14)	3/5/24	15:41 Central		Water		X			



310-276156 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Deliverable Requested: I II III IV Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by: <i>[Signature]</i>	Date:	Time:	Method of Shipment:
Relinquished by: <i>[Signature]</i>	Date/Time: 3/8/24/1600	Company:	Received by: <i>[Signature]</i>
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 27/27 5C 12	

Page 64 of 66

3/22/2024



Login Sample Receipt Checklist

Client: Stantec Consulting Services, Inc.

Job Number: 310-276156-1

Login Number: 276156

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Costello, Mackenzie K

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



Login Sample Receipt Checklist

Client: Stantec Consulting Services, Inc.

Job Number: 310-276156-1

Login Number: 276156

List Number: 3

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 03/07/24 06:58 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7
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?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Steve Varsa
Stantec Consulting Services, Inc.
11311 Aurora Avenue
Des Moines, Iowa 50322-7904

Generated 6/20/2024 1:44:28 PM

JOB DESCRIPTION

Rockwell Collins - 35th Street

JOB NUMBER

310-282892-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



Generated
6/20/2024 1:44:28 PM

Authorized for release by
Zach Bindert, Client Service Manager
Zach.Bindert@et.eurofinsus.com
(319)277-2401



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Sample Summary	6
Detection Summary	7
Client Sample Results	9
Definitions	30
Surrogate Summary	31
QC Sample Results	32
QC Association	42
Chronicle	45
Certification Summary	49
Method Summary	50
Chain of Custody	51
Receipt Checklists	59

Case Narrative

Client: Stantec Consulting Services, Inc.
Project: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Job ID: 310-282892-1

Eurofins Cedar Falls

Job Narrative 310-282892-1

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 6/6/2024 12:20 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.0°C and 3.3°C.

GC/MS VOA

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

GC VOA

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

HPLC/IC

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Case Narrative

Client: Stantec Consulting Services, Inc.
Project: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Job ID: 310-282892-2

Eurofins Cedar Falls

Job Narrative 310-282892-2

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 6/6/2024 12:20 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.0°C and 3.3°C.

HPLC/IC

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

Eurofins Cedar Falls

Sample Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-282892-1	TB-01	Water	06/04/24 10:30	06/06/24 12:20
310-282892-2	Dup-01	Water	06/06/24 00:00	06/06/24 12:20
310-282892-3	MW-01-0624	Water	06/05/24 16:38	06/06/24 12:20
310-282892-4	MW-06-0624	Water	06/05/24 11:25	06/06/24 12:20
310-282892-5	MW-07-0624	Water	06/05/24 13:00	06/06/24 12:20
310-282892-6	MW-08-0624	Water	06/04/24 11:15	06/06/24 12:20
310-282892-7	MW-09-0624	Water	06/04/24 12:30	06/06/24 12:20
310-282892-8	MW-11-0624	Water	06/05/24 08:50	06/06/24 12:20
310-282892-9	MW-12-0624	Water	06/06/24 09:40	06/06/24 12:20
310-282892-10	MW-13-0624	Water	06/05/24 09:55	06/06/24 12:20
310-282892-11	MW-14-0624	Water	06/04/24 18:10	06/06/24 12:20
310-282892-12	MW-15-0624	Water	06/04/24 14:35	06/06/24 12:20
310-282892-13	MW-16-0624	Water	06/04/24 13:30	06/06/24 12:20
310-282892-14	MW-17-0624	Water	06/05/24 14:30	06/06/24 12:20
310-282892-15	MW-18-0624	Water	06/04/24 17:10	06/06/24 12:20
310-282892-16	MW-19-0624	Water	06/04/24 15:45	06/06/24 12:20



Detection Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: TB-01

Lab Sample ID: 310-282892-1

No Detections.

Client Sample ID: Dup-01

Lab Sample ID: 310-282892-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	8.80		1.00		ug/L	1		8260D	Total/NA
Carbon dioxide	8810		50.0		ug/L	10		RSK-175	Total/NA
Methane	15.2		1.00		ug/L	1		RSK-175	Total/NA
Chloride	265		20.0		mg/L	20		9056A	Total/NA
Sulfate	49.6		1.00		mg/L	1		9056A	Total/NA
Iron	0.264		0.100		mg/L	1		6020B	Dissolved
Manganese	0.268		0.0100		mg/L	1		6020B	Dissolved

Client Sample ID: MW-01-0624

Lab Sample ID: 310-282892-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	20200		50.0		ug/L	10		RSK-175	Total/NA
Chloride	74.2		1.00		mg/L	1		9056A	Total/NA
Nitrate as N	1.09		0.200		mg/L	1		9056A	Total/NA
Sulfate	112		20.0		mg/L	20		9056A	Total/NA
Total Organic Carbon	6.11		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-06-0624

Lab Sample ID: 310-282892-4

No Detections.

Client Sample ID: MW-07-0624

Lab Sample ID: 310-282892-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	17.8		10.0		ug/L	1		8260D	Total/NA
Benzene	0.520		0.500		ug/L	1		8260D	Total/NA
Carbon dioxide	62600		50.0		ug/L	10		RSK-175	Total/NA
Methane	13400		10.0		ug/L	10		RSK-175	Total/NA
Ethane	1.41		1.00		ug/L	1		RSK-175	Total/NA
Ethene	2.25		1.00		ug/L	1		RSK-175	Total/NA
Chloride	152		20.0		mg/L	20		9056A	Total/NA
Iron	130		0.400		mg/L	4		6020B	Dissolved
Manganese	1.19		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	21.2		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-08-0624

Lab Sample ID: 310-282892-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	25.0		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-09-0624

Lab Sample ID: 310-282892-7

No Detections.

Client Sample ID: MW-11-0624

Lab Sample ID: 310-282892-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	32.1		1.00		ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.27		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	2.10		1.00		ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-12-0624

Lab Sample ID: 310-282892-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	8.39		1.00		ug/L	1		8260D	Total/NA
Carbon dioxide	8720		50.0		ug/L	10		RSK-175	Total/NA
Methane	16.2		1.00		ug/L	1		RSK-175	Total/NA
Chloride	262		20.0		mg/L	20		9056A	Total/NA
Sulfate	49.6		1.00		mg/L	1		9056A	Total/NA
Iron	0.293		0.100		mg/L	1		6020B	Dissolved
Manganese	0.269		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	1.20		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-13-0624

Lab Sample ID: 310-282892-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6.50		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-14-0624

Lab Sample ID: 310-282892-11

No Detections.

Client Sample ID: MW-15-0624

Lab Sample ID: 310-282892-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6.73		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-16-0624

Lab Sample ID: 310-282892-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.26		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-17-0624

Lab Sample ID: 310-282892-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	65.4		10.0		ug/L	1		8260D	Total/NA
Benzene	1.63		0.500		ug/L	1		8260D	Total/NA
2-Butanone (MEK)	90.8		10.0		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	72.4		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	12.0		1.00		ug/L	1		8260D	Total/NA
Carbon dioxide	51800		50.0		ug/L	10		RSK-175	Total/NA
Methane	14800		10.0		ug/L	10		RSK-175	Total/NA
Ethane	82.5		1.00		ug/L	1		RSK-175	Total/NA
Ethene	167		1.00		ug/L	1		RSK-175	Total/NA
Chloride	12.8		1.00		mg/L	1		9056A	Total/NA
Iron	136		0.400		mg/L	4		6020B	Dissolved
Manganese	1.65		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	22.0		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-18-0624

Lab Sample ID: 310-282892-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	8.39		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-19-0624

Lab Sample ID: 310-282892-16

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: TB-01

Lab Sample ID: 310-282892-1

Date Collected: 06/04/24 10:30

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/07/24 12:16	1
Benzene	<0.500		0.500		ug/L			06/07/24 12:16	1
Bromodichloromethane	<1.00		1.00		ug/L			06/07/24 12:16	1
Bromoform	<5.00		5.00		ug/L			06/07/24 12:16	1
Bromomethane	<4.00		4.00		ug/L			06/07/24 12:16	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/07/24 12:16	1
Carbon disulfide	<1.00		1.00		ug/L			06/07/24 12:16	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/07/24 12:16	1
Chlorobenzene	<1.00		1.00		ug/L			06/07/24 12:16	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/07/24 12:16	1
Chloroethane	<4.00		4.00		ug/L			06/07/24 12:16	1
Chloroform	<3.00		3.00		ug/L			06/07/24 12:16	1
Chloromethane	<3.00		3.00		ug/L			06/07/24 12:16	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 12:16	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 12:16	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 12:16	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 12:16	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 12:16	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/07/24 12:16	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/07/24 12:16	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/07/24 12:16	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/07/24 12:16	1
Ethylbenzene	<1.00		1.00		ug/L			06/07/24 12:16	1
2-Hexanone	<10.0		10.0		ug/L			06/07/24 12:16	1
Methylene Chloride	<5.00		5.00		ug/L			06/07/24 12:16	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/07/24 12:16	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/07/24 12:16	1
Naphthalene	<5.00		5.00		ug/L			06/07/24 12:16	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/07/24 12:16	1
Tetrachloroethene	<1.00		1.00		ug/L			06/07/24 12:16	1
Toluene	<1.00		1.00		ug/L			06/07/24 12:16	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 12:16	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 12:16	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/07/24 12:16	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/07/24 12:16	1
Trichloroethene	<1.00		1.00		ug/L			06/07/24 12:16	1
Vinyl chloride	<1.00		1.00		ug/L			06/07/24 12:16	1
Xylenes, Total	<3.00		3.00		ug/L			06/07/24 12:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		06/07/24 12:16	1
Dibromofluoromethane (Surr)	95		73 - 130		06/07/24 12:16	1
Toluene-d8 (Surr)	99		80 - 120		06/07/24 12:16	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: Dup-01

Lab Sample ID: 310-282892-2

Date Collected: 06/06/24 00:00

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/07/24 17:42	1
Benzene	<0.500		0.500		ug/L			06/07/24 17:42	1
Bromodichloromethane	<1.00		1.00		ug/L			06/07/24 17:42	1
Bromoform	<5.00		5.00		ug/L			06/07/24 17:42	1
Bromomethane	<4.00		4.00		ug/L			06/07/24 17:42	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/07/24 17:42	1
Carbon disulfide	<1.00		1.00		ug/L			06/07/24 17:42	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/07/24 17:42	1
Chlorobenzene	<1.00		1.00		ug/L			06/07/24 17:42	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/07/24 17:42	1
Chloroethane	<4.00		4.00		ug/L			06/07/24 17:42	1
Chloroform	<3.00		3.00		ug/L			06/07/24 17:42	1
Chloromethane	<3.00		3.00		ug/L			06/07/24 17:42	1
cis-1,2-Dichloroethene	8.80		1.00		ug/L			06/07/24 17:42	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 17:42	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 17:42	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 17:42	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 17:42	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/07/24 17:42	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/07/24 17:42	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/07/24 17:42	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/07/24 17:42	1
Ethylbenzene	<1.00		1.00		ug/L			06/07/24 17:42	1
2-Hexanone	<10.0		10.0		ug/L			06/07/24 17:42	1
Methylene Chloride	<5.00		5.00		ug/L			06/07/24 17:42	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/07/24 17:42	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/07/24 17:42	1
Naphthalene	<5.00		5.00		ug/L			06/07/24 17:42	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/07/24 17:42	1
Tetrachloroethene	<1.00		1.00		ug/L			06/07/24 17:42	1
Toluene	<1.00		1.00		ug/L			06/07/24 17:42	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 17:42	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 17:42	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/07/24 17:42	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/07/24 17:42	1
Trichloroethene	<1.00		1.00		ug/L			06/07/24 17:42	1
Vinyl chloride	<1.00		1.00		ug/L			06/07/24 17:42	1
Xylenes, Total	<3.00		3.00		ug/L			06/07/24 17:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		80 - 120		06/07/24 17:42	1
Dibromofluoromethane (Surr)	100		73 - 130		06/07/24 17:42	1
Toluene-d8 (Surr)	96		80 - 120		06/07/24 17:42	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	8810		50.0		ug/L			06/10/24 14:07	10
Methane	15.2		1.00		ug/L			06/10/24 16:02	1
Ethane	<1.00		1.00		ug/L			06/10/24 16:02	1
Ethene	<1.00		1.00		ug/L			06/10/24 16:02	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: Dup-01
Date Collected: 06/06/24 00:00
Date Received: 06/06/24 12:20

Lab Sample ID: 310-282892-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	96		60 - 140					06/10/24 16:02	1

Method: SW846 9056A - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	265		20.0		mg/L			06/10/24 12:43	20
Nitrate as N	<0.200		0.200		mg/L			06/06/24 14:49	1
Sulfate	49.6		1.00		mg/L			06/06/24 14:49	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.264		0.100		mg/L		06/07/24 09:15	06/11/24 16:13	1
Manganese	0.268		0.0100		mg/L		06/07/24 09:15	06/11/24 16:13	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	<1.00		1.00		mg/L			06/12/24 15:42	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		06/07/24 12:01	06/07/24 12:01	1

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

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-01-0624

Lab Sample ID: 310-282892-3

Date Collected: 06/05/24 16:38

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/07/24 18:26	1
Benzene	<0.500		0.500		ug/L			06/07/24 18:26	1
Bromodichloromethane	<1.00		1.00		ug/L			06/07/24 18:26	1
Bromoform	<5.00		5.00		ug/L			06/07/24 18:26	1
Bromomethane	<4.00		4.00		ug/L			06/07/24 18:26	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/07/24 18:26	1
Carbon disulfide	<1.00		1.00		ug/L			06/07/24 18:26	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/07/24 18:26	1
Chlorobenzene	<1.00		1.00		ug/L			06/07/24 18:26	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/07/24 18:26	1
Chloroethane	<4.00		4.00		ug/L			06/07/24 18:26	1
Chloroform	<3.00		3.00		ug/L			06/07/24 18:26	1
Chloromethane	<3.00		3.00		ug/L			06/07/24 18:26	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 18:26	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 18:26	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 18:26	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 18:26	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 18:26	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/07/24 18:26	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/07/24 18:26	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/07/24 18:26	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/07/24 18:26	1
Ethylbenzene	<1.00		1.00		ug/L			06/07/24 18:26	1
2-Hexanone	<10.0		10.0		ug/L			06/07/24 18:26	1
Methylene Chloride	<5.00		5.00		ug/L			06/07/24 18:26	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/07/24 18:26	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/07/24 18:26	1
Naphthalene	<5.00		5.00		ug/L			06/07/24 18:26	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/07/24 18:26	1
Tetrachloroethene	<1.00		1.00		ug/L			06/07/24 18:26	1
Toluene	<1.00		1.00		ug/L			06/07/24 18:26	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 18:26	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 18:26	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/07/24 18:26	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/07/24 18:26	1
Trichloroethene	<1.00		1.00		ug/L			06/07/24 18:26	1
Vinyl chloride	<1.00		1.00		ug/L			06/07/24 18:26	1
Xylenes, Total	<3.00		3.00		ug/L			06/07/24 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		06/07/24 18:26	1
Dibromofluoromethane (Surr)	97		73 - 130		06/07/24 18:26	1
Toluene-d8 (Surr)	98		80 - 120		06/07/24 18:26	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	20200		50.0		ug/L			06/10/24 13:36	10
Methane	<1.00		1.00		ug/L			06/10/24 16:19	1
Ethane	<1.00		1.00		ug/L			06/10/24 16:19	1
Ethene	<1.00		1.00		ug/L			06/10/24 16:19	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-01-0624

Lab Sample ID: 310-282892-3

Date Collected: 06/05/24 16:38

Matrix: Water

Date Received: 06/06/24 12:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	96		60 - 140		06/10/24 16:19	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.2		1.00		mg/L			06/06/24 15:39	1
Nitrate as N	1.09		0.200		mg/L			06/06/24 15:39	1
Sulfate	112		20.0		mg/L			06/06/24 16:11	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.100		0.100		mg/L		06/07/24 09:15	06/11/24 16:15	1
Manganese	<0.0100		0.0100		mg/L		06/07/24 09:15	06/11/24 16:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	6.11		1.00		mg/L			06/12/24 16:18	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		06/07/24 12:01	06/07/24 12:01	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-06-0624

Lab Sample ID: 310-282892-4

Date Collected: 06/05/24 11:25

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/07/24 18:48	1
Benzene	<0.500		0.500		ug/L			06/07/24 18:48	1
Bromodichloromethane	<1.00		1.00		ug/L			06/07/24 18:48	1
Bromoform	<5.00		5.00		ug/L			06/07/24 18:48	1
Bromomethane	<4.00		4.00		ug/L			06/07/24 18:48	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/07/24 18:48	1
Carbon disulfide	<1.00		1.00		ug/L			06/07/24 18:48	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/07/24 18:48	1
Chlorobenzene	<1.00		1.00		ug/L			06/07/24 18:48	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/07/24 18:48	1
Chloroethane	<4.00		4.00		ug/L			06/07/24 18:48	1
Chloroform	<3.00		3.00		ug/L			06/07/24 18:48	1
Chloromethane	<3.00		3.00		ug/L			06/07/24 18:48	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 18:48	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 18:48	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 18:48	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 18:48	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 18:48	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/07/24 18:48	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/07/24 18:48	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/07/24 18:48	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/07/24 18:48	1
Ethylbenzene	<1.00		1.00		ug/L			06/07/24 18:48	1
2-Hexanone	<10.0		10.0		ug/L			06/07/24 18:48	1
Methylene Chloride	<5.00		5.00		ug/L			06/07/24 18:48	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/07/24 18:48	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/07/24 18:48	1
Naphthalene	<5.00		5.00		ug/L			06/07/24 18:48	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/07/24 18:48	1
Tetrachloroethene	<1.00		1.00		ug/L			06/07/24 18:48	1
Toluene	<1.00		1.00		ug/L			06/07/24 18:48	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 18:48	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 18:48	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/07/24 18:48	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/07/24 18:48	1
Trichloroethene	<1.00		1.00		ug/L			06/07/24 18:48	1
Vinyl chloride	<1.00		1.00		ug/L			06/07/24 18:48	1
Xylenes, Total	<3.00		3.00		ug/L			06/07/24 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		06/07/24 18:48	1
Dibromofluoromethane (Surr)	98		73 - 130		06/07/24 18:48	1
Toluene-d8 (Surr)	87		80 - 120		06/07/24 18:48	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-07-0624

Lab Sample ID: 310-282892-5

Date Collected: 06/05/24 13:00

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	17.8		10.0		ug/L			06/07/24 18:04	1
Benzene	0.520		0.500		ug/L			06/07/24 18:04	1
Bromodichloromethane	<1.00		1.00		ug/L			06/07/24 18:04	1
Bromoform	<5.00		5.00		ug/L			06/07/24 18:04	1
Bromomethane	<4.00		4.00		ug/L			06/07/24 18:04	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/07/24 18:04	1
Carbon disulfide	<1.00		1.00		ug/L			06/07/24 18:04	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/07/24 18:04	1
Chlorobenzene	<1.00		1.00		ug/L			06/07/24 18:04	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/07/24 18:04	1
Chloroethane	<4.00		4.00		ug/L			06/07/24 18:04	1
Chloroform	<3.00		3.00		ug/L			06/07/24 18:04	1
Chloromethane	<3.00		3.00		ug/L			06/07/24 18:04	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 18:04	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 18:04	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 18:04	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 18:04	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 18:04	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/07/24 18:04	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/07/24 18:04	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/07/24 18:04	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/07/24 18:04	1
Ethylbenzene	<1.00		1.00		ug/L			06/07/24 18:04	1
2-Hexanone	<10.0		10.0		ug/L			06/07/24 18:04	1
Methylene Chloride	<5.00		5.00		ug/L			06/07/24 18:04	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/07/24 18:04	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/07/24 18:04	1
Naphthalene	<5.00		5.00		ug/L			06/07/24 18:04	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/07/24 18:04	1
Tetrachloroethene	<1.00		1.00		ug/L			06/07/24 18:04	1
Toluene	<1.00		1.00		ug/L			06/07/24 18:04	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 18:04	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 18:04	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/07/24 18:04	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/07/24 18:04	1
Trichloroethene	<1.00		1.00		ug/L			06/07/24 18:04	1
Vinyl chloride	<1.00		1.00		ug/L			06/07/24 18:04	1
Xylenes, Total	<3.00		3.00		ug/L			06/07/24 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		06/07/24 18:04	1
Dibromofluoromethane (Surr)	94		73 - 130		06/07/24 18:04	1
Toluene-d8 (Surr)	99		80 - 120		06/07/24 18:04	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	62600		50.0		ug/L			06/10/24 14:24	10
Methane	13400		10.0		ug/L			06/12/24 16:43	10
Ethane	1.41		1.00		ug/L			06/10/24 16:36	1
Ethene	2.25		1.00		ug/L			06/10/24 16:36	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-07-0624

Lab Sample ID: 310-282892-5

Date Collected: 06/05/24 13:00

Matrix: Water

Date Received: 06/06/24 12:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	93		60 - 140		06/10/24 16:36	1
1,1,1-Trifluoroethane	100		60 - 140		06/12/24 16:43	10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	152		20.0		mg/L			06/10/24 13:08	20
Nitrate as N	<0.200		0.200		mg/L			06/06/24 15:14	1
Sulfate	<1.00		1.00		mg/L			06/06/24 15:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	130		0.400		mg/L		06/07/24 09:15	06/13/24 16:51	4
Manganese	1.19		0.0100		mg/L		06/07/24 09:15	06/11/24 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	21.2		1.00		mg/L			06/12/24 16:54	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		06/07/24 12:01	06/07/24 12:01	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-08-0624

Lab Sample ID: 310-282892-6

Date Collected: 06/04/24 11:15

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 03:00	1
Benzene	<0.500		0.500		ug/L			06/08/24 03:00	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 03:00	1
Bromoform	<5.00		5.00		ug/L			06/08/24 03:00	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 03:00	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 03:00	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 03:00	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 03:00	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 03:00	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 03:00	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 03:00	1
Chloroform	<3.00		3.00		ug/L			06/08/24 03:00	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 03:00	1
cis-1,2-Dichloroethene	25.0		1.00		ug/L			06/08/24 03:00	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 03:00	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 03:00	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 03:00	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 03:00	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 03:00	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 03:00	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 03:00	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 03:00	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 03:00	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 03:00	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 03:00	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 03:00	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 03:00	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 03:00	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 03:00	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 03:00	1
Toluene	<1.00		1.00		ug/L			06/08/24 03:00	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 03:00	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 03:00	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 03:00	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 03:00	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 03:00	1
Vinyl chloride	<1.00		1.00		ug/L			06/08/24 03:00	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 03:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		06/08/24 03:00	1
Dibromofluoromethane (Surr)	106		73 - 130		06/08/24 03:00	1
Toluene-d8 (Surr)	95		80 - 120		06/08/24 03:00	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-09-0624

Lab Sample ID: 310-282892-7

Date Collected: 06/04/24 12:30

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 03:23	1
Benzene	<0.500		0.500		ug/L			06/08/24 03:23	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 03:23	1
Bromoform	<5.00		5.00		ug/L			06/08/24 03:23	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 03:23	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 03:23	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 03:23	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 03:23	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 03:23	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 03:23	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 03:23	1
Chloroform	<3.00		3.00		ug/L			06/08/24 03:23	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 03:23	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 03:23	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 03:23	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 03:23	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 03:23	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 03:23	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 03:23	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 03:23	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 03:23	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 03:23	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 03:23	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 03:23	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 03:23	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 03:23	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 03:23	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 03:23	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 03:23	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 03:23	1
Toluene	<1.00		1.00		ug/L			06/08/24 03:23	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 03:23	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 03:23	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 03:23	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 03:23	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 03:23	1
Vinyl chloride	<1.00		1.00		ug/L			06/08/24 03:23	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 03:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120		06/08/24 03:23	1
Dibromofluoromethane (Surr)	104		73 - 130		06/08/24 03:23	1
Toluene-d8 (Surr)	95		80 - 120		06/08/24 03:23	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-11-0624

Lab Sample ID: 310-282892-8

Date Collected: 06/05/24 08:50

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 03:45	1
Benzene	<0.500		0.500		ug/L			06/08/24 03:45	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 03:45	1
Bromoform	<5.00		5.00		ug/L			06/08/24 03:45	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 03:45	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 03:45	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 03:45	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 03:45	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 03:45	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 03:45	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 03:45	1
Chloroform	<3.00		3.00		ug/L			06/08/24 03:45	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 03:45	1
cis-1,2-Dichloroethene	32.1		1.00		ug/L			06/08/24 03:45	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 03:45	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 03:45	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 03:45	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 03:45	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 03:45	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 03:45	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 03:45	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 03:45	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 03:45	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 03:45	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 03:45	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 03:45	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 03:45	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 03:45	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 03:45	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 03:45	1
Toluene	<1.00		1.00		ug/L			06/08/24 03:45	1
trans-1,2-Dichloroethene	1.27		1.00		ug/L			06/08/24 03:45	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 03:45	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 03:45	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 03:45	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 03:45	1
Vinyl chloride	2.10		1.00		ug/L			06/08/24 03:45	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 03:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		06/08/24 03:45	1
Dibromofluoromethane (Surr)	106		73 - 130		06/08/24 03:45	1
Toluene-d8 (Surr)	95		80 - 120		06/08/24 03:45	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-12-0624

Lab Sample ID: 310-282892-9

Date Collected: 06/06/24 09:40

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 04:08	1
Benzene	<0.500		0.500		ug/L			06/08/24 04:08	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 04:08	1
Bromoform	<5.00		5.00		ug/L			06/08/24 04:08	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 04:08	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 04:08	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 04:08	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 04:08	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 04:08	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 04:08	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 04:08	1
Chloroform	<3.00		3.00		ug/L			06/08/24 04:08	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 04:08	1
cis-1,2-Dichloroethene	8.39		1.00		ug/L			06/08/24 04:08	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 04:08	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 04:08	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 04:08	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 04:08	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 04:08	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 04:08	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 04:08	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 04:08	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 04:08	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 04:08	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 04:08	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 04:08	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 04:08	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 04:08	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 04:08	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 04:08	1
Toluene	<1.00		1.00		ug/L			06/08/24 04:08	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 04:08	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 04:08	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 04:08	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 04:08	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 04:08	1
Vinyl chloride	<1.00		1.00		ug/L			06/08/24 04:08	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 04:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		06/08/24 04:08	1
Dibromofluoromethane (Surr)	104		73 - 130		06/08/24 04:08	1
Toluene-d8 (Surr)	97		80 - 120		06/08/24 04:08	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	8720		50.0		ug/L			06/10/24 14:38	10
Methane	16.2		1.00		ug/L			06/10/24 16:53	1
Ethane	<1.00		1.00		ug/L			06/10/24 16:53	1
Ethene	<1.00		1.00		ug/L			06/10/24 16:53	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-12-0624

Lab Sample ID: 310-282892-9

Date Collected: 06/06/24 09:40

Matrix: Water

Date Received: 06/06/24 12:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	97		60 - 140		06/10/24 16:53	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	262		20.0		mg/L			06/10/24 12:55	20
Nitrate as N	<0.200		0.200		mg/L			06/06/24 15:01	1
Sulfate	49.6		1.00		mg/L			06/06/24 15:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.293		0.100		mg/L		06/07/24 09:15	06/11/24 16:28	1
Manganese	0.269		0.0100		mg/L		06/07/24 09:15	06/11/24 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	1.20		1.00		mg/L			06/12/24 17:31	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		06/07/24 12:01	06/07/24 12:01	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-13-0624

Lab Sample ID: 310-282892-10

Date Collected: 06/05/24 09:55

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 04:31	1
Benzene	<0.500		0.500		ug/L			06/08/24 04:31	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 04:31	1
Bromoform	<5.00		5.00		ug/L			06/08/24 04:31	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 04:31	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 04:31	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 04:31	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 04:31	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 04:31	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 04:31	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 04:31	1
Chloroform	<3.00		3.00		ug/L			06/08/24 04:31	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 04:31	1
cis-1,2-Dichloroethene	6.50		1.00		ug/L			06/08/24 04:31	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 04:31	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 04:31	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 04:31	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 04:31	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 04:31	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 04:31	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 04:31	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 04:31	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 04:31	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 04:31	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 04:31	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 04:31	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 04:31	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 04:31	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 04:31	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 04:31	1
Toluene	<1.00		1.00		ug/L			06/08/24 04:31	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 04:31	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 04:31	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 04:31	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 04:31	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 04:31	1
Vinyl chloride	<1.00		1.00		ug/L			06/08/24 04:31	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 04:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120		06/08/24 04:31	1
Dibromofluoromethane (Surr)	104		73 - 130		06/08/24 04:31	1
Toluene-d8 (Surr)	95		80 - 120		06/08/24 04:31	1

Euofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-14-0624

Lab Sample ID: 310-282892-11

Date Collected: 06/04/24 18:10

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 04:53	1
Benzene	<0.500		0.500		ug/L			06/08/24 04:53	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 04:53	1
Bromoform	<5.00		5.00		ug/L			06/08/24 04:53	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 04:53	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 04:53	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 04:53	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 04:53	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 04:53	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 04:53	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 04:53	1
Chloroform	<3.00		3.00		ug/L			06/08/24 04:53	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 04:53	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 04:53	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 04:53	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 04:53	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 04:53	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 04:53	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 04:53	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 04:53	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 04:53	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 04:53	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 04:53	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 04:53	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 04:53	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 04:53	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 04:53	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 04:53	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 04:53	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 04:53	1
Toluene	<1.00		1.00		ug/L			06/08/24 04:53	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 04:53	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 04:53	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 04:53	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 04:53	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 04:53	1
Vinyl chloride	<1.00		1.00		ug/L			06/08/24 04:53	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 04:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		06/08/24 04:53	1
Dibromofluoromethane (Surr)	104		73 - 130		06/08/24 04:53	1
Toluene-d8 (Surr)	94		80 - 120		06/08/24 04:53	1

Euofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-15-0624

Lab Sample ID: 310-282892-12

Date Collected: 06/04/24 14:35

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 05:16	1
Benzene	<0.500		0.500		ug/L			06/08/24 05:16	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 05:16	1
Bromoform	<5.00		5.00		ug/L			06/08/24 05:16	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 05:16	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 05:16	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 05:16	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 05:16	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 05:16	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 05:16	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 05:16	1
Chloroform	<3.00		3.00		ug/L			06/08/24 05:16	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 05:16	1
cis-1,2-Dichloroethene	6.73		1.00		ug/L			06/08/24 05:16	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 05:16	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 05:16	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 05:16	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 05:16	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 05:16	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 05:16	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 05:16	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 05:16	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 05:16	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 05:16	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 05:16	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 05:16	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 05:16	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 05:16	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 05:16	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 05:16	1
Toluene	<1.00		1.00		ug/L			06/08/24 05:16	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 05:16	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 05:16	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 05:16	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 05:16	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 05:16	1
Vinyl chloride	<1.00		1.00		ug/L			06/08/24 05:16	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 05:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		06/08/24 05:16	1
Dibromofluoromethane (Surr)	106		73 - 130		06/08/24 05:16	1
Toluene-d8 (Surr)	96		80 - 120		06/08/24 05:16	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-16-0624

Lab Sample ID: 310-282892-13

Date Collected: 06/04/24 13:30

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 05:39	1
Benzene	<0.500		0.500		ug/L			06/08/24 05:39	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 05:39	1
Bromoform	<5.00		5.00		ug/L			06/08/24 05:39	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 05:39	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 05:39	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 05:39	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 05:39	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 05:39	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 05:39	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 05:39	1
Chloroform	<3.00		3.00		ug/L			06/08/24 05:39	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 05:39	1
cis-1,2-Dichloroethene	1.26		1.00		ug/L			06/08/24 05:39	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 05:39	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 05:39	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 05:39	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 05:39	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 05:39	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 05:39	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 05:39	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 05:39	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 05:39	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 05:39	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 05:39	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 05:39	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 05:39	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 05:39	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 05:39	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 05:39	1
Toluene	<1.00		1.00		ug/L			06/08/24 05:39	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 05:39	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 05:39	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 05:39	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 05:39	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 05:39	1
Vinyl chloride	<1.00		1.00		ug/L			06/08/24 05:39	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 05:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		06/08/24 05:39	1
Dibromofluoromethane (Surr)	106		73 - 130		06/08/24 05:39	1
Toluene-d8 (Surr)	97		80 - 120		06/08/24 05:39	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-17-0624

Lab Sample ID: 310-282892-14

Date Collected: 06/05/24 14:30

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	65.4		10.0		ug/L			06/08/24 06:01	1
Benzene	1.63		0.500		ug/L			06/08/24 06:01	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 06:01	1
Bromoform	<5.00		5.00		ug/L			06/08/24 06:01	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 06:01	1
2-Butanone (MEK)	90.8		10.0		ug/L			06/08/24 06:01	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 06:01	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 06:01	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 06:01	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 06:01	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 06:01	1
Chloroform	<3.00		3.00		ug/L			06/08/24 06:01	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 06:01	1
cis-1,2-Dichloroethene	72.4		1.00		ug/L			06/08/24 06:01	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 06:01	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 06:01	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 06:01	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 06:01	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 06:01	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 06:01	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 06:01	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 06:01	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 06:01	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 06:01	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 06:01	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 06:01	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 06:01	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 06:01	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 06:01	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 06:01	1
Toluene	<1.00		1.00		ug/L			06/08/24 06:01	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 06:01	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 06:01	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 06:01	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 06:01	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 06:01	1
Vinyl chloride	12.0		1.00		ug/L			06/08/24 06:01	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 06:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		06/08/24 06:01	1
Dibromofluoromethane (Surr)	105		73 - 130		06/08/24 06:01	1
Toluene-d8 (Surr)	97		80 - 120		06/08/24 06:01	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	51800		50.0		ug/L			06/10/24 14:58	10
Methane	14800		10.0		ug/L			06/12/24 17:00	10
Ethane	82.5		1.00		ug/L			06/10/24 17:10	1
Ethene	167		1.00		ug/L			06/10/24 17:10	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-17-0624

Lab Sample ID: 310-282892-14

Date Collected: 06/05/24 14:30

Matrix: Water

Date Received: 06/06/24 12:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	96		60 - 140		06/10/24 17:10	1
1,1,1-Trifluoroethane	99		60 - 140		06/12/24 17:00	10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.8		1.00		mg/L			06/06/24 15:26	1
Nitrate as N	<0.200		0.200		mg/L			06/06/24 15:26	1
Sulfate	<1.00		1.00		mg/L			06/06/24 15:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	136		0.400		mg/L		06/07/24 09:15	06/13/24 16:54	4
Manganese	1.65		0.0100		mg/L		06/07/24 09:15	06/11/24 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	22.0		1.00		mg/L			06/12/24 18:07	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		06/07/24 12:01	06/07/24 12:01	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-18-0624

Lab Sample ID: 310-282892-15

Date Collected: 06/04/24 17:10

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 06:24	1
Benzene	<0.500		0.500		ug/L			06/08/24 06:24	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 06:24	1
Bromoform	<5.00		5.00		ug/L			06/08/24 06:24	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 06:24	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 06:24	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 06:24	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 06:24	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 06:24	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 06:24	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 06:24	1
Chloroform	<3.00		3.00		ug/L			06/08/24 06:24	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 06:24	1
cis-1,2-Dichloroethene	8.39		1.00		ug/L			06/08/24 06:24	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 06:24	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 06:24	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 06:24	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 06:24	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 06:24	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 06:24	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 06:24	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 06:24	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 06:24	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 06:24	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 06:24	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 06:24	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 06:24	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 06:24	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 06:24	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 06:24	1
Toluene	<1.00		1.00		ug/L			06/08/24 06:24	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 06:24	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 06:24	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 06:24	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 06:24	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 06:24	1
Vinyl chloride	<1.00		1.00		ug/L			06/08/24 06:24	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 06:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		06/08/24 06:24	1
Dibromofluoromethane (Surr)	106		73 - 130		06/08/24 06:24	1
Toluene-d8 (Surr)	95		80 - 120		06/08/24 06:24	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-19-0624

Lab Sample ID: 310-282892-16

Date Collected: 06/04/24 15:45

Matrix: Water

Date Received: 06/06/24 12:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 06:46	1
Benzene	<0.500		0.500		ug/L			06/08/24 06:46	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 06:46	1
Bromoform	<5.00		5.00		ug/L			06/08/24 06:46	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 06:46	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 06:46	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 06:46	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 06:46	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 06:46	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 06:46	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 06:46	1
Chloroform	<3.00		3.00		ug/L			06/08/24 06:46	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 06:46	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 06:46	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 06:46	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 06:46	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 06:46	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 06:46	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 06:46	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 06:46	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 06:46	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 06:46	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 06:46	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 06:46	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 06:46	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 06:46	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 06:46	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 06:46	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 06:46	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 06:46	1
Toluene	<1.00		1.00		ug/L			06/08/24 06:46	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 06:46	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 06:46	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 06:46	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 06:46	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 06:46	1
Vinyl chloride	<1.00		1.00		ug/L			06/08/24 06:46	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 06:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		06/08/24 06:46	1
Dibromofluoromethane (Surr)	101		73 - 130		06/08/24 06:46	1
Toluene-d8 (Surr)	96		80 - 120		06/08/24 06:46	1

Eurolins Cedar Falls

Definitions/Glossary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Glossary

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

Surrogate Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DBFM (73-130)	TOL (80-120)
310-282892-1	TB-01	108	95	99
310-282892-2	Dup-01	112	100	96
310-282892-3	MW-01-0624	106	97	98
310-282892-4	MW-06-0624	108	98	87
310-282892-5	MW-07-0624	104	94	99
310-282892-6	MW-08-0624	102	106	95
310-282892-7	MW-09-0624	105	104	95
310-282892-8	MW-11-0624	102	106	95
310-282892-8 MS	MW-11-0624	101	98	99
310-282892-8 MSD	MW-11-0624	99	100	97
310-282892-9	MW-12-0624	102	104	97
310-282892-10	MW-13-0624	105	104	95
310-282892-11	MW-14-0624	104	104	94
310-282892-12	MW-15-0624	102	106	96
310-282892-13	MW-16-0624	103	106	97
310-282892-14	MW-17-0624	97	105	97
310-282892-15	MW-18-0624	104	106	95
310-282892-16	MW-19-0624	103	101	96
LCS 310-423910/6	Lab Control Sample	100	99	100
LCS 310-423910/7	Lab Control Sample	102	100	97
LCS 310-423914/6	Lab Control Sample	102	95	102
LCS 310-423914/7	Lab Control Sample	109	97	95
MB 310-423910/5	Method Blank	102	102	97
MB 310-423914/5	Method Blank	107	97	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: RSK-175 - Dissolved Gases (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		TFE1 (60-140)
310-282892-2	Dup-01	96
310-282892-3	MW-01-0624	96
310-282892-5	MW-07-0624	93
310-282892-5	MW-07-0624	100
310-282892-9	MW-12-0624	97
310-282892-14	MW-17-0624	96
310-282892-14	MW-17-0624	99
LCS 240-616030/4	Lab Control Sample	100
LCS 240-616332/4	Lab Control Sample	101
MB 240-616030/3	Method Blank	100
MB 240-616332/3	Method Blank	102

Surrogate Legend

TFE = 1,1,1-Trifluoroethane

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

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

Lab Sample ID: MB 310-423910/5
Matrix: Water
Analysis Batch: 423910

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			06/08/24 01:30	1
Benzene	<0.500		0.500		ug/L			06/08/24 01:30	1
Bromodichloromethane	<1.00		1.00		ug/L			06/08/24 01:30	1
Bromoform	<5.00		5.00		ug/L			06/08/24 01:30	1
Bromomethane	<4.00		4.00		ug/L			06/08/24 01:30	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/08/24 01:30	1
Carbon disulfide	<1.00		1.00		ug/L			06/08/24 01:30	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/08/24 01:30	1
Chlorobenzene	<1.00		1.00		ug/L			06/08/24 01:30	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/08/24 01:30	1
Chloroethane	<4.00		4.00		ug/L			06/08/24 01:30	1
Chloroform	<3.00		3.00		ug/L			06/08/24 01:30	1
Chloromethane	<3.00		3.00		ug/L			06/08/24 01:30	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 01:30	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 01:30	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 01:30	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 01:30	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/08/24 01:30	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/08/24 01:30	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/08/24 01:30	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/08/24 01:30	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/08/24 01:30	1
Ethylbenzene	<1.00		1.00		ug/L			06/08/24 01:30	1
2-Hexanone	<10.0		10.0		ug/L			06/08/24 01:30	1
Methylene Chloride	<5.00		5.00		ug/L			06/08/24 01:30	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/08/24 01:30	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/08/24 01:30	1
Naphthalene	<5.00		5.00		ug/L			06/08/24 01:30	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/08/24 01:30	1
Tetrachloroethene	<1.00		1.00		ug/L			06/08/24 01:30	1
Toluene	<1.00		1.00		ug/L			06/08/24 01:30	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/08/24 01:30	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/08/24 01:30	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/08/24 01:30	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/08/24 01:30	1
Trichloroethene	<1.00		1.00		ug/L			06/08/24 01:30	1
Vinyl chloride	<1.00		1.00		ug/L			06/08/24 01:30	1
Xylenes, Total	<3.00		3.00		ug/L			06/08/24 01:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		06/08/24 01:30	1
Dibromofluoromethane (Surr)	102		73 - 130		06/08/24 01:30	1
Toluene-d8 (Surr)	97		80 - 120		06/08/24 01:30	1

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

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

Lab Sample ID: LCS 310-423910/6

Matrix: Water

Analysis Batch: 423910

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	39.10		ug/L		98	50 - 150
Benzene	20.0	18.72		ug/L		94	72 - 124
Bromodichloromethane	20.0	18.40		ug/L		92	74 - 122
Bromoform	20.0	18.45		ug/L		92	61 - 122
2-Butanone (MEK)	40.0	38.62		ug/L		97	50 - 150
Carbon disulfide	20.0	19.27		ug/L		96	59 - 135
Carbon tetrachloride	20.0	19.50		ug/L		97	67 - 132
Chlorobenzene	20.0	19.60		ug/L		98	76 - 120
Chlorodibromomethane	20.0	18.78		ug/L		94	71 - 121
Chloroform	20.0	17.78		ug/L		89	72 - 125
cis-1,2-Dichloroethene	20.0	17.90		ug/L		89	74 - 123
cis-1,3-Dichloropropene	20.0	18.20		ug/L		91	71 - 125
1,2-Dichlorobenzene	20.0	19.73		ug/L		99	74 - 120
1,3-Dichlorobenzene	20.0	20.80		ug/L		104	72 - 120
1,4-Dichlorobenzene	20.0	17.71		ug/L		89	72 - 120
1,1-Dichloroethane	20.0	18.36		ug/L		92	70 - 127
1,2-Dichloroethane	20.0	17.83		ug/L		89	71 - 125
1,1-Dichloroethene	20.0	19.72		ug/L		99	63 - 132
1,2-Dichloropropane	20.0	19.06		ug/L		95	73 - 124
Ethylbenzene	20.0	18.98		ug/L		95	74 - 122
2-Hexanone	40.0	43.68		ug/L		109	60 - 140
Methylene Chloride	20.0	19.09		ug/L		95	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	42.63		ug/L		107	60 - 139
Methyl tert-butyl ether	20.0	19.80		ug/L		99	68 - 130
Naphthalene	20.0	18.87		ug/L		94	50 - 150
1,1,2,2-Tetrachloroethane	20.0	19.82		ug/L		99	68 - 124
Tetrachloroethene	20.0	19.23		ug/L		96	71 - 130
Toluene	20.0	20.16		ug/L		101	74 - 123
trans-1,2-Dichloroethene	20.0	18.03		ug/L		90	70 - 126
trans-1,3-Dichloropropene	20.0	18.25		ug/L		91	69 - 123
1,1,1-Trichloroethane	20.0	19.53		ug/L		98	73 - 129
1,1,2-Trichloroethane	20.0	19.24		ug/L		96	73 - 123
Trichloroethene	20.0	20.08		ug/L		100	72 - 126
Xylenes, Total	40.0	38.29		ug/L		96	73 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	99		73 - 130
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 310-423910/7

Matrix: Water

Analysis Batch: 423910

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	16.43		ug/L		82	23 - 150
Chloroethane	20.0	21.53		ug/L		108	54 - 136
Chloromethane	20.0	19.91		ug/L		100	38 - 150

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

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

Lab Sample ID: LCS 310-423910/7

Matrix: Water

Analysis Batch: 423910

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	20.0	21.08		ug/L		105	56 - 140
Surrogate							
	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	102		80 - 120				
Dibromofluoromethane (Surr)	100		73 - 130				
Toluene-d8 (Surr)	97		80 - 120				

Lab Sample ID: 310-282892-8 MS

Matrix: Water

Analysis Batch: 423910

Client Sample ID: MW-11-0624

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	<10.0		50.0	42.62		ug/L		85	31 - 150
Benzene	<0.500		25.0	19.27		ug/L		77	46 - 130
Bromodichloromethane	<1.00		25.0	19.39		ug/L		78	57 - 130
Bromoform	<5.00		25.0	18.99		ug/L		76	44 - 130
2-Butanone (MEK)	<10.0		50.0	40.60		ug/L		81	38 - 150
Carbon disulfide	<1.00		25.0	22.62		ug/L		90	38 - 135
Carbon tetrachloride	<2.00		25.0	19.03		ug/L		76	45 - 132
Chlorobenzene	<1.00		25.0	20.32		ug/L		81	59 - 130
Chlorodibromomethane	<5.00		25.0	20.26		ug/L		81	54 - 130
Chloroform	<3.00		25.0	19.06		ug/L		76	51 - 130
cis-1,2-Dichloroethene	32.1		25.0	48.73		ug/L		66	45 - 130
cis-1,3-Dichloropropene	<5.00		25.0	19.29		ug/L		77	53 - 130
1,2-Dichlorobenzene	<1.00		25.0	22.10		ug/L		88	59 - 130
1,3-Dichlorobenzene	<1.00		25.0	21.96		ug/L		88	57 - 130
1,4-Dichlorobenzene	<1.00		25.0	19.56		ug/L		78	57 - 130
1,1-Dichloroethane	<1.00		25.0	19.02		ug/L		76	49 - 130
1,2-Dichloroethane	<1.00		25.0	19.38		ug/L		78	51 - 130
1,1-Dichloroethene	<2.00		25.0	21.23		ug/L		85	37 - 132
1,2-Dichloropropane	<1.00		25.0	19.86		ug/L		79	57 - 130
Ethylbenzene	<1.00		25.0	19.34		ug/L		77	45 - 130
2-Hexanone	<10.0		50.0	48.11		ug/L		96	46 - 140
Methylene Chloride	<5.00		25.0	21.39		ug/L		86	37 - 150
Methyl isobutyl ketone (MIBK)	<10.0		50.0	44.94		ug/L		90	47 - 139
Methyl tert-butyl ether	<1.00		25.0	20.25		ug/L		81	52 - 130
Naphthalene	<5.00		25.0	20.16		ug/L		81	40 - 150
1,1,2,2-Tetrachloroethane	<1.00		25.0	21.00		ug/L		84	54 - 130
Tetrachloroethene	<1.00		25.0	19.25		ug/L		77	47 - 130
Toluene	<1.00		25.0	20.51		ug/L		82	51 - 130
trans-1,2-Dichloroethene	1.27		25.0	20.69		ug/L		78	48 - 130
trans-1,3-Dichloropropene	<5.00		25.0	18.93		ug/L		76	50 - 130
1,1,1-Trichloroethane	<1.00		25.0	19.19		ug/L		77	52 - 130
1,1,2-Trichloroethane	<1.00		25.0	21.33		ug/L		85	58 - 130
Trichloroethene	<1.00		25.0	20.83		ug/L		81	51 - 130
Xylenes, Total	<3.00		50.0	39.77		ug/L		80	43 - 130

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

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

Lab Sample ID: 310-282892-8 MS
Matrix: Water
Analysis Batch: 423910

Client Sample ID: MW-11-0624
Prep Type: Total/NA

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	98		73 - 130
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 310-282892-8 MSD
Matrix: Water
Analysis Batch: 423910

Client Sample ID: MW-11-0624
Prep Type: Total/NA

<u>Analyte</u>	<u>Sample Result</u>	<u>Sample Qualifier</u>	<u>Spike Added</u>	<u>MSD Result</u>	<u>MSD Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec Limits</u>	<u>RPD</u>	<u>RPD Limit</u>
Acetone	<10.0		50.0	38.82		ug/L		78	31 - 150	9	29
Benzene	<0.500		25.0	18.51		ug/L		74	46 - 130	4	20
Bromodichloromethane	<1.00		25.0	18.61		ug/L		74	57 - 130	4	20
Bromoform	<5.00		25.0	18.25		ug/L		73	44 - 130	4	20
2-Butanone (MEK)	<10.0		50.0	40.30		ug/L		81	38 - 150	1	20
Carbon disulfide	<1.00		25.0	19.81		ug/L		79	38 - 135	13	30
Carbon tetrachloride	<2.00		25.0	18.12		ug/L		72	45 - 132	5	20
Chlorobenzene	<1.00		25.0	19.30		ug/L		77	59 - 130	5	20
Chlorodibromomethane	<5.00		25.0	19.49		ug/L		78	54 - 130	4	20
Chloroform	<3.00		25.0	18.36		ug/L		73	51 - 130	4	20
cis-1,2-Dichloroethene	32.1		25.0	46.85		ug/L		59	45 - 130	4	20
cis-1,3-Dichloropropene	<5.00		25.0	18.48		ug/L		74	53 - 130	4	20
1,2-Dichlorobenzene	<1.00		25.0	20.39		ug/L		82	59 - 130	8	20
1,3-Dichlorobenzene	<1.00		25.0	20.86		ug/L		83	57 - 130	5	20
1,4-Dichlorobenzene	<1.00		25.0	18.46		ug/L		74	57 - 130	6	20
1,1-Dichloroethane	<1.00		25.0	18.80		ug/L		75	49 - 130	1	20
1,2-Dichloroethane	<1.00		25.0	18.32		ug/L		73	51 - 130	6	20
1,1-Dichloroethene	<2.00		25.0	19.86		ug/L		79	37 - 132	7	26
1,2-Dichloropropane	<1.00		25.0	19.24		ug/L		77	57 - 130	3	20
Ethylbenzene	<1.00		25.0	18.14		ug/L		73	45 - 130	6	20
2-Hexanone	<10.0		50.0	45.33		ug/L		91	46 - 140	6	20
Methylene Chloride	<5.00		25.0	19.76		ug/L		79	37 - 150	8	24
Methyl isobutyl ketone (MIBK)	<10.0		50.0	44.35		ug/L		89	47 - 139	1	20
Methyl tert-butyl ether	<1.00		25.0	20.10		ug/L		80	52 - 130	1	20
Naphthalene	<5.00		25.0	19.35		ug/L		77	40 - 150	4	30
1,1,2,2-Tetrachloroethane	<1.00		25.0	19.89		ug/L		80	54 - 130	5	20
Tetrachloroethene	<1.00		25.0	18.56		ug/L		74	47 - 130	4	20
Toluene	<1.00		25.0	19.84		ug/L		79	51 - 130	3	20
trans-1,2-Dichloroethene	1.27		25.0	18.90		ug/L		70	48 - 130	9	22
trans-1,3-Dichloropropene	<5.00		25.0	17.96		ug/L		72	50 - 130	5	20
1,1,1-Trichloroethane	<1.00		25.0	18.62		ug/L		74	52 - 130	3	20
1,1,2-Trichloroethane	<1.00		25.0	20.19		ug/L		81	58 - 130	6	20
Trichloroethene	<1.00		25.0	19.86		ug/L		78	51 - 130	5	20
Xylenes, Total	<3.00		50.0	37.42		ug/L		75	43 - 130	6	20

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		73 - 130
Toluene-d8 (Surr)	97		80 - 120

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

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

Lab Sample ID: MB 310-423914/5
Matrix: Water
Analysis Batch: 423914

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0		10.0		ug/L			06/07/24 10:48	1
Benzene	<0.500		0.500		ug/L			06/07/24 10:48	1
Bromodichloromethane	<1.00		1.00		ug/L			06/07/24 10:48	1
Bromoform	<5.00		5.00		ug/L			06/07/24 10:48	1
Bromomethane	<4.00		4.00		ug/L			06/07/24 10:48	1
2-Butanone (MEK)	<10.0		10.0		ug/L			06/07/24 10:48	1
Carbon disulfide	<1.00		1.00		ug/L			06/07/24 10:48	1
Carbon tetrachloride	<2.00		2.00		ug/L			06/07/24 10:48	1
Chlorobenzene	<1.00		1.00		ug/L			06/07/24 10:48	1
Chlorodibromomethane	<5.00		5.00		ug/L			06/07/24 10:48	1
Chloroethane	<4.00		4.00		ug/L			06/07/24 10:48	1
Chloroform	<3.00		3.00		ug/L			06/07/24 10:48	1
Chloromethane	<3.00		3.00		ug/L			06/07/24 10:48	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 10:48	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 10:48	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 10:48	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 10:48	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			06/07/24 10:48	1
1,1-Dichloroethane	<1.00		1.00		ug/L			06/07/24 10:48	1
1,2-Dichloroethane	<1.00		1.00		ug/L			06/07/24 10:48	1
1,1-Dichloroethene	<2.00		2.00		ug/L			06/07/24 10:48	1
1,2-Dichloropropane	<1.00		1.00		ug/L			06/07/24 10:48	1
Ethylbenzene	<1.00		1.00		ug/L			06/07/24 10:48	1
2-Hexanone	<10.0		10.0		ug/L			06/07/24 10:48	1
Methylene Chloride	<5.00		5.00		ug/L			06/07/24 10:48	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			06/07/24 10:48	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			06/07/24 10:48	1
Naphthalene	<5.00		5.00		ug/L			06/07/24 10:48	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			06/07/24 10:48	1
Tetrachloroethene	<1.00		1.00		ug/L			06/07/24 10:48	1
Toluene	<1.00		1.00		ug/L			06/07/24 10:48	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			06/07/24 10:48	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			06/07/24 10:48	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			06/07/24 10:48	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			06/07/24 10:48	1
Trichloroethene	<1.00		1.00		ug/L			06/07/24 10:48	1
Vinyl chloride	<1.00		1.00		ug/L			06/07/24 10:48	1
Xylenes, Total	<3.00		3.00		ug/L			06/07/24 10:48	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	107		80 - 120		06/07/24 10:48	1
Dibromofluoromethane (Surr)	97		73 - 130		06/07/24 10:48	1
Toluene-d8 (Surr)	100		80 - 120		06/07/24 10:48	1

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

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

Lab Sample ID: LCS 310-423914/6
Matrix: Water
Analysis Batch: 423914

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	37.34		ug/L		93	50 - 150
Benzene	20.0	19.27		ug/L		96	72 - 124
Bromodichloromethane	20.0	17.37		ug/L		87	74 - 122
Bromoform	20.0	16.72		ug/L		84	61 - 122
2-Butanone (MEK)	40.0	41.36		ug/L		103	50 - 150
Carbon disulfide	20.0	18.63		ug/L		93	59 - 135
Carbon tetrachloride	20.0	18.59		ug/L		93	67 - 132
Chlorobenzene	20.0	18.77		ug/L		94	76 - 120
Chlorodibromomethane	20.0	17.68		ug/L		88	71 - 121
Chloroform	20.0	18.15		ug/L		91	72 - 125
cis-1,2-Dichloroethene	20.0	18.62		ug/L		93	74 - 123
cis-1,3-Dichloropropene	20.0	20.51		ug/L		103	71 - 125
1,2-Dichlorobenzene	20.0	19.16		ug/L		96	74 - 120
1,3-Dichlorobenzene	20.0	18.13		ug/L		91	72 - 120
1,4-Dichlorobenzene	20.0	18.32		ug/L		92	72 - 120
1,1-Dichloroethane	20.0	18.98		ug/L		95	70 - 127
1,2-Dichloroethane	20.0	18.01		ug/L		90	71 - 125
1,1-Dichloroethene	20.0	18.48		ug/L		92	63 - 132
1,2-Dichloropropane	20.0	19.42		ug/L		97	73 - 124
Ethylbenzene	20.0	19.68		ug/L		98	74 - 122
2-Hexanone	40.0	42.73		ug/L		107	60 - 140
Methylene Chloride	20.0	20.50		ug/L		102	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	42.59		ug/L		106	60 - 139
Methyl tert-butyl ether	20.0	20.94		ug/L		105	68 - 130
Naphthalene	20.0	20.50		ug/L		103	50 - 150
1,1,2,2-Tetrachloroethane	20.0	19.06		ug/L		95	68 - 124
Tetrachloroethene	20.0	18.96		ug/L		95	71 - 130
Toluene	20.0	19.01		ug/L		95	74 - 123
trans-1,2-Dichloroethene	20.0	18.57		ug/L		93	70 - 126
trans-1,3-Dichloropropene	20.0	19.81		ug/L		99	69 - 123
1,1,1-Trichloroethane	20.0	18.85		ug/L		94	73 - 129
1,1,2-Trichloroethane	20.0	19.48		ug/L		97	73 - 123
Trichloroethene	20.0	19.08		ug/L		95	72 - 126
Xylenes, Total	40.0	39.18		ug/L		98	73 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	95		73 - 130
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: LCS 310-423914/7
Matrix: Water
Analysis Batch: 423914

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	12.47		ug/L		62	23 - 150
Chloroethane	20.0	17.50		ug/L		87	54 - 136
Chloromethane	20.0	17.83		ug/L		89	38 - 150

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

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

Lab Sample ID: LCS 310-423914/7
Matrix: Water
Analysis Batch: 423914

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	20.0	18.44		ug/L		92	56 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		80 - 120
Dibromofluoromethane (Surr)	97		73 - 130
Toluene-d8 (Surr)	95		80 - 120

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 570-449202/4
Matrix: Water
Analysis Batch: 449202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	<5.00		5.00		ug/L			06/10/24 09:58	1

Lab Sample ID: LCS 570-449202/2
Matrix: Water
Analysis Batch: 449202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	562	547.1		ug/L		97	80 - 120

Lab Sample ID: LCSD 570-449202/3
Matrix: Water
Analysis Batch: 449202

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 dioxide	562	545.9		ug/L		97	80 - 120	0	20

Lab Sample ID: 310-282892-3 DU
Matrix: Water
Analysis Batch: 449202

Client Sample ID: MW-01-0624
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbon dioxide	20200		21240		ug/L		5	20

Lab Sample ID: MB 240-616030/3
Matrix: Water
Analysis Batch: 616030

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	<1.00		1.00		ug/L			06/10/24 11:30	1
Ethane	<1.00		1.00		ug/L			06/10/24 11:30	1
Ethene	<1.00		1.00		ug/L			06/10/24 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	100		60 - 140		06/10/24 11:30	1

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

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

Lab Sample ID: LCS 240-616030/4
Matrix: Water
Analysis Batch: 616030

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methane	284	297.3		ug/L		105	80 - 120
Ethane	537	538.5		ug/L		100	80 - 120
Ethene	506	505.6		ug/L		100	80 - 120
Surrogate		LCS %Recovery	LCS Qualifier			Limits	
1,1,1-Trifluoroethane		100				60 - 140	

Lab Sample ID: MB 240-616332/3
Matrix: Water
Analysis Batch: 616332

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	<1.00		1.00		ug/L			06/12/24 13:52	1
Ethane	<1.00		1.00		ug/L			06/12/24 13:52	1
Ethene	<1.00		1.00		ug/L			06/12/24 13:52	1
Surrogate		MB %Recovery	MB Qualifier			Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane		102				60 - 140		06/12/24 13:52	1

Lab Sample ID: LCS 240-616332/4
Matrix: Water
Analysis Batch: 616332

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methane	284	306.6		ug/L		108	80 - 120
Ethane	537	554.0		ug/L		103	80 - 120
Ethene	506	521.5		ug/L		103	80 - 120
Surrogate		LCS %Recovery	LCS Qualifier			Limits	
1,1,1-Trifluoroethane		101				60 - 140	

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-424031/3
Matrix: Water
Analysis Batch: 424031

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			06/06/24 11:02	1
Nitrate as N	<0.200		0.200		mg/L			06/06/24 11:02	1
Sulfate	<1.00		1.00		mg/L			06/06/24 11:02	1

Lab Sample ID: LCS 310-424031/4
Matrix: Water
Analysis Batch: 424031

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.614		mg/L		96	90 - 110

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 310-424031/4
Matrix: Water
Analysis Batch: 424031

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	2.00	2.023		mg/L		101	90 - 110
Sulfate	10.0	10.13		mg/L		101	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-423848/1-A
Matrix: Water
Analysis Batch: 424223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.100		0.100		mg/L		06/07/24 09:15	06/11/24 15:10	1
Manganese	<0.0100		0.0100		mg/L		06/07/24 09:15	06/11/24 15:10	1

Lab Sample ID: LCS 310-423848/2-A
Matrix: Water
Analysis Batch: 424223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	0.200	0.2195		mg/L		110	80 - 120
Manganese	0.100	0.09621		mg/L		96	80 - 120

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 310-424547/11
Matrix: Water
Analysis Batch: 424547

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.00		1.00		mg/L			06/12/24 12:42	1

Lab Sample ID: LCS 310-424547/12
Matrix: Water
Analysis Batch: 424547

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	9.99	10.82		mg/L		108	85 - 115

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 310-423948/1-A
Matrix: Water
Analysis Batch: 423949

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423948

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.00		2.00		mg/L		06/07/24 12:01	06/07/24 12:01	1

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Method: SM 4500 S2 F - Sulfide, Total (Continued)

Lab Sample ID: LCS 310-423948/2-A
Matrix: Water
Analysis Batch: 423949

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423948

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	5.00	3.600		mg/L		72	10 - 110

Lab Sample ID: 310-282892-2 MS
Matrix: Water
Analysis Batch: 423949

Client Sample ID: Dup-01
Prep Type: Total/NA
Prep Batch: 423948

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	<2.00		5.00	4.000		mg/L		80	10 - 110

Lab Sample ID: 310-282892-2 MSD
Matrix: Water
Analysis Batch: 423949

Client Sample ID: Dup-01
Prep Type: Total/NA
Prep Batch: 423948

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<2.00		5.00	4.000		mg/L		80	10 - 110	0	27

QC Association Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

GC/MS VOA

Analysis Batch: 423910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-6	MW-08-0624	Total/NA	Water	8260D	
310-282892-7	MW-09-0624	Total/NA	Water	8260D	
310-282892-8	MW-11-0624	Total/NA	Water	8260D	
310-282892-9	MW-12-0624	Total/NA	Water	8260D	
310-282892-10	MW-13-0624	Total/NA	Water	8260D	
310-282892-11	MW-14-0624	Total/NA	Water	8260D	
310-282892-12	MW-15-0624	Total/NA	Water	8260D	
310-282892-13	MW-16-0624	Total/NA	Water	8260D	
310-282892-14	MW-17-0624	Total/NA	Water	8260D	
310-282892-15	MW-18-0624	Total/NA	Water	8260D	
310-282892-16	MW-19-0624	Total/NA	Water	8260D	
MB 310-423910/5	Method Blank	Total/NA	Water	8260D	
LCS 310-423910/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-423910/7	Lab Control Sample	Total/NA	Water	8260D	
310-282892-8 MS	MW-11-0624	Total/NA	Water	8260D	
310-282892-8 MSD	MW-11-0624	Total/NA	Water	8260D	

Analysis Batch: 423914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-1	TB-01	Total/NA	Water	8260D	
310-282892-2	Dup-01	Total/NA	Water	8260D	
310-282892-3	MW-01-0624	Total/NA	Water	8260D	
310-282892-4	MW-06-0624	Total/NA	Water	8260D	
310-282892-5	MW-07-0624	Total/NA	Water	8260D	
MB 310-423914/5	Method Blank	Total/NA	Water	8260D	
LCS 310-423914/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-423914/7	Lab Control Sample	Total/NA	Water	8260D	

GC VOA

Analysis Batch: 449202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-2	Dup-01	Total/NA	Water	RSK-175	
310-282892-3	MW-01-0624	Total/NA	Water	RSK-175	
310-282892-5	MW-07-0624	Total/NA	Water	RSK-175	
310-282892-9	MW-12-0624	Total/NA	Water	RSK-175	
310-282892-14	MW-17-0624	Total/NA	Water	RSK-175	
MB 570-449202/4	Method Blank	Total/NA	Water	RSK-175	
LCS 570-449202/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 570-449202/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
310-282892-3 DU	MW-01-0624	Total/NA	Water	RSK-175	

Analysis Batch: 616030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-2	Dup-01	Total/NA	Water	RSK-175	
310-282892-3	MW-01-0624	Total/NA	Water	RSK-175	
310-282892-5	MW-07-0624	Total/NA	Water	RSK-175	
310-282892-9	MW-12-0624	Total/NA	Water	RSK-175	
310-282892-14	MW-17-0624	Total/NA	Water	RSK-175	
MB 240-616030/3	Method Blank	Total/NA	Water	RSK-175	
LCS 240-616030/4	Lab Control Sample	Total/NA	Water	RSK-175	

Eurofins Cedar Falls

QC Association Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

GC VOA

Analysis Batch: 616332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-5	MW-07-0624	Total/NA	Water	RSK-175	
310-282892-14	MW-17-0624	Total/NA	Water	RSK-175	
MB 240-616332/3	Method Blank	Total/NA	Water	RSK-175	
LCS 240-616332/4	Lab Control Sample	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 424031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-2	Dup-01	Total/NA	Water	9056A	
310-282892-2	Dup-01	Total/NA	Water	9056A	
310-282892-3	MW-01-0624	Total/NA	Water	9056A	
310-282892-3	MW-01-0624	Total/NA	Water	9056A	
310-282892-5	MW-07-0624	Total/NA	Water	9056A	
310-282892-5	MW-07-0624	Total/NA	Water	9056A	
310-282892-9	MW-12-0624	Total/NA	Water	9056A	
310-282892-9	MW-12-0624	Total/NA	Water	9056A	
310-282892-14	MW-17-0624	Total/NA	Water	9056A	
MB 310-424031/3	Method Blank	Total/NA	Water	9056A	
LCS 310-424031/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 423848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-2	Dup-01	Dissolved	Water	3005A	
310-282892-3	MW-01-0624	Dissolved	Water	3005A	
310-282892-5	MW-07-0624	Dissolved	Water	3005A	
310-282892-9	MW-12-0624	Dissolved	Water	3005A	
310-282892-14	MW-17-0624	Dissolved	Water	3005A	
MB 310-423848/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-423848/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 424223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-2	Dup-01	Dissolved	Water	6020B	423848
310-282892-3	MW-01-0624	Dissolved	Water	6020B	423848
310-282892-5	MW-07-0624	Dissolved	Water	6020B	423848
310-282892-9	MW-12-0624	Dissolved	Water	6020B	423848
310-282892-14	MW-17-0624	Dissolved	Water	6020B	423848
MB 310-423848/1-A	Method Blank	Total/NA	Water	6020B	423848
LCS 310-423848/2-A	Lab Control Sample	Total/NA	Water	6020B	423848

Analysis Batch: 424568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-5	MW-07-0624	Dissolved	Water	6020B	423848
310-282892-14	MW-17-0624	Dissolved	Water	6020B	423848

QC Association Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

General Chemistry

Prep Batch: 423948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-2	Dup-01	Total/NA	Water	SM 4500 S2 C	
310-282892-3	MW-01-0624	Total/NA	Water	SM 4500 S2 C	
310-282892-5	MW-07-0624	Total/NA	Water	SM 4500 S2 C	
310-282892-9	MW-12-0624	Total/NA	Water	SM 4500 S2 C	
310-282892-14	MW-17-0624	Total/NA	Water	SM 4500 S2 C	
MB 310-423948/1-A	Method Blank	Total/NA	Water	SM 4500 S2 C	
LCS 310-423948/2-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 C	
310-282892-2 MS	Dup-01	Total/NA	Water	SM 4500 S2 C	
310-282892-2 MSD	Dup-01	Total/NA	Water	SM 4500 S2 C	

Analysis Batch: 423949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-2	Dup-01	Total/NA	Water	SM 4500 S2 F	423948
310-282892-3	MW-01-0624	Total/NA	Water	SM 4500 S2 F	423948
310-282892-5	MW-07-0624	Total/NA	Water	SM 4500 S2 F	423948
310-282892-9	MW-12-0624	Total/NA	Water	SM 4500 S2 F	423948
310-282892-14	MW-17-0624	Total/NA	Water	SM 4500 S2 F	423948
MB 310-423948/1-A	Method Blank	Total/NA	Water	SM 4500 S2 F	423948
LCS 310-423948/2-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	423948
310-282892-2 MS	Dup-01	Total/NA	Water	SM 4500 S2 F	423948
310-282892-2 MSD	Dup-01	Total/NA	Water	SM 4500 S2 F	423948

Analysis Batch: 424547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282892-2	Dup-01	Total/NA	Water	9060A	
310-282892-3	MW-01-0624	Total/NA	Water	9060A	
310-282892-5	MW-07-0624	Total/NA	Water	9060A	
310-282892-9	MW-12-0624	Total/NA	Water	9060A	
310-282892-14	MW-17-0624	Total/NA	Water	9060A	
MB 310-424547/11	Method Blank	Total/NA	Water	9060A	
LCS 310-424547/12	Lab Control Sample	Total/NA	Water	9060A	

Lab Chronicle

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: TB-01
Date Collected: 06/04/24 10:30
Date Received: 06/06/24 12:20

Lab Sample ID: 310-282892-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423914	WSE8	EET CF	06/07/24 12:16

Client Sample ID: Dup-01
Date Collected: 06/06/24 00:00
Date Received: 06/06/24 12:20

Lab Sample ID: 310-282892-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423914	WSE8	EET CF	06/07/24 17:42
Total/NA	Analysis	RSK-175		10	449202	I9H5	EET CAL 4	06/10/24 14:07
Total/NA	Analysis	RSK-175		1	616030	JBN	EET CLE	06/10/24 16:02
Total/NA	Analysis	9056A		1	424031	QTZ5	EET CF	06/06/24 14:49
Total/NA	Analysis	9056A		20	424031	QTZ5	EET CF	06/10/24 12:43
Dissolved	Prep	3005A			423848	DHM5	EET CF	06/07/24 09:15
Dissolved	Analysis	6020B		1	424223	NFT2	EET CF	06/11/24 16:13
Total/NA	Analysis	9060A		1	424547	DGU1	EET CF	06/12/24 15:42
Total/NA	Prep	SM 4500 S2 C			423948	D7CP	EET CF	06/07/24 12:01
Total/NA	Analysis	SM 4500 S2 F		1	423949	D7CP	EET CF	06/07/24 12:01

Client Sample ID: MW-01-0624
Date Collected: 06/05/24 16:38
Date Received: 06/06/24 12:20

Lab Sample ID: 310-282892-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423914	WSE8	EET CF	06/07/24 18:26
Total/NA	Analysis	RSK-175		10	449202	I9H5	EET CAL 4	06/10/24 13:36
Total/NA	Analysis	RSK-175		1	616030	JBN	EET CLE	06/10/24 16:19
Total/NA	Analysis	9056A		1	424031	QTZ5	EET CF	06/06/24 15:39
Total/NA	Analysis	9056A		20	424031	QTZ5	EET CF	06/06/24 16:11
Dissolved	Prep	3005A			423848	DHM5	EET CF	06/07/24 09:15
Dissolved	Analysis	6020B		1	424223	NFT2	EET CF	06/11/24 16:15
Total/NA	Analysis	9060A		1	424547	DGU1	EET CF	06/12/24 16:18
Total/NA	Prep	SM 4500 S2 C			423948	D7CP	EET CF	06/07/24 12:01
Total/NA	Analysis	SM 4500 S2 F		1	423949	D7CP	EET CF	06/07/24 12:01

Client Sample ID: MW-06-0624
Date Collected: 06/05/24 11:25
Date Received: 06/06/24 12:20

Lab Sample ID: 310-282892-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423914	WSE8	EET CF	06/07/24 18:48

Lab Chronicle

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-07-0624

Lab Sample ID: 310-282892-5

Date Collected: 06/05/24 13:00

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423914	WSE8	EET CF	06/07/24 18:04
Total/NA	Analysis	RSK-175		10	449202	I9H5	EET CAL 4	06/10/24 14:24
Total/NA	Analysis	RSK-175		1	616030	JBN	EET CLE	06/10/24 16:36
Total/NA	Analysis	RSK-175		10	616332	JBN	EET CLE	06/12/24 16:43
Total/NA	Analysis	9056A		1	424031	QTZ5	EET CF	06/06/24 15:14
Total/NA	Analysis	9056A		20	424031	QTZ5	EET CF	06/10/24 13:08
Dissolved	Prep	3005A			423848	DHM5	EET CF	06/07/24 09:15
Dissolved	Analysis	6020B		4	424568	NFT2	EET CF	06/13/24 16:51
Dissolved	Prep	3005A			423848	DHM5	EET CF	06/07/24 09:15
Dissolved	Analysis	6020B		1	424223	NFT2	EET CF	06/11/24 16:26
Total/NA	Analysis	9060A		1	424547	DGU1	EET CF	06/12/24 16:54
Total/NA	Prep	SM 4500 S2 C			423948	D7CP	EET CF	06/07/24 12:01
Total/NA	Analysis	SM 4500 S2 F		1	423949	D7CP	EET CF	06/07/24 12:01

Client Sample ID: MW-08-0624

Lab Sample ID: 310-282892-6

Date Collected: 06/04/24 11:15

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 03:00

Client Sample ID: MW-09-0624

Lab Sample ID: 310-282892-7

Date Collected: 06/04/24 12:30

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 03:23

Client Sample ID: MW-11-0624

Lab Sample ID: 310-282892-8

Date Collected: 06/05/24 08:50

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 03:45

Client Sample ID: MW-12-0624

Lab Sample ID: 310-282892-9

Date Collected: 06/06/24 09:40

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 04:08
Total/NA	Analysis	RSK-175		10	449202	I9H5	EET CAL 4	06/10/24 14:38
Total/NA	Analysis	RSK-175		1	616030	JBN	EET CLE	06/10/24 16:53
Total/NA	Analysis	9056A		1	424031	QTZ5	EET CF	06/06/24 15:01

Eurofins Cedar Falls

Lab Chronicle

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-12-0624

Lab Sample ID: 310-282892-9

Date Collected: 06/06/24 09:40

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		20	424031	QTZ5	EET CF	06/10/24 12:55
Dissolved	Prep	3005A			423848	DHM5	EET CF	06/07/24 09:15
Dissolved	Analysis	6020B		1	424223	NFT2	EET CF	06/11/24 16:28
Total/NA	Analysis	9060A		1	424547	DGU1	EET CF	06/12/24 17:31
Total/NA	Prep	SM 4500 S2 C			423948	D7CP	EET CF	06/07/24 12:01
Total/NA	Analysis	SM 4500 S2 F		1	423949	D7CP	EET CF	06/07/24 12:01

Client Sample ID: MW-13-0624

Lab Sample ID: 310-282892-10

Date Collected: 06/05/24 09:55

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 04:31

Client Sample ID: MW-14-0624

Lab Sample ID: 310-282892-11

Date Collected: 06/04/24 18:10

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 04:53

Client Sample ID: MW-15-0624

Lab Sample ID: 310-282892-12

Date Collected: 06/04/24 14:35

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 05:16

Client Sample ID: MW-16-0624

Lab Sample ID: 310-282892-13

Date Collected: 06/04/24 13:30

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 05:39

Client Sample ID: MW-17-0624

Lab Sample ID: 310-282892-14

Date Collected: 06/05/24 14:30

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 06:01
Total/NA	Analysis	RSK-175		10	449202	I9H5	EET CAL 4	06/10/24 14:58
Total/NA	Analysis	RSK-175		1	616030	JBN	EET CLE	06/10/24 17:10
Total/NA	Analysis	RSK-175		10	616332	JBN	EET CLE	06/12/24 17:00
Total/NA	Analysis	9056A		1	424031	QTZ5	EET CF	06/06/24 15:26

Eurofins Cedar Falls

Lab Chronicle

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Client Sample ID: MW-17-0624

Lab Sample ID: 310-282892-14

Date Collected: 06/05/24 14:30

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			423848	DHM5	EET CF	06/07/24 09:15
Dissolved	Analysis	6020B		4	424568	NFT2	EET CF	06/13/24 16:54
Dissolved	Prep	3005A			423848	DHM5	EET CF	06/07/24 09:15
Dissolved	Analysis	6020B		1	424223	NFT2	EET CF	06/11/24 16:30
Total/NA	Analysis	9060A		1	424547	DGU1	EET CF	06/12/24 18:07
Total/NA	Prep	SM 4500 S2 C			423948	D7CP	EET CF	06/07/24 12:01
Total/NA	Analysis	SM 4500 S2 F		1	423949	D7CP	EET CF	06/07/24 12:01

Client Sample ID: MW-18-0624

Lab Sample ID: 310-282892-15

Date Collected: 06/04/24 17:10

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 06:24

Client Sample ID: MW-19-0624

Lab Sample ID: 310-282892-16

Date Collected: 06/04/24 15:45

Matrix: Water

Date Received: 06/06/24 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423910	WSE8	EET CF	06/08/24 06:46

Laboratory References:

- EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494
- EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
- EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24
California	Los Angeles County Sanitation Districts	10109	08-01-24
California	State	3082	07-31-24
Kansas	NELAP	E-10420	08-01-24
Nevada	State	CA00111	07-31-24
Oregon	NELAP	4175	06-11-24
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-24

Laboratory: Eurofins Cleveland

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	421	06-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
RSK-175		Water	Ethane
RSK-175		Water	Ethene
RSK-175		Water	Methane

Method Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins - 35th Street

Job ID: 310-282892-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
RSK-175	Dissolved Gases (GC)	RSK	EET CAL 4
RSK-175	Dissolved Gases (GC)	RSK	EET CLE
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
9060A	Organic Carbon, Total (TOC)	SW846	EET CF
SM 4500 S2 F	Sulfide, Total	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
SM 4500 S2 C	Sulfide, Sample Pretreatment/Concentration	SM	EET CF

Protocol References:

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

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

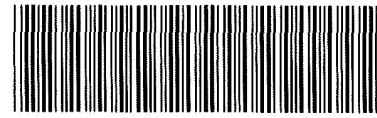
EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

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

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



Environment Testing
America



310-282892 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>Stank</u>			
City/State:	CITY <u>Des Moines</u>	STATE <u>IA</u>	Project: <u>Rockwell Collins</u>
Receipt Information			
Date/Time Received:	DATE <u>6/6/24</u>	TIME <u>1220</u>	Received By: <u>10</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input checked="" type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>2</u>	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<u>All vials except the ones for RSK</u>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>P</u>		Correction Factor (°C): <u>0.0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>0.0</u>		Corrected Temp (°C): <u>0.0</u>	
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>STORC</u>			
City/State: <u>DES MOINES</u>	CITY: <u>IA</u>	STATE: <u>IA</u>	Project: <u>Rockwell Collins</u>
Receipt Information			
Date/Time Received: <u>6/6/24</u>	DATE: <u>6/6/24</u>	TIME: <u>1220</u>	Received By: <u>10</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input checked="" type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID: _____			
Multiple Coolers? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler # <u>2</u> of <u>2</u>			
Cooler Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Trip Blank Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Which VOA samples are in cooler? ↓			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>P</u>		Correction Factor (°C): <u>0.0</u>	
*Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>3.3</u>		Corrected Temp (°C): <u>3.3</u>	
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Eurofins Cedar Falls

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

Chain of Custody Record

TestAmerica Des Moines SC

eurofins | Environment Testing

214

Client Information		Sampler: <i>Emma Brady</i>		Lab PM: Bindert, Zach T		Carrier Tracking No(s):		COC No: 310-87244-24434 1																																																						
Client Contact: Steve Varsa		Phone: <i>515-253 0830</i>		E-Mail: Zach.Bindert@et.eurofinsus.com		State of Origin: <i>IA</i>		Page: Page 1 of 2																																																						
Company: Stantec Consulting Services Inc		PWSID:		Analysis Requested						Job #:																																																				
Address: 11311 Aurora Avenue		Due Date Requested: <i>STD</i>		<table border="1"> <tr> <td>Field Filtered Sample (Yes or No)</td> <td>Perform MS/MSD (Yes or No)</td> <td>8260D - Volatile Standard Sublist</td> <td>RSK_176 - Methane, Ethane, Ethene</td> <td>9060A - TOC</td> <td>Chloride, Sulfate - 9066A_ORGFM_28D, Nitrate - 9066A_ORGFM_48H</td> <td>6020B - Dissolved Iron and Manganese</td> <td>RSK_176_CO2 - RSK-176 CO2</td> <td>SMA600_S2_F - Sulfide, Total</td> <td rowspan="5" style="text-align: center; vertical-align: middle;"> <i>SRB</i> / </td> <td>Total Number of Containers</td> </tr> <tr> <td>City: Des Moines</td> <td>TAT Requested (days): <i>STD</i></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>State Zip: IA, 50322-7904</td> <td>Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Phone:</td> <td>PO #: 193709909 100 001</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Email: steve.varsa@stantec.com</td> <td>WO #:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - Volatile Standard Sublist	RSK_176 - Methane, Ethane, Ethene	9060A - TOC	Chloride, Sulfate - 9066A_ORGFM_28D, Nitrate - 9066A_ORGFM_48H	6020B - Dissolved Iron and Manganese	RSK_176_CO2 - RSK-176 CO2	SMA600_S2_F - Sulfide, Total	<i>SRB</i> /	Total Number of Containers	City: Des Moines	TAT Requested (days): <i>STD</i>									State Zip: IA, 50322-7904	Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No									Phone:	PO #: 193709909 100 001									Email: steve.varsa@stantec.com	WO #:									Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)	
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - Volatile Standard Sublist	RSK_176 - Methane, Ethane, Ethene							9060A - TOC	Chloride, Sulfate - 9066A_ORGFM_28D, Nitrate - 9066A_ORGFM_48H	6020B - Dissolved Iron and Manganese	RSK_176_CO2 - RSK-176 CO2	SMA600_S2_F - Sulfide, Total	<i>SRB</i> /	Total Number of Containers																																														
City: Des Moines	TAT Requested (days): <i>STD</i>																																																													
State Zip: IA, 50322-7904	Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																																																													
Phone:	PO #: 193709909 100 001																																																													
Email: steve.varsa@stantec.com	WO #:																																																													
Project Name: Rockwell Collins - 35th Street		Project #: 31012345								Other:																																																				
Site:		SSOW#:																																																												
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)		Special Instructions/Note:																																																				
		Preservation Code:																																																												
<i>TB-01</i>		<i>6/4/2024</i>		<i>1030</i>		<i>G</i>		<i>Water</i>		<i>Nitrate - 48 Hour Hold Time</i>																																																				
<i>Dup-01</i>		<i>6/6/2024</i>		<i>-</i>		<i>G</i>		<i>Water</i>																																																						
<i>MW-01-0624</i>		<i>6/5/2024</i>		<i>1638</i>		<i>G</i>		<i>Water</i>																																																						
<i>MW-06-0624</i>		<i>6/5/2024</i>		<i>1125</i>		<i>G</i>		<i>Water</i>																																																						
<i>MW-07-0624</i>		<i>6/5/2024</i>		<i>1300</i>		<i>G</i>		<i>Water</i>																																																						
<i>MW-08-0624</i>		<i>6/4/2024</i>		<i>1115</i>		<i>G</i>		<i>Water</i>																																																						
<i>MW-09-0624</i>		<i>6/4/2024</i>		<i>1230</i>		<i>G</i>		<i>Water</i>																																																						
<i>MW-11-0624</i>		<i>6/5/2024</i>		<i>0850</i>		<i>G</i>		<i>Water</i>		<i>MS/MSD</i>																																																				
<i>MW-12-0624</i>		<i>6/6/2024</i>		<i>0940</i>		<i>G</i>		<i>Water</i>																																																						
<i>MW-13-0624</i>		<i>6/5/2024</i>		<i>0955</i>		<i>G</i>		<i>Water</i>																																																						
<i>MW-14-0624</i>		<i>6/4/2024</i>		<i>1810</i>		<i>G</i>		<i>Water</i>																																																						
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																																																								
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																																								
Deliverable Requested <input checked="" type="checkbox"/> I, <input checked="" type="checkbox"/> III, IV, Other (specify)						Special Instructions/QC Requirements																																																								
Empty Kit Relinquished by:			Date:			Time:			Method of Shipment:																																																					
Relinquished by: <i>Emma Brady Em Bly</i>			Date/Time: <i>6/6/2024 1220</i>			Company: <i>STN</i>			Received by: <i>[Signature]</i>																																																					
Relinquished by:			Date/Time:			Company:			Received by:																																																					
Relinquished by:			Date/Time:			Company:			Received by:																																																					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.		Cooler Temperature(s) °C and Other Remarks:																																																										

Page 53 of 60

6/20/2024



Eurofins Cedar Falls

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

Chain of Custody Record

TestAmerica Des Moines SC
214

eurofins Environment Testing

Client Information		Sampler: <i>Emma Brady</i>		Lab PM: Bindert, Zach T		Carrier Tracking No(s):		COC No: 310-87244-24434 2																																								
Client Contact: Steve Varsa		Phone: <i>515-253-0830</i>		E-Mail: Zach.Bindert@et.eurofins.us		State of Origin:		Page: Page 2 of 2																																								
Company: Stantec Consulting Services Inc		PWSID:		Analysis Requested						Job #:																																						
Address: 11311 Aurora Avenue		Due Date Requested: <i>STD</i>		<table border="1"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>8260D - Volatile Standard Sublist</th> <th>RSK_176 - Methane, Ethane, Ethene</th> <th>9060A - TOC</th> <th>Chloride, Sulfate - 9066A_ORGFM_28D, Nitrate - 9066A_ORGFM_48H</th> <th>9020B - Dissolved Iron and Manganese</th> <th>RSK_176_CO2 - RSK-176 CO2</th> <th>SMA600_S2_F - Sulfide, Total</th> <th rowspan="4">Total Number of Containers</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - Volatile Standard Sublist	RSK_176 - Methane, Ethane, Ethene	9060A - TOC	Chloride, Sulfate - 9066A_ORGFM_28D, Nitrate - 9066A_ORGFM_48H	9020B - Dissolved Iron and Manganese	RSK_176_CO2 - RSK-176 CO2	SMA600_S2_F - Sulfide, Total	Total Number of Containers																												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)	
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - Volatile Standard Sublist	RSK_176 - Methane, Ethane, Ethene							9060A - TOC	Chloride, Sulfate - 9066A_ORGFM_28D, Nitrate - 9066A_ORGFM_48H	9020B - Dissolved Iron and Manganese	RSK_176_CO2 - RSK-176 CO2	SMA600_S2_F - Sulfide, Total	Total Number of Containers																																	
City: Des Moines		TAT Requested (days): <i>STD</i>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		PO #: 193709909 100 001		WO #:		Special Instructions/Note:																																						
State Zip: IA, 50322-7904		Project #: 31012345		SSOW#:		Project Name: Rockwell Collins - 35th Street		Site:		Nitrate - 48 Hour Hold Time																																						
Phone:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)																																								
Email: steve.varsa@stantec.com		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Preservation Code:																																						
Project Name: Rockwell Collins - 35th Street		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Preservation Code:																																						
Site:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Preservation Code:																																						
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Preservation Code:																																						
<i>MW-15-0624</i>		<i>6/4/2024</i>		<i>1435</i>		<i>G</i>		<i>Water</i>		<i>3</i>																																						
<i>MW-16-0624</i>		<i>6/4/2024</i>		<i>1330</i>		<i>G</i>		<i>Water</i>		<i>3</i>																																						
<i>MW-17-0624</i>		<i>6/5/2024</i>		<i>1430</i>		<i>G</i>		<i>Water</i>		<i>14</i>																																						
<i>MW-18-0624</i>		<i>6/4/2024</i>		<i>1710</i>		<i>G</i>		<i>Water</i>		<i>3</i>																																						
<i>MW-14-0624</i>		<i>6/4/2024</i>		<i>1545</i>		<i>G</i>		<i>Water</i>		<i>3</i>																																						
<i>ERB</i>		<i>ERB</i>		<i>ERB</i>		<i>ERB</i>		<i>ERB</i>		<i>ERB</i>																																						
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Deliverable Requested <input checked="" type="checkbox"/> I, <input checked="" type="checkbox"/> III, IV, Other (specify)		Special Instructions/QC Requirements.																																						
Empty Kit Relinquished by		Date		Time		Method of Shipment		Relinquished by: <i>Emma Brady</i>		Date/Time: <i>6/6/2024 1220</i>																																						
Relinquished by		Date/Time		Company		Received by		Date/Time		Company																																						
Relinquished by		Date/Time		Company		Received by		Date/Time		Company																																						
Relinquished by		Date/Time		Company		Received by		Date/Time		Company																																						
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks:		Ver 01/16/2019		15		14																																						

Page 54 of 60

6/20/2024



Eurofins Cedar Falls

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

3.6/5.1

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:		Lab PM: Bindert, Zach T		Carrier Tracking No(s):		COC No: 310-73181.1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: Zach.Bindert@et.eurofinsus.com		State of Origin: Iowa		Page: Page 1 of 1			
Company: Eurofins Environment Testing North Centr				Accreditations Required (See note): State - Iowa				Job #: 310-282892-1			
Address: 180 S. Van Buren Avenue,		Due Date Requested: 6/19/2024		Analysis Requested						Preservation Codes: -	
City: Barberton		TAT Requested (days):									
State, Zip: OH, 44203		PO #:									
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:									
Email:		Project #: 31012345		Project #:		SSOW#:		Other:			
Project Name: Rockwell Collins - 35th Street		Site:		SSOW#:							
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RSK_175 Methane, Ethane, Ethene	Total Number of containers	Special Instructions/Note: RSK	
				Preservation Code:							
Dup-01 (310-282892-2)		6/6/24	Central	Water		X			3		
MW-01-0624 (310-282892-3)		6/5/24	16:38 Central	Water		X			3		
MW-07-0624 (310-282892-5)		6/5/24	13:00 Central	Water		X			3		
MW-12-0624 (310-282892-9)		6/6/24	09:40 Central	Water		X			3		
MW-17-0624 (310-282892-14)		6/5/24	14:30 Central	Water		X			3		
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.</p>											
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested: I, II, III, IV, Other (specify)					Primary Deliverable Rank: 2		Special Instructions/QC Requirements:				
Empty Kit Relinquished by:			Date:		Time:		Method of Shipment:				
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
[Signature]		6/6/24 1610		[Company]		JESSICA RIGDON		6-7-24 1000		E.BTNC	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact:		Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:						
Δ Yes Δ No											



Eurofins - Cleveland Sample Receipt Form/Narrative Login # Barberton Facility

Client Eurofins - CF Site Name Cooler unpacked by JESSICA RIGDON
Cooler Received on 6-7-24 Opened on 6-7-24
FedEx: 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # EC Foam Box Client Cooler Box Other
Packing material used. Bubble Wrap Foam Plastic Bag None Other
COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt IR GUN # 19 (CF +1.5 °C) Observed Cooler Temp 3.6 °C Corrected Cooler Temp 5.1 °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1
-Were the seals on the outside of the cooler(s) signed & dated?
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?
-Were tamper/custody seals intact and uncompromised?
3 Shippers' packing slip attached to the cooler(s)?
4 Did custody papers accompany the sample(s)?
5 Were the custody papers relinquished & signed in the appropriate place?
6 Was/were the person(s) who collected the samples clearly identified on the COC?
7 Did all bottles arrive in good condition (Unbroken)?
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10 Were correct bottle(s) used for the test(s) indicated?
11 Sufficient quantity received to perform indicated analyses?
12. Are these work share samples and all listed on the COC?
If yes, Questions 13-17 have been checked at the originating laboratory
13 Were all preserved sample(s) at the correct pH upon receipt?
14 Were VOAs on the COC?
15 Were air bubbles >6 mm in any VOA vials?
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #
17 Was a LL Hg or Me Hg trip blank present?

Tests that are not checked for pH by Receiving: VOAs Oil and Grease TOC

Contacted PM Date by via Verbal Voice Mail Other
Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by

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

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

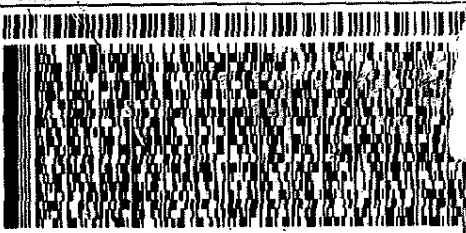
ORIGIN ID ALOA (319)
SAMPLE RECEIVING
EUROFINS TESTAMERICA
3019 VENTURE WAY

CEDAR FALLS, IA 50614
UNITED STATES US

TO SHIPPING/RE
EUROFINS ENV
100 S. VAN B

BARBERTON OH 44203

(330) 497-9396
REF: S310-94072

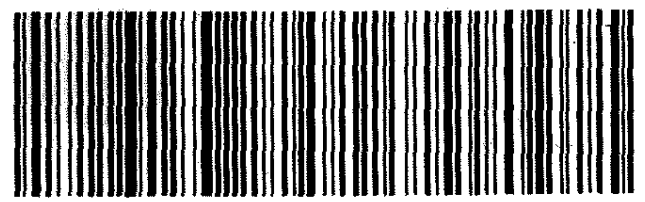


TRK# 7008 5809 5658
0201

FRI - 07 JUN
PRIORITY OVER

XS CAKA

4426
OH-US CLE



Login Sample Receipt Checklist

Client: Stantec Consulting Services, Inc.

Job Number: 310-282892-1

Login Number: 282892

List Number: 1

Creator: Costello, Mackenzie K

List Source: Eurofins Cedar Falls

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



Login Sample Receipt Checklist

Client: Stantec Consulting Services, Inc.

Job Number: 310-282892-1

Login Number: 282892

List Number: 3

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 06/07/24 05:40 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.0
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?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Steve Varsa
Stantec Consulting Services, Inc.
11311 Aurora Avenue
Des Moines, Iowa 50322-7904

Generated 9/23/2024 1:32:57 PM

JOB DESCRIPTION

Rockwell Collins – 35th Street/Main Plant

JOB NUMBER

310-289905-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



Generated
9/23/2024 1:32:57 PM

Authorized for release by
Zach Bindert, Senior Project Manager
Zach.Bindert@et.eurofinsus.com
(319)595-2016



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Sample Summary	6
Detection Summary	7
Client Sample Results	10
Definitions	33
Surrogate Summary	34
QC Sample Results	36
QC Association	44
Chronicle	47
Certification Summary	51
Method Summary	52
Chain of Custody	53
Receipt Checklists	61

Case Narrative

Client: Stantec Consulting Services, Inc.
Project: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Job ID: 310-289905-1

Eurofins Cedar Falls

Job Narrative 310-289905-1

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 9/6/2024 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were -0.4°C and 1.3°C.

GC/MS VOA

Method 8260D: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-17 (310-289905-16).

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

GC VOA

Method RSK_175: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-17 (310-289905-16).

Method RSK_175: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: MW-17 (310-289905-16).

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

HPLC/IC

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

Metals

Method 6020B - Dissolved: The reference method requires samples to be preserved to a pH of <2. The following samples were received with insufficient preservation at a pH of >2: Dup-01 (310-289905-3) and MW-17 (310-289905-16). The sample(s) was preserved to the appropriate pH in the laboratory.

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

General Chemistry

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

Eurofins Cedar Falls

Case Narrative

Client: Stantec Consulting Services, Inc.
Project: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Job ID: 310-289905-2

Eurofins Cedar Falls

Job Narrative 310-289905-2

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 9/6/2024 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were -0.4°C and 1.3°C.

HPLC/IC

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

Eurofins Cedar Falls

Sample Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-289905-1	TB-01	Water	09/04/24 09:00	09/06/24 10:20
310-289905-2	EB-01	Water	09/04/24 11:00	09/06/24 10:20
310-289905-3	Dup-01	Water	09/05/24 00:00	09/06/24 10:20
310-289905-4	Dup-02	Water	09/05/24 00:00	09/06/24 10:20
310-289905-5	MW-1	Water	09/05/24 08:40	09/06/24 10:20
310-289905-6	MW-6	Water	09/04/24 15:37	09/06/24 10:20
310-289905-7	MW-7	Water	09/05/24 13:13	09/06/24 10:20
310-289905-8	MW-8	Water	09/04/24 10:32	09/06/24 10:20
310-289905-9	MW-9	Water	09/04/24 12:00	09/06/24 10:20
310-289905-10	MW-11	Water	09/04/24 17:00	09/06/24 10:20
310-289905-11	MW-12	Water	09/05/24 15:00	09/06/24 10:20
310-289905-12	MW-13	Water	09/05/24 16:45	09/06/24 10:20
310-289905-13	MW-14	Water	09/05/24 15:49	09/06/24 10:20
310-289905-14	MW-15	Water	09/04/24 14:17	09/06/24 10:20
310-289905-15	MW-16	Water	09/04/24 13:23	09/06/24 10:20
310-289905-16	MW-17	Water	09/05/24 11:55	09/06/24 10:20
310-289905-17	MW-18	Water	09/05/24 18:25	09/06/24 10:20
310-289905-18	MW-19	Water	09/05/24 17:21	09/06/24 10:20



Detection Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: TB-01

Lab Sample ID: 310-289905-1

No Detections.

Client Sample ID: EB-01

Lab Sample ID: 310-289905-2

No Detections.

Client Sample ID: Dup-01

Lab Sample ID: 310-289905-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.947		0.500		ug/L	1		8260D	Total/NA
Carbon disulfide	1.93		1.00		ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.11		1.00		ug/L	1		8260D	Total/NA
Carbon dioxide	72800		125		ug/L	25		RSK-175	Total/NA
Methane	12600		10.0		ug/L	10		RSK-175	Total/NA
Ethane	1.07		1.00		ug/L	1		RSK-175	Total/NA
Ethene	1.80		1.00		ug/L	1		RSK-175	Total/NA
Chloride	244		10.0		mg/L	10		9056A	Total/NA
Iron	87.9		0.400		mg/L	4		6020B	Dissolved
Manganese	1.04		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	4.23		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: Dup-02

Lab Sample ID: 310-289905-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.10		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-1

Lab Sample ID: 310-289905-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	32500		125		ug/L	25		RSK-175	Total/NA
Methane	2.09		1.00		ug/L	1		RSK-175	Total/NA
Chloride	116		10.0		mg/L	10		9056A	Total/NA
Sulfate	169		10.0		mg/L	10		9056A	Total/NA
Iron	4.18		0.100		mg/L	1		6020B	Dissolved
Manganese	1.59		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	8.82		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 310-289905-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.502		0.500		ug/L	1		8260D	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 310-289905-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.765		0.500		ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.21		1.00		ug/L	1		8260D	Total/NA
Carbon dioxide	90800		125		ug/L	25		RSK-175	Total/NA
Methane	12300		10.0		ug/L	10		RSK-175	Total/NA
Ethane	1.05		1.00		ug/L	1		RSK-175	Total/NA
Ethene	1.91		1.00		ug/L	1		RSK-175	Total/NA
Chloride	244		10.0		mg/L	10		9056A	Total/NA
Iron	89.5		0.400		mg/L	4		6020B	Dissolved
Manganese	1.09		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	12.1		10.0		mg/L	10		9060A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-8

Lab Sample ID: 310-289905-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	15.3		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 310-289905-9

No Detections.

Client Sample ID: MW-11

Lab Sample ID: 310-289905-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	19.4		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	2.65		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 310-289905-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.85		1.00		ug/L	1		8260D	Total/NA
Carbon dioxide	10700		125		ug/L	25		RSK-175	Total/NA
Methane	348		1.00		ug/L	1		RSK-175	Total/NA
Chloride	241		10.0		mg/L	10		9056A	Total/NA
Sulfate	44.8		1.00		mg/L	1		9056A	Total/NA
Iron	0.114		0.100		mg/L	1		6020B	Dissolved
Manganese	0.307		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	1.35		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 310-289905-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.20		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 310-289905-13

No Detections.

Client Sample ID: MW-15

Lab Sample ID: 310-289905-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	26.1		1.00		ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.36		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 310-289905-15

No Detections.

Client Sample ID: MW-17

Lab Sample ID: 310-289905-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	54.2		10.0		ug/L	1		8260D	Total/NA
Benzene	7.26		0.500		ug/L	1		8260D	Total/NA
2-Butanone (MEK)	98.5		10.0		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	20.9		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	14.8		1.00		ug/L	1		8260D	Total/NA
Carbon dioxide	64000		125		ug/L	25		RSK-175	Total/NA
Methane	7240		20.0		ug/L	20		RSK-175	Total/NA
Ethane	21.3		1.00		ug/L	1		RSK-175	Total/NA
Ethene	74.2		1.00		ug/L	1		RSK-175	Total/NA
Chloride	40.3		10.0		mg/L	10		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-17 (Continued)

Lab Sample ID: 310-289905-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	90.1		0.400		mg/L	4		6020B	Dissolved
Manganese	1.55		0.0100		mg/L	1		6020B	Dissolved
Total Organic Carbon	15.5		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-18

Lab Sample ID: 310-289905-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	10.5		1.00		ug/L	1		8260D	Total/NA

Client Sample ID: MW-19

Lab Sample ID: 310-289905-18

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: TB-01
Date Collected: 09/04/24 09:00
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/10/24 22:12	1
Benzene	<0.500		0.500		ug/L			09/10/24 22:12	1
Bromodichloromethane	<1.00		1.00		ug/L			09/10/24 22:12	1
Bromoform	<5.00		5.00		ug/L			09/10/24 22:12	1
Bromomethane	<4.00		4.00		ug/L			09/10/24 22:12	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/10/24 22:12	1
Carbon disulfide	<1.00		1.00		ug/L			09/10/24 22:12	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/10/24 22:12	1
Chlorobenzene	<1.00		1.00		ug/L			09/10/24 22:12	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/10/24 22:12	1
Chloroethane	<4.00		4.00		ug/L			09/10/24 22:12	1
Chloroform	<3.00		3.00		ug/L			09/10/24 22:12	1
Chloromethane	<3.00		3.00		ug/L			09/10/24 22:12	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/10/24 22:12	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/10/24 22:12	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 22:12	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 22:12	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 22:12	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/10/24 22:12	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/10/24 22:12	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/10/24 22:12	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/10/24 22:12	1
Ethylbenzene	<1.00		1.00		ug/L			09/10/24 22:12	1
2-Hexanone	<10.0		10.0		ug/L			09/10/24 22:12	1
Methylene Chloride	<5.00		5.00		ug/L			09/10/24 22:12	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/10/24 22:12	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/10/24 22:12	1
Naphthalene	<5.00		5.00		ug/L			09/10/24 22:12	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/10/24 22:12	1
Tetrachloroethene	<1.00		1.00		ug/L			09/10/24 22:12	1
Toluene	<1.00		1.00		ug/L			09/10/24 22:12	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/10/24 22:12	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/10/24 22:12	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/10/24 22:12	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/10/24 22:12	1
Trichloroethene	<1.00		1.00		ug/L			09/10/24 22:12	1
Vinyl chloride	<1.00		1.00		ug/L			09/10/24 22:12	1
Xylenes, Total	<3.00		3.00		ug/L			09/10/24 22:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		09/10/24 22:12	1
Dibromofluoromethane (Surr)	100		73 - 130		09/10/24 22:12	1
Toluene-d8 (Surr)	95		80 - 120		09/10/24 22:12	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: EB-01

Lab Sample ID: 310-289905-2

Date Collected: 09/04/24 11:00

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/10/24 22:34	1
Benzene	<0.500		0.500		ug/L			09/10/24 22:34	1
Bromodichloromethane	<1.00		1.00		ug/L			09/10/24 22:34	1
Bromoform	<5.00		5.00		ug/L			09/10/24 22:34	1
Bromomethane	<4.00		4.00		ug/L			09/10/24 22:34	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/10/24 22:34	1
Carbon disulfide	<1.00		1.00		ug/L			09/10/24 22:34	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/10/24 22:34	1
Chlorobenzene	<1.00		1.00		ug/L			09/10/24 22:34	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/10/24 22:34	1
Chloroethane	<4.00		4.00		ug/L			09/10/24 22:34	1
Chloroform	<3.00		3.00		ug/L			09/10/24 22:34	1
Chloromethane	<3.00		3.00		ug/L			09/10/24 22:34	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/10/24 22:34	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/10/24 22:34	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 22:34	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 22:34	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 22:34	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/10/24 22:34	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/10/24 22:34	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/10/24 22:34	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/10/24 22:34	1
Ethylbenzene	<1.00		1.00		ug/L			09/10/24 22:34	1
2-Hexanone	<10.0		10.0		ug/L			09/10/24 22:34	1
Methylene Chloride	<5.00		5.00		ug/L			09/10/24 22:34	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/10/24 22:34	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/10/24 22:34	1
Naphthalene	<5.00		5.00		ug/L			09/10/24 22:34	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/10/24 22:34	1
Tetrachloroethene	<1.00		1.00		ug/L			09/10/24 22:34	1
Toluene	<1.00		1.00		ug/L			09/10/24 22:34	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/10/24 22:34	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/10/24 22:34	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/10/24 22:34	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/10/24 22:34	1
Trichloroethene	<1.00		1.00		ug/L			09/10/24 22:34	1
Vinyl chloride	<1.00		1.00		ug/L			09/10/24 22:34	1
Xylenes, Total	<3.00		3.00		ug/L			09/10/24 22:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		09/10/24 22:34	1
Dibromofluoromethane (Surr)	104		73 - 130		09/10/24 22:34	1
Toluene-d8 (Surr)	94		80 - 120		09/10/24 22:34	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: Dup-01

Lab Sample ID: 310-289905-3

Date Collected: 09/05/24 00:00

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/10/24 23:20	1
Benzene	0.947		0.500		ug/L			09/10/24 23:20	1
Bromodichloromethane	<1.00		1.00		ug/L			09/10/24 23:20	1
Bromoform	<5.00		5.00		ug/L			09/10/24 23:20	1
Bromomethane	<4.00		4.00		ug/L			09/10/24 23:20	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/10/24 23:20	1
Carbon disulfide	1.93		1.00		ug/L			09/10/24 23:20	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/10/24 23:20	1
Chlorobenzene	<1.00		1.00		ug/L			09/10/24 23:20	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/10/24 23:20	1
Chloroethane	<4.00		4.00		ug/L			09/10/24 23:20	1
Chloroform	<3.00		3.00		ug/L			09/10/24 23:20	1
Chloromethane	<3.00		3.00		ug/L			09/10/24 23:20	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/10/24 23:20	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/10/24 23:20	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 23:20	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 23:20	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 23:20	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/10/24 23:20	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/10/24 23:20	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/10/24 23:20	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/10/24 23:20	1
Ethylbenzene	<1.00		1.00		ug/L			09/10/24 23:20	1
2-Hexanone	<10.0		10.0		ug/L			09/10/24 23:20	1
Methylene Chloride	<5.00		5.00		ug/L			09/10/24 23:20	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/10/24 23:20	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/10/24 23:20	1
Naphthalene	<5.00		5.00		ug/L			09/10/24 23:20	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/10/24 23:20	1
Tetrachloroethene	<1.00		1.00		ug/L			09/10/24 23:20	1
Toluene	<1.00		1.00		ug/L			09/10/24 23:20	1
trans-1,2-Dichloroethene	1.11		1.00		ug/L			09/10/24 23:20	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/10/24 23:20	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/10/24 23:20	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/10/24 23:20	1
Trichloroethene	<1.00		1.00		ug/L			09/10/24 23:20	1
Vinyl chloride	<1.00		1.00		ug/L			09/10/24 23:20	1
Xylenes, Total	<3.00		3.00		ug/L			09/10/24 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		09/10/24 23:20	1
Dibromofluoromethane (Surr)	105		73 - 130		09/10/24 23:20	1
Toluene-d8 (Surr)	98		80 - 120		09/10/24 23:20	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	72800		125		ug/L			09/09/24 15:53	25
Methane	12600		10.0		ug/L			09/11/24 13:52	10
Ethane	1.07		1.00		ug/L			09/10/24 04:43	1
Ethene	1.80		1.00		ug/L			09/10/24 04:43	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: Dup-01
Date Collected: 09/05/24 00:00
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	92		60 - 140		09/10/24 04:43	1
1,1,1-Trifluoroethane	99		60 - 140		09/11/24 13:52	10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	244		10.0		mg/L			09/10/24 09:50	10
Nitrate as N	<0.200		0.200		mg/L			09/06/24 16:26	1
Sulfate	<1.00		1.00		mg/L			09/06/24 16:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	87.9		0.400		mg/L		09/09/24 09:30	09/20/24 20:03	4
Manganese	1.04		0.0100		mg/L		09/09/24 09:30	09/11/24 17:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	4.23		1.00		mg/L			09/10/24 19:30	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		09/09/24 09:56	09/09/24 09:56	1



Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: Dup-02

Lab Sample ID: 310-289905-4

Date Collected: 09/05/24 00:00

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/10/24 23:42	1
Benzene	<0.500		0.500		ug/L			09/10/24 23:42	1
Bromodichloromethane	<1.00		1.00		ug/L			09/10/24 23:42	1
Bromoform	<5.00		5.00		ug/L			09/10/24 23:42	1
Bromomethane	<4.00		4.00		ug/L			09/10/24 23:42	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/10/24 23:42	1
Carbon disulfide	<1.00		1.00		ug/L			09/10/24 23:42	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/10/24 23:42	1
Chlorobenzene	<1.00		1.00		ug/L			09/10/24 23:42	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/10/24 23:42	1
Chloroethane	<4.00		4.00		ug/L			09/10/24 23:42	1
Chloroform	<3.00		3.00		ug/L			09/10/24 23:42	1
Chloromethane	<3.00		3.00		ug/L			09/10/24 23:42	1
cis-1,2-Dichloroethene	2.10		1.00		ug/L			09/10/24 23:42	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/10/24 23:42	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 23:42	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 23:42	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 23:42	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/10/24 23:42	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/10/24 23:42	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/10/24 23:42	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/10/24 23:42	1
Ethylbenzene	<1.00		1.00		ug/L			09/10/24 23:42	1
2-Hexanone	<10.0		10.0		ug/L			09/10/24 23:42	1
Methylene Chloride	<5.00		5.00		ug/L			09/10/24 23:42	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/10/24 23:42	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/10/24 23:42	1
Naphthalene	<5.00		5.00		ug/L			09/10/24 23:42	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/10/24 23:42	1
Tetrachloroethene	<1.00		1.00		ug/L			09/10/24 23:42	1
Toluene	<1.00		1.00		ug/L			09/10/24 23:42	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/10/24 23:42	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/10/24 23:42	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/10/24 23:42	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/10/24 23:42	1
Trichloroethene	<1.00		1.00		ug/L			09/10/24 23:42	1
Vinyl chloride	<1.00		1.00		ug/L			09/10/24 23:42	1
Xylenes, Total	<3.00		3.00		ug/L			09/10/24 23:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		09/10/24 23:42	1
Dibromofluoromethane (Surr)	104		73 - 130		09/10/24 23:42	1
Toluene-d8 (Surr)	100		80 - 120		09/10/24 23:42	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-1

Lab Sample ID: 310-289905-5

Date Collected: 09/05/24 08:40

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 00:05	1
Benzene	<0.500		0.500		ug/L			09/11/24 00:05	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 00:05	1
Bromoform	<5.00		5.00		ug/L			09/11/24 00:05	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 00:05	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 00:05	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 00:05	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 00:05	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 00:05	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 00:05	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 00:05	1
Chloroform	<3.00		3.00		ug/L			09/11/24 00:05	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 00:05	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 00:05	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 00:05	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 00:05	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 00:05	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 00:05	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 00:05	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 00:05	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 00:05	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 00:05	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 00:05	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 00:05	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 00:05	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 00:05	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 00:05	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 00:05	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 00:05	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 00:05	1
Toluene	<1.00		1.00		ug/L			09/11/24 00:05	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 00:05	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 00:05	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 00:05	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 00:05	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 00:05	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 00:05	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 00:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120		09/11/24 00:05	1
Dibromofluoromethane (Surr)	108		73 - 130		09/11/24 00:05	1
Toluene-d8 (Surr)	95		80 - 120		09/11/24 00:05	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	32500		125		ug/L			09/09/24 16:29	25
Methane	2.09		1.00		ug/L			09/11/24 12:44	1
Ethane	<1.00		1.00		ug/L			09/11/24 12:44	1
Ethene	<1.00		1.00		ug/L			09/11/24 12:44	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-1

Lab Sample ID: 310-289905-5

Date Collected: 09/05/24 08:40

Matrix: Water

Date Received: 09/06/24 10:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	94		60 - 140		09/11/24 12:44	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	116		10.0		mg/L			09/10/24 10:01	10
Nitrate as N	<0.200		0.200		mg/L			09/06/24 16:38	1
Sulfate	169		10.0		mg/L			09/10/24 10:01	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4.18		0.100		mg/L		09/09/24 09:30	09/11/24 17:20	1
Manganese	1.59		0.0100		mg/L		09/09/24 09:30	09/11/24 17:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	8.82		1.00		mg/L			09/10/24 20:06	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		09/09/24 09:56	09/09/24 09:56	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-6

Lab Sample ID: 310-289905-6

Date Collected: 09/04/24 15:37

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 00:28	1
Benzene	0.502		0.500		ug/L			09/11/24 00:28	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 00:28	1
Bromoform	<5.00		5.00		ug/L			09/11/24 00:28	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 00:28	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 00:28	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 00:28	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 00:28	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 00:28	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 00:28	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 00:28	1
Chloroform	<3.00		3.00		ug/L			09/11/24 00:28	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 00:28	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 00:28	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 00:28	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 00:28	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 00:28	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 00:28	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 00:28	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 00:28	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 00:28	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 00:28	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 00:28	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 00:28	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 00:28	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 00:28	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 00:28	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 00:28	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 00:28	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 00:28	1
Toluene	<1.00		1.00		ug/L			09/11/24 00:28	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 00:28	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 00:28	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 00:28	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 00:28	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 00:28	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 00:28	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 00:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		09/11/24 00:28	1
Dibromofluoromethane (Surr)	111		73 - 130		09/11/24 00:28	1
Toluene-d8 (Surr)	98		80 - 120		09/11/24 00:28	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-7

Lab Sample ID: 310-289905-7

Date Collected: 09/05/24 13:13

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 00:50	1
Benzene	0.765		0.500		ug/L			09/11/24 00:50	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 00:50	1
Bromoform	<5.00		5.00		ug/L			09/11/24 00:50	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 00:50	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 00:50	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 00:50	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 00:50	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 00:50	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 00:50	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 00:50	1
Chloroform	<3.00		3.00		ug/L			09/11/24 00:50	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 00:50	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 00:50	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 00:50	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 00:50	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 00:50	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 00:50	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 00:50	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 00:50	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 00:50	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 00:50	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 00:50	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 00:50	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 00:50	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 00:50	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 00:50	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 00:50	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 00:50	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 00:50	1
Toluene	<1.00		1.00		ug/L			09/11/24 00:50	1
trans-1,2-Dichloroethene	1.21		1.00		ug/L			09/11/24 00:50	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 00:50	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 00:50	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 00:50	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 00:50	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 00:50	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 00:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		09/11/24 00:50	1
Dibromofluoromethane (Surr)	108		73 - 130		09/11/24 00:50	1
Toluene-d8 (Surr)	99		80 - 120		09/11/24 00:50	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	90800		125		ug/L			09/09/24 16:44	25
Methane	12300		10.0		ug/L			09/11/24 14:09	10
Ethane	1.05		1.00		ug/L			09/10/24 05:17	1
Ethene	1.91		1.00		ug/L			09/10/24 05:17	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-7
Date Collected: 09/05/24 13:13
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	91		60 - 140		09/10/24 05:17	1
1,1,1-Trifluoroethane	99		60 - 140		09/11/24 14:09	10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	244		10.0		mg/L			09/10/24 10:13	10
Nitrate as N	<0.200		0.200		mg/L			09/06/24 16:49	1
Sulfate	<1.00		1.00		mg/L			09/06/24 16:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	89.5		0.400		mg/L		09/09/24 09:30	09/20/24 20:22	4
Manganese	1.09		0.0100		mg/L		09/09/24 09:30	09/11/24 17:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	12.1		10.0		mg/L			09/10/24 21:55	10
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		09/09/24 09:56	09/09/24 09:56	1

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

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-8

Lab Sample ID: 310-289905-8

Date Collected: 09/04/24 10:32

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 01:13	1
Benzene	<0.500		0.500		ug/L			09/11/24 01:13	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 01:13	1
Bromoform	<5.00		5.00		ug/L			09/11/24 01:13	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 01:13	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 01:13	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 01:13	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 01:13	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 01:13	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 01:13	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 01:13	1
Chloroform	<3.00		3.00		ug/L			09/11/24 01:13	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 01:13	1
cis-1,2-Dichloroethene	15.3		1.00		ug/L			09/11/24 01:13	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 01:13	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 01:13	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 01:13	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 01:13	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 01:13	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 01:13	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 01:13	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 01:13	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 01:13	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 01:13	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 01:13	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 01:13	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 01:13	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 01:13	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 01:13	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 01:13	1
Toluene	<1.00		1.00		ug/L			09/11/24 01:13	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 01:13	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 01:13	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 01:13	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 01:13	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 01:13	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 01:13	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 01:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		09/11/24 01:13	1
Dibromofluoromethane (Surr)	110		73 - 130		09/11/24 01:13	1
Toluene-d8 (Surr)	95		80 - 120		09/11/24 01:13	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-9

Lab Sample ID: 310-289905-9

Date Collected: 09/04/24 12:00

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 01:35	1
Benzene	<0.500		0.500		ug/L			09/11/24 01:35	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 01:35	1
Bromoform	<5.00		5.00		ug/L			09/11/24 01:35	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 01:35	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 01:35	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 01:35	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 01:35	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 01:35	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 01:35	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 01:35	1
Chloroform	<3.00		3.00		ug/L			09/11/24 01:35	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 01:35	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 01:35	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 01:35	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 01:35	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 01:35	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 01:35	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 01:35	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 01:35	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 01:35	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 01:35	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 01:35	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 01:35	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 01:35	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 01:35	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 01:35	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 01:35	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 01:35	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 01:35	1
Toluene	<1.00		1.00		ug/L			09/11/24 01:35	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 01:35	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 01:35	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 01:35	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 01:35	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 01:35	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 01:35	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 01:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		09/11/24 01:35	1
Dibromofluoromethane (Surr)	103		73 - 130		09/11/24 01:35	1
Toluene-d8 (Surr)	95		80 - 120		09/11/24 01:35	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-11

Lab Sample ID: 310-289905-10

Date Collected: 09/04/24 17:00

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 01:58	1
Benzene	<0.500		0.500		ug/L			09/11/24 01:58	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 01:58	1
Bromoform	<5.00		5.00		ug/L			09/11/24 01:58	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 01:58	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 01:58	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 01:58	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 01:58	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 01:58	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 01:58	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 01:58	1
Chloroform	<3.00		3.00		ug/L			09/11/24 01:58	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 01:58	1
cis-1,2-Dichloroethene	19.4		1.00		ug/L			09/11/24 01:58	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 01:58	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 01:58	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 01:58	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 01:58	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 01:58	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 01:58	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 01:58	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 01:58	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 01:58	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 01:58	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 01:58	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 01:58	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 01:58	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 01:58	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 01:58	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 01:58	1
Toluene	<1.00		1.00		ug/L			09/11/24 01:58	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 01:58	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 01:58	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 01:58	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 01:58	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 01:58	1
Vinyl chloride	2.65		1.00		ug/L			09/11/24 01:58	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 01:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		09/11/24 01:58	1
Dibromofluoromethane (Surr)	109		73 - 130		09/11/24 01:58	1
Toluene-d8 (Surr)	93		80 - 120		09/11/24 01:58	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-12

Lab Sample ID: 310-289905-11

Date Collected: 09/05/24 15:00

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 02:20	1
Benzene	<0.500		0.500		ug/L			09/11/24 02:20	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 02:20	1
Bromoform	<5.00		5.00		ug/L			09/11/24 02:20	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 02:20	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 02:20	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 02:20	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 02:20	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 02:20	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 02:20	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 02:20	1
Chloroform	<3.00		3.00		ug/L			09/11/24 02:20	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 02:20	1
cis-1,2-Dichloroethene	1.85		1.00		ug/L			09/11/24 02:20	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 02:20	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 02:20	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 02:20	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 02:20	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 02:20	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 02:20	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 02:20	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 02:20	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 02:20	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 02:20	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 02:20	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 02:20	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 02:20	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 02:20	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 02:20	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 02:20	1
Toluene	<1.00		1.00		ug/L			09/11/24 02:20	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 02:20	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 02:20	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 02:20	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 02:20	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 02:20	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 02:20	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 02:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		09/11/24 02:20	1
Dibromofluoromethane (Surr)	105		73 - 130		09/11/24 02:20	1
Toluene-d8 (Surr)	100		80 - 120		09/11/24 02:20	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	10700		125		ug/L			09/09/24 17:00	25
Methane	348		1.00		ug/L			09/10/24 05:34	1
Ethane	<1.00		1.00		ug/L			09/10/24 05:34	1
Ethene	<1.00		1.00		ug/L			09/10/24 05:34	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-12
Date Collected: 09/05/24 15:00
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-11
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	95		60 - 140					09/10/24 05:34	1
Method: SW846 9056A - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	241		10.0		mg/L			09/10/24 10:25	10
Nitrate as N	<0.200		0.200		mg/L			09/06/24 17:01	1
Sulfate	44.8		1.00		mg/L			09/06/24 17:01	1
Method: SW846 6020B - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.114		0.100		mg/L		09/09/24 09:30	09/11/24 17:25	1
Manganese	0.307		0.0100		mg/L		09/09/24 09:30	09/11/24 17:25	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	1.35		1.00		mg/L			09/10/24 22:31	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		09/09/24 09:56	09/09/24 09:56	1

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

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-13

Lab Sample ID: 310-289905-12

Date Collected: 09/05/24 16:45

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 02:43	1
Benzene	<0.500		0.500		ug/L			09/11/24 02:43	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 02:43	1
Bromoform	<5.00		5.00		ug/L			09/11/24 02:43	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 02:43	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 02:43	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 02:43	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 02:43	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 02:43	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 02:43	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 02:43	1
Chloroform	<3.00		3.00		ug/L			09/11/24 02:43	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 02:43	1
cis-1,2-Dichloroethene	2.20		1.00		ug/L			09/11/24 02:43	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 02:43	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 02:43	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 02:43	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 02:43	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 02:43	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 02:43	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 02:43	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 02:43	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 02:43	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 02:43	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 02:43	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 02:43	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 02:43	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 02:43	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 02:43	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 02:43	1
Toluene	<1.00		1.00		ug/L			09/11/24 02:43	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 02:43	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 02:43	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 02:43	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 02:43	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 02:43	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 02:43	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 02:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120		09/11/24 02:43	1
Dibromofluoromethane (Surr)	103		73 - 130		09/11/24 02:43	1
Toluene-d8 (Surr)	98		80 - 120		09/11/24 02:43	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-14

Lab Sample ID: 310-289905-13

Date Collected: 09/05/24 15:49

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 03:05	1
Benzene	<0.500		0.500		ug/L			09/11/24 03:05	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 03:05	1
Bromoform	<5.00		5.00		ug/L			09/11/24 03:05	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 03:05	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 03:05	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 03:05	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 03:05	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 03:05	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 03:05	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 03:05	1
Chloroform	<3.00		3.00		ug/L			09/11/24 03:05	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 03:05	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 03:05	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 03:05	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 03:05	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 03:05	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 03:05	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 03:05	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 03:05	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 03:05	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 03:05	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 03:05	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 03:05	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 03:05	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 03:05	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 03:05	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 03:05	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 03:05	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 03:05	1
Toluene	<1.00		1.00		ug/L			09/11/24 03:05	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 03:05	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 03:05	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 03:05	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 03:05	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 03:05	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 03:05	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 03:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		09/11/24 03:05	1
Dibromofluoromethane (Surr)	103		73 - 130		09/11/24 03:05	1
Toluene-d8 (Surr)	95		80 - 120		09/11/24 03:05	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-15

Lab Sample ID: 310-289905-14

Date Collected: 09/04/24 14:17

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 03:28	1
Benzene	<0.500		0.500		ug/L			09/11/24 03:28	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 03:28	1
Bromoform	<5.00		5.00		ug/L			09/11/24 03:28	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 03:28	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 03:28	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 03:28	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 03:28	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 03:28	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 03:28	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 03:28	1
Chloroform	<3.00		3.00		ug/L			09/11/24 03:28	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 03:28	1
cis-1,2-Dichloroethene	26.1		1.00		ug/L			09/11/24 03:28	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 03:28	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 03:28	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 03:28	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 03:28	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 03:28	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 03:28	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 03:28	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 03:28	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 03:28	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 03:28	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 03:28	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 03:28	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 03:28	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 03:28	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 03:28	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 03:28	1
Toluene	<1.00		1.00		ug/L			09/11/24 03:28	1
trans-1,2-Dichloroethene	1.36		1.00		ug/L			09/11/24 03:28	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 03:28	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 03:28	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 03:28	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 03:28	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 03:28	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 03:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		09/11/24 03:28	1
Dibromofluoromethane (Surr)	101		73 - 130		09/11/24 03:28	1
Toluene-d8 (Surr)	96		80 - 120		09/11/24 03:28	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-16

Lab Sample ID: 310-289905-15

Date Collected: 09/04/24 13:23

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 03:51	1
Benzene	<0.500		0.500		ug/L			09/11/24 03:51	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 03:51	1
Bromoform	<5.00		5.00		ug/L			09/11/24 03:51	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 03:51	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 03:51	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 03:51	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 03:51	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 03:51	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 03:51	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 03:51	1
Chloroform	<3.00		3.00		ug/L			09/11/24 03:51	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 03:51	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 03:51	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 03:51	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 03:51	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 03:51	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 03:51	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 03:51	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 03:51	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 03:51	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 03:51	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 03:51	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 03:51	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 03:51	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 03:51	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 03:51	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 03:51	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 03:51	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 03:51	1
Toluene	<1.00		1.00		ug/L			09/11/24 03:51	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 03:51	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 03:51	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 03:51	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 03:51	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 03:51	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 03:51	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 03:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		09/11/24 03:51	1
Dibromofluoromethane (Surr)	105		73 - 130		09/11/24 03:51	1
Toluene-d8 (Surr)	95		80 - 120		09/11/24 03:51	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-17

Lab Sample ID: 310-289905-16

Date Collected: 09/05/24 11:55

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	54.2		10.0		ug/L			09/11/24 04:13	1
Benzene	7.26		0.500		ug/L			09/11/24 04:13	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 04:13	1
Bromoform	<5.00		5.00		ug/L			09/11/24 04:13	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 04:13	1
2-Butanone (MEK)	98.5		10.0		ug/L			09/11/24 04:13	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 04:13	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 04:13	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 04:13	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 04:13	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 04:13	1
Chloroform	<3.00		3.00		ug/L			09/11/24 04:13	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 04:13	1
cis-1,2-Dichloroethene	20.9		1.00		ug/L			09/11/24 04:13	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 04:13	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 04:13	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 04:13	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 04:13	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 04:13	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 04:13	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 04:13	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 04:13	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 04:13	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 04:13	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 04:13	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 04:13	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 04:13	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 04:13	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 04:13	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 04:13	1
Toluene	<1.00		1.00		ug/L			09/11/24 04:13	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 04:13	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 04:13	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 04:13	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 04:13	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 04:13	1
Vinyl chloride	14.8		1.00		ug/L			09/11/24 04:13	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 04:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		09/11/24 04:13	1
Dibromofluoromethane (Surr)	114		73 - 130		09/11/24 04:13	1
Toluene-d8 (Surr)	99		80 - 120		09/11/24 04:13	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	64000		125		ug/L			09/09/24 17:15	25
Methane	7240		20.0		ug/L			09/16/24 14:01	20
Ethane	21.3		1.00		ug/L			09/11/24 14:43	1
Ethene	74.2		1.00		ug/L			09/11/24 14:43	1

Eurofins Cedar Falls

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-17
Date Collected: 09/05/24 11:55
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-16
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	93		60 - 140		09/11/24 14:43	1
1,1,1-Trifluoroethane	99		60 - 140		09/16/24 14:01	20

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.3		10.0		mg/L			09/10/24 10:36	10
Nitrate as N	<0.200		0.200		mg/L			09/06/24 17:47	1
Sulfate	<1.00		1.00		mg/L			09/06/24 17:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	90.1		0.400		mg/L		09/09/24 09:30	09/20/24 20:25	4
Manganese	1.55		0.0100		mg/L		09/09/24 09:30	09/11/24 17:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SW846 9060A)	15.5		1.00		mg/L			09/10/24 23:07	1
Sulfide (SM 4500 S2 F)	<2.00		2.00		mg/L		09/09/24 09:56	09/09/24 09:56	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-18

Lab Sample ID: 310-289905-17

Date Collected: 09/05/24 18:25

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 04:36	1
Benzene	<0.500		0.500		ug/L			09/11/24 04:36	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 04:36	1
Bromoform	<5.00		5.00		ug/L			09/11/24 04:36	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 04:36	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 04:36	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 04:36	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 04:36	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 04:36	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 04:36	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 04:36	1
Chloroform	<3.00		3.00		ug/L			09/11/24 04:36	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 04:36	1
cis-1,2-Dichloroethene	10.5		1.00		ug/L			09/11/24 04:36	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 04:36	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 04:36	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 04:36	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 04:36	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 04:36	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 04:36	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 04:36	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 04:36	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 04:36	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 04:36	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 04:36	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 04:36	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 04:36	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 04:36	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 04:36	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 04:36	1
Toluene	<1.00		1.00		ug/L			09/11/24 04:36	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 04:36	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 04:36	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 04:36	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 04:36	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 04:36	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 04:36	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 04:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		09/11/24 04:36	1
Dibromofluoromethane (Surr)	109		73 - 130		09/11/24 04:36	1
Toluene-d8 (Surr)	97		80 - 120		09/11/24 04:36	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-19

Lab Sample ID: 310-289905-18

Date Collected: 09/05/24 17:21

Matrix: Water

Date Received: 09/06/24 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/11/24 04:58	1
Benzene	<0.500		0.500		ug/L			09/11/24 04:58	1
Bromodichloromethane	<1.00		1.00		ug/L			09/11/24 04:58	1
Bromoform	<5.00		5.00		ug/L			09/11/24 04:58	1
Bromomethane	<4.00		4.00		ug/L			09/11/24 04:58	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/11/24 04:58	1
Carbon disulfide	<1.00		1.00		ug/L			09/11/24 04:58	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/11/24 04:58	1
Chlorobenzene	<1.00		1.00		ug/L			09/11/24 04:58	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/11/24 04:58	1
Chloroethane	<4.00		4.00		ug/L			09/11/24 04:58	1
Chloroform	<3.00		3.00		ug/L			09/11/24 04:58	1
Chloromethane	<3.00		3.00		ug/L			09/11/24 04:58	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 04:58	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 04:58	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 04:58	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 04:58	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/11/24 04:58	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/11/24 04:58	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/11/24 04:58	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/11/24 04:58	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/11/24 04:58	1
Ethylbenzene	<1.00		1.00		ug/L			09/11/24 04:58	1
2-Hexanone	<10.0		10.0		ug/L			09/11/24 04:58	1
Methylene Chloride	<5.00		5.00		ug/L			09/11/24 04:58	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/11/24 04:58	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/11/24 04:58	1
Naphthalene	<5.00		5.00		ug/L			09/11/24 04:58	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/11/24 04:58	1
Tetrachloroethene	<1.00		1.00		ug/L			09/11/24 04:58	1
Toluene	<1.00		1.00		ug/L			09/11/24 04:58	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/11/24 04:58	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/11/24 04:58	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/11/24 04:58	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/11/24 04:58	1
Trichloroethene	<1.00		1.00		ug/L			09/11/24 04:58	1
Vinyl chloride	<1.00		1.00		ug/L			09/11/24 04:58	1
Xylenes, Total	<3.00		3.00		ug/L			09/11/24 04:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		09/11/24 04:58	1
Dibromofluoromethane (Surr)	106		73 - 130		09/11/24 04:58	1
Toluene-d8 (Surr)	99		80 - 120		09/11/24 04:58	1

Definitions/Glossary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Glossary

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

Surrogate Summary

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DBFM (73-130)	TOL (80-120)
310-289905-1	TB-01	103	100	95
310-289905-2	EB-01	104	104	94
310-289905-3	Dup-01	102	105	98
310-289905-4	Dup-02	101	104	100
310-289905-5	MW-1	107	108	95
310-289905-6	MW-6	104	111	98
310-289905-7	MW-7	100	108	99
310-289905-8	MW-8	103	110	95
310-289905-9	MW-9	102	103	95
310-289905-10	MW-11	101	109	93
310-289905-10 MS	MW-11	100	106	96
310-289905-10 MSD	MW-11	98	109	97
310-289905-11	MW-12	100	105	100
310-289905-12	MW-13	105	103	98
310-289905-13	MW-14	102	103	95
310-289905-14	MW-15	102	101	96
310-289905-15	MW-16	102	105	95
310-289905-16	MW-17	101	114	99
310-289905-17	MW-18	102	109	97
310-289905-18	MW-19	103	106	99
LCS 310-432618/6	Lab Control Sample	101	103	99
LCS 310-432618/7	Lab Control Sample	103	103	98
MB 310-432618/5	Method Blank	103	101	99

Surrogate Legend

- BFB = 4-Bromofluorobenzene (Surr)
- DBFM = Dibromofluoromethane (Surr)
- TOL = Toluene-d8 (Surr)

Method: RSK-175 - Dissolved Gases (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TFE1
		(60-140)
310-289905-3	Dup-01	92
310-289905-3	Dup-01	99
310-289905-5	MW-1	94
310-289905-7	MW-7	91
310-289905-7	MW-7	99
310-289905-11	MW-12	95
310-289905-16	MW-17	93
310-289905-16	MW-17	99
310-289905-16 MS	MW-17	99
310-289905-16 MSD	MW-17	100
LCS 240-626299/33	Lab Control Sample	98
LCS 240-626623/4	Lab Control Sample	101
LCS 240-627155/4	Lab Control Sample	98
MB 240-626299/32	Method Blank	99
MB 240-626623/3	Method Blank	103

Surrogate Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TFE1 (60-140)
MB 240-627155/3	Method Blank	100

Surrogate Legend

TFE = 1,1,1-Trifluoroethane

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

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

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

Lab Sample ID: MB 310-432618/5
Matrix: Water
Analysis Batch: 432618

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0		10.0		ug/L			09/10/24 21:04	1
Benzene	<0.500		0.500		ug/L			09/10/24 21:04	1
Bromodichloromethane	<1.00		1.00		ug/L			09/10/24 21:04	1
Bromoform	<5.00		5.00		ug/L			09/10/24 21:04	1
Bromomethane	<4.00		4.00		ug/L			09/10/24 21:04	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/10/24 21:04	1
Carbon disulfide	<1.00		1.00		ug/L			09/10/24 21:04	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/10/24 21:04	1
Chlorobenzene	<1.00		1.00		ug/L			09/10/24 21:04	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/10/24 21:04	1
Chloroethane	<4.00		4.00		ug/L			09/10/24 21:04	1
Chloroform	<3.00		3.00		ug/L			09/10/24 21:04	1
Chloromethane	<3.00		3.00		ug/L			09/10/24 21:04	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/10/24 21:04	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/10/24 21:04	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 21:04	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 21:04	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/10/24 21:04	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/10/24 21:04	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/10/24 21:04	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/10/24 21:04	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/10/24 21:04	1
Ethylbenzene	<1.00		1.00		ug/L			09/10/24 21:04	1
2-Hexanone	<10.0		10.0		ug/L			09/10/24 21:04	1
Methylene Chloride	<5.00		5.00		ug/L			09/10/24 21:04	1
Methyl isobutyl ketone (MIBK)	<10.0		10.0		ug/L			09/10/24 21:04	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			09/10/24 21:04	1
Naphthalene	<5.00		5.00		ug/L			09/10/24 21:04	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/10/24 21:04	1
Tetrachloroethene	<1.00		1.00		ug/L			09/10/24 21:04	1
Toluene	<1.00		1.00		ug/L			09/10/24 21:04	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/10/24 21:04	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/10/24 21:04	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/10/24 21:04	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/10/24 21:04	1
Trichloroethene	<1.00		1.00		ug/L			09/10/24 21:04	1
Vinyl chloride	<1.00		1.00		ug/L			09/10/24 21:04	1
Xylenes, Total	<3.00		3.00		ug/L			09/10/24 21:04	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	103		80 - 120		09/10/24 21:04	1
Dibromofluoromethane (Surr)	101		73 - 130		09/10/24 21:04	1
Toluene-d8 (Surr)	99		80 - 120		09/10/24 21:04	1

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

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

Lab Sample ID: LCS 310-432618/6
Matrix: Water
Analysis Batch: 432618

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	34.90		ug/L		87	50 - 150
Benzene	20.0	18.27		ug/L		91	72 - 124
Bromodichloromethane	20.0	18.08		ug/L		90	74 - 122
Bromoform	20.0	19.20		ug/L		96	61 - 122
2-Butanone (MEK)	40.0	36.37		ug/L		91	50 - 150
Carbon disulfide	20.0	16.79		ug/L		84	59 - 135
Carbon tetrachloride	20.0	18.70		ug/L		94	67 - 132
Chlorobenzene	20.0	18.61		ug/L		93	76 - 120
Chlorodibromomethane	20.0	19.34		ug/L		97	71 - 121
Chloroform	20.0	18.55		ug/L		93	72 - 125
cis-1,2-Dichloroethene	20.0	18.33		ug/L		92	74 - 123
cis-1,3-Dichloropropene	20.0	18.10		ug/L		90	71 - 125
1,2-Dichlorobenzene	20.0	18.30		ug/L		91	74 - 120
1,3-Dichlorobenzene	20.0	18.71		ug/L		94	72 - 120
1,4-Dichlorobenzene	20.0	17.49		ug/L		87	72 - 120
1,1-Dichloroethane	20.0	18.45		ug/L		92	70 - 127
1,2-Dichloroethane	20.0	18.97		ug/L		95	71 - 125
1,1-Dichloroethene	20.0	19.33		ug/L		97	63 - 132
1,2-Dichloropropane	20.0	18.79		ug/L		94	73 - 124
Ethylbenzene	20.0	18.74		ug/L		94	74 - 122
2-Hexanone	40.0	38.07		ug/L		95	60 - 140
Methylene Chloride	20.0	18.92		ug/L		95	50 - 150
Methyl isobutyl ketone (MIBK)	40.0	36.74		ug/L		92	60 - 139
Methyl tert-butyl ether	20.0	19.51		ug/L		98	68 - 130
Naphthalene	20.0	18.17		ug/L		91	50 - 150
1,1,2,2-Tetrachloroethane	20.0	18.70		ug/L		94	68 - 124
Tetrachloroethene	20.0	19.34		ug/L		97	71 - 130
Toluene	20.0	18.65		ug/L		93	74 - 123
trans-1,2-Dichloroethene	20.0	18.51		ug/L		93	70 - 126
trans-1,3-Dichloropropene	20.0	17.63		ug/L		88	69 - 123
1,1,1-Trichloroethane	20.0	20.13		ug/L		101	73 - 129
1,1,2-Trichloroethane	20.0	17.97		ug/L		90	73 - 123
Trichloroethene	20.0	19.02		ug/L		95	72 - 126
Xylenes, Total	40.0	36.93		ug/L		92	73 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	103		73 - 130
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCS 310-432618/7
Matrix: Water
Analysis Batch: 432618

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	27.06		ug/L		135	23 - 150
Chloroethane	20.0	25.87		ug/L		129	54 - 136
Chloromethane	20.0	26.92		ug/L		135	38 - 150

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

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

Lab Sample ID: LCS 310-432618/7
Matrix: Water
Analysis Batch: 432618

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	20.0	25.99		ug/L		130	56 - 140
Surrogate							
	LCS	LCS					
	%Recovery	Qualifier					Limits
4-Bromofluorobenzene (Surr)	103						80 - 120
Dibromofluoromethane (Surr)	103						73 - 130
Toluene-d8 (Surr)	98						80 - 120

Lab Sample ID: 310-289905-10 MS
Matrix: Water
Analysis Batch: 432618

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	<10.0		50.0	41.21		ug/L		82	31 - 150
Benzene	<0.500		25.0	21.28		ug/L		85	46 - 130
Bromodichloromethane	<1.00		25.0	22.30		ug/L		89	57 - 130
Bromoform	<5.00		25.0	25.84		ug/L		103	44 - 130
2-Butanone (MEK)	<10.0		50.0	43.19		ug/L		86	38 - 150
Carbon disulfide	<1.00		25.0	23.80		ug/L		95	38 - 135
Carbon tetrachloride	<2.00		25.0	24.06		ug/L		96	45 - 132
Chlorobenzene	<1.00		25.0	22.34		ug/L		89	59 - 130
Chlorodibromomethane	<5.00		25.0	24.19		ug/L		97	54 - 130
Chloroform	<3.00		25.0	22.58		ug/L		90	51 - 130
cis-1,2-Dichloroethene	19.4		25.0	39.93		ug/L		82	45 - 130
cis-1,3-Dichloropropene	<5.00		25.0	21.72		ug/L		87	53 - 130
1,2-Dichlorobenzene	<1.00		25.0	22.01		ug/L		88	59 - 130
1,3-Dichlorobenzene	<1.00		25.0	22.67		ug/L		91	57 - 130
1,4-Dichlorobenzene	<1.00		25.0	21.81		ug/L		87	57 - 130
1,1-Dichloroethane	<1.00		25.0	21.68		ug/L		87	49 - 130
1,2-Dichloroethane	<1.00		25.0	22.86		ug/L		91	51 - 130
1,1-Dichloroethene	<2.00		25.0	22.41		ug/L		90	37 - 132
1,2-Dichloropropane	<1.00		25.0	22.15		ug/L		89	57 - 130
Ethylbenzene	<1.00		25.0	21.34		ug/L		85	45 - 130
2-Hexanone	<10.0		50.0	49.38		ug/L		99	46 - 140
Methylene Chloride	<5.00		25.0	21.70		ug/L		87	37 - 150
Methyl isobutyl ketone (MIBK)	<10.0		50.0	44.81		ug/L		90	47 - 139
Methyl tert-butyl ether	<1.00		25.0	22.07		ug/L		88	52 - 130
Naphthalene	<5.00		25.0	22.49		ug/L		90	40 - 150
1,1,2,2-Tetrachloroethane	<1.00		25.0	23.90		ug/L		96	54 - 130
Tetrachloroethene	<1.00		25.0	24.09		ug/L		96	47 - 130
Toluene	<1.00		25.0	21.75		ug/L		87	51 - 130
trans-1,2-Dichloroethene	<1.00		25.0	23.41		ug/L		91	48 - 130
trans-1,3-Dichloropropene	<5.00		25.0	21.88		ug/L		88	50 - 130
1,1,1-Trichloroethane	<1.00		25.0	24.03		ug/L		96	52 - 130
1,1,2-Trichloroethane	<1.00		25.0	22.15		ug/L		89	58 - 130
Trichloroethene	<1.00		25.0	24.35		ug/L		94	51 - 130
Xylenes, Total	<3.00		50.0	43.24		ug/L		86	43 - 130

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

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

Lab Sample ID: 310-289905-10 MS
Matrix: Water
Analysis Batch: 432618

Client Sample ID: MW-11
Prep Type: Total/NA

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	106		73 - 130
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: 310-289905-10 MSD
Matrix: Water
Analysis Batch: 432618

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	<10.0		50.0	44.28		ug/L		89	31 - 150	7	29
Benzene	<0.500		25.0	21.31		ug/L		85	46 - 130	0	20
Bromodichloromethane	<1.00		25.0	23.11		ug/L		92	57 - 130	4	20
Bromoform	<5.00		25.0	27.67		ug/L		111	44 - 130	7	20
2-Butanone (MEK)	<10.0		50.0	43.74		ug/L		87	38 - 150	1	20
Carbon disulfide	<1.00		25.0	21.44		ug/L		86	38 - 135	10	30
Carbon tetrachloride	<2.00		25.0	24.32		ug/L		97	45 - 132	1	20
Chlorobenzene	<1.00		25.0	22.18		ug/L		89	59 - 130	1	20
Chlorodibromomethane	<5.00		25.0	24.75		ug/L		99	54 - 130	2	20
Chloroform	<3.00		25.0	22.41		ug/L		90	51 - 130	1	20
cis-1,2-Dichloroethene	19.4		25.0	39.62		ug/L		81	45 - 130	1	20
cis-1,3-Dichloropropene	<5.00		25.0	22.20		ug/L		89	53 - 130	2	20
1,2-Dichlorobenzene	<1.00		25.0	22.82		ug/L		91	59 - 130	4	20
1,3-Dichlorobenzene	<1.00		25.0	23.48		ug/L		94	57 - 130	4	20
1,4-Dichlorobenzene	<1.00		25.0	22.05		ug/L		88	57 - 130	1	20
1,1-Dichloroethane	<1.00		25.0	22.05		ug/L		88	49 - 130	2	20
1,2-Dichloroethane	<1.00		25.0	23.56		ug/L		94	51 - 130	3	20
1,1-Dichloroethene	<2.00		25.0	22.00		ug/L		88	37 - 132	2	26
1,2-Dichloropropane	<1.00		25.0	22.08		ug/L		88	57 - 130	0	20
Ethylbenzene	<1.00		25.0	21.92		ug/L		88	45 - 130	3	20
2-Hexanone	<10.0		50.0	49.34		ug/L		99	46 - 140	0	20
Methylene Chloride	<5.00		25.0	22.35		ug/L		89	37 - 150	3	24
Methyl isobutyl ketone (MIBK)	<10.0		50.0	46.02		ug/L		92	47 - 139	3	20
Methyl tert-butyl ether	<1.00		25.0	23.60		ug/L		94	52 - 130	7	20
Naphthalene	<5.00		25.0	23.98		ug/L		96	40 - 150	6	30
1,1,2,2-Tetrachloroethane	<1.00		25.0	23.74		ug/L		95	54 - 130	1	20
Tetrachloroethene	<1.00		25.0	24.08		ug/L		96	47 - 130	0	20
Toluene	<1.00		25.0	22.07		ug/L		88	51 - 130	1	20
trans-1,2-Dichloroethene	<1.00		25.0	23.05		ug/L		89	48 - 130	2	22
trans-1,3-Dichloropropene	<5.00		25.0	22.63		ug/L		91	50 - 130	3	20
1,1,1-Trichloroethane	<1.00		25.0	25.34		ug/L		101	52 - 130	5	20
1,1,2-Trichloroethane	<1.00		25.0	22.10		ug/L		88	58 - 130	0	20
Trichloroethene	<1.00		25.0	24.34		ug/L		94	51 - 130	0	20
Xylenes, Total	<3.00		50.0	43.10		ug/L		86	43 - 130	0	20

<i>Surrogate</i>	<i>%Recovery</i>	<i>MSD MSD Qualifier</i>	<i>Limits</i>
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	109		73 - 130
Toluene-d8 (Surr)	97		80 - 120

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 570-478757/4
Matrix: Water
Analysis Batch: 478757

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	<5.00		5.00		ug/L			09/09/24 11:28	1

Lab Sample ID: LCS 570-478757/2
Matrix: Water
Analysis Batch: 478757

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	562	546.1		ug/L		97	80 - 120

Lab Sample ID: LCSD 570-478757/3
Matrix: Water
Analysis Batch: 478757

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 dioxide	562	537.6		ug/L		96	80 - 120	2	20

Lab Sample ID: 310-289905-3 DU
Matrix: Water
Analysis Batch: 478757

Client Sample ID: Dup-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbon dioxide	72800		77050		ug/L		6	20

Lab Sample ID: MB 240-626299/32
Matrix: Water
Analysis Batch: 626299

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	<1.00		1.00		ug/L			09/09/24 22:47	1
Ethane	<1.00		1.00		ug/L			09/09/24 22:47	1
Ethene	<1.00		1.00		ug/L			09/09/24 22:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1-Trifluoroethane	99		60 - 140		09/09/24 22:47	1

Lab Sample ID: LCS 240-626299/33
Matrix: Water
Analysis Batch: 626299

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methane	284	291.5		ug/L		103	80 - 120
Ethane	537	527.8		ug/L		98	80 - 120
Ethene	506	501.8		ug/L		99	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,1,1-Trifluoroethane	98		60 - 140

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

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

Lab Sample ID: MB 240-626623/3
Matrix: Water
Analysis Batch: 626623

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methane	<1.00		1.00		ug/L			09/11/24 11:53	1
Ethane	<1.00		1.00		ug/L			09/11/24 11:53	1
Ethene	<1.00		1.00		ug/L			09/11/24 11:53	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery		Qualifier					
1,1,1-Trifluoroethane		103	60 - 140				09/11/24 11:53	1	

Lab Sample ID: LCS 240-626623/4
Matrix: Water
Analysis Batch: 626623

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
								Methane
Ethane	537	541.3		ug/L		101	80 - 120	
Ethene	506	513.1		ug/L		101	80 - 120	
Surrogate		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
		%Recovery		Qualifier				
1,1,1-Trifluoroethane		101	60 - 140				09/11/24 11:53	1

Lab Sample ID: MB 240-627155/3
Matrix: Water
Analysis Batch: 627155

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methane	<1.00		1.00		ug/L			09/16/24 13:27	1
Ethane	<1.00		1.00		ug/L			09/16/24 13:27	1
Ethene	<1.00		1.00		ug/L			09/16/24 13:27	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery		Qualifier					
1,1,1-Trifluoroethane		100	60 - 140				09/16/24 13:27	1	

Lab Sample ID: LCS 240-627155/4
Matrix: Water
Analysis Batch: 627155

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
								Methane
Ethane	537	534.2		ug/L		99	80 - 120	
Ethene	506	507.4		ug/L		100	80 - 120	
Surrogate		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
		%Recovery		Qualifier				
1,1,1-Trifluoroethane		98	60 - 140				09/16/24 13:27	1

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

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

Lab Sample ID: 310-289905-16 MS
Matrix: Water
Analysis Batch: 627155

Client Sample ID: MW-17
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Methane	7240		5680	12840		ug/L		99		50 - 150
Ethane	<20.0		10700	10090		ug/L		94		50 - 150
Ethene	47.2		10100	9608		ug/L		94		50 - 150
		MS	MS							
Surrogate	%Recovery	Qualifier	Limits							
1,1,1-Trifluoroethane	99		60 - 140							

Lab Sample ID: 310-289905-16 MSD
Matrix: Water
Analysis Batch: 627155

Client Sample ID: MW-17
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier								
Methane	7240		5680	12780		ug/L		98		50 - 150	0		30
Ethane	<20.0		10700	10190		ug/L		95		50 - 150	1		30
Ethene	47.2		10100	9702		ug/L		95		50 - 150	1		30
		MSD	MSD										
Surrogate	%Recovery	Qualifier	Limits										
1,1,1-Trifluoroethane	100		60 - 140										

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-432734/3
Matrix: Water
Analysis Batch: 432734

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<1.00		1.00		mg/L			09/06/24 13:44	1
Nitrate as N	<0.200		0.200		mg/L			09/06/24 13:44	1
Sulfate	<1.00		1.00		mg/L			09/06/24 13:44	1

Lab Sample ID: LCS 310-432734/4
Matrix: Water
Analysis Batch: 432734

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	Limits
		Added	Result					
Chloride	10.0	9.906		mg/L		99		90 - 110
Nitrate as N	2.00	2.012		mg/L		101		90 - 110
Sulfate	10.0	10.04		mg/L		100		90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-432510/1-A
Matrix: Water
Analysis Batch: 432910

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 432510

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	<0.100		0.100		mg/L		09/09/24 09:30	09/11/24 16:16	1
Manganese	<0.0100		0.0100		mg/L		09/09/24 09:30	09/11/24 16:16	1

Eurofins Cedar Falls

QC Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

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

Lab Sample ID: MB 310-432510/1-A
 Matrix: Water
 Analysis Batch: 433905

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 432510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.100		0.100		mg/L		09/09/24 09:30	09/20/24 19:46	1

Lab Sample ID: LCS 310-432510/2-A
 Matrix: Water
 Analysis Batch: 432910

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 432510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	0.200	0.2019		mg/L		101	80 - 120
Manganese	0.100	0.09435		mg/L		94	80 - 120

Lab Sample ID: LCS 310-432510/2-A
 Matrix: Water
 Analysis Batch: 433905

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 432510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	0.200	0.1966		mg/L		98	80 - 120

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 310-432858/11
 Matrix: Water
 Analysis Batch: 432858

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.00		1.00		mg/L			09/10/24 14:42	1

Lab Sample ID: LCS 310-432858/12
 Matrix: Water
 Analysis Batch: 432858

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	9.99	10.98		mg/L		110	85 - 115

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 310-432584/1-A
 Matrix: Water
 Analysis Batch: 432585

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 432584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.00		2.00		mg/L		09/09/24 09:56	09/09/24 09:56	1

Lab Sample ID: LCS 310-432584/2-A
 Matrix: Water
 Analysis Batch: 432585

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 432584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	5.00	2.859		mg/L		57	10 - 110

Eurofins Cedar Falls

QC Association Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

GC/MS VOA

Analysis Batch: 432618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-1	TB-01	Total/NA	Water	8260D	
310-289905-2	EB-01	Total/NA	Water	8260D	
310-289905-3	Dup-01	Total/NA	Water	8260D	
310-289905-4	Dup-02	Total/NA	Water	8260D	
310-289905-5	MW-1	Total/NA	Water	8260D	
310-289905-6	MW-6	Total/NA	Water	8260D	
310-289905-7	MW-7	Total/NA	Water	8260D	
310-289905-8	MW-8	Total/NA	Water	8260D	
310-289905-9	MW-9	Total/NA	Water	8260D	
310-289905-10	MW-11	Total/NA	Water	8260D	
310-289905-11	MW-12	Total/NA	Water	8260D	
310-289905-12	MW-13	Total/NA	Water	8260D	
310-289905-13	MW-14	Total/NA	Water	8260D	
310-289905-14	MW-15	Total/NA	Water	8260D	
310-289905-15	MW-16	Total/NA	Water	8260D	
310-289905-16	MW-17	Total/NA	Water	8260D	
310-289905-17	MW-18	Total/NA	Water	8260D	
310-289905-18	MW-19	Total/NA	Water	8260D	
MB 310-432618/5	Method Blank	Total/NA	Water	8260D	
LCS 310-432618/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-432618/7	Lab Control Sample	Total/NA	Water	8260D	
310-289905-10 MS	MW-11	Total/NA	Water	8260D	
310-289905-10 MSD	MW-11	Total/NA	Water	8260D	

GC VOA

Analysis Batch: 478757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-3	Dup-01	Total/NA	Water	RSK-175	
310-289905-5	MW-1	Total/NA	Water	RSK-175	
310-289905-7	MW-7	Total/NA	Water	RSK-175	
310-289905-11	MW-12	Total/NA	Water	RSK-175	
310-289905-16	MW-17	Total/NA	Water	RSK-175	
MB 570-478757/4	Method Blank	Total/NA	Water	RSK-175	
LCS 570-478757/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 570-478757/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
310-289905-3 DU	Dup-01	Total/NA	Water	RSK-175	

Analysis Batch: 626299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-3	Dup-01	Total/NA	Water	RSK-175	
310-289905-7	MW-7	Total/NA	Water	RSK-175	
310-289905-11	MW-12	Total/NA	Water	RSK-175	
MB 240-626299/32	Method Blank	Total/NA	Water	RSK-175	
LCS 240-626299/33	Lab Control Sample	Total/NA	Water	RSK-175	

Analysis Batch: 626623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-3	Dup-01	Total/NA	Water	RSK-175	
310-289905-5	MW-1	Total/NA	Water	RSK-175	
310-289905-7	MW-7	Total/NA	Water	RSK-175	

Eurofins Cedar Falls

QC Association Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

GC VOA (Continued)

Analysis Batch: 626623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-16	MW-17	Total/NA	Water	RSK-175	
MB 240-626623/3	Method Blank	Total/NA	Water	RSK-175	
LCS 240-626623/4	Lab Control Sample	Total/NA	Water	RSK-175	

Analysis Batch: 627155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-16	MW-17	Total/NA	Water	RSK-175	
MB 240-627155/3	Method Blank	Total/NA	Water	RSK-175	
LCS 240-627155/4	Lab Control Sample	Total/NA	Water	RSK-175	
310-289905-16 MS	MW-17	Total/NA	Water	RSK-175	
310-289905-16 MSD	MW-17	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 432734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-3	Dup-01	Total/NA	Water	9056A	
310-289905-3	Dup-01	Total/NA	Water	9056A	
310-289905-5	MW-1	Total/NA	Water	9056A	
310-289905-5	MW-1	Total/NA	Water	9056A	
310-289905-7	MW-7	Total/NA	Water	9056A	
310-289905-7	MW-7	Total/NA	Water	9056A	
310-289905-11	MW-12	Total/NA	Water	9056A	
310-289905-11	MW-12	Total/NA	Water	9056A	
310-289905-16	MW-17	Total/NA	Water	9056A	
310-289905-16	MW-17	Total/NA	Water	9056A	
MB 310-432734/3	Method Blank	Total/NA	Water	9056A	
LCS 310-432734/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 432510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-3	Dup-01	Dissolved	Water	3005A	
310-289905-5	MW-1	Dissolved	Water	3005A	
310-289905-7	MW-7	Dissolved	Water	3005A	
310-289905-11	MW-12	Dissolved	Water	3005A	
310-289905-16	MW-17	Dissolved	Water	3005A	
MB 310-432510/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-432510/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 432910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-3	Dup-01	Dissolved	Water	6020B	432510
310-289905-5	MW-1	Dissolved	Water	6020B	432510
310-289905-7	MW-7	Dissolved	Water	6020B	432510
310-289905-11	MW-12	Dissolved	Water	6020B	432510
310-289905-16	MW-17	Dissolved	Water	6020B	432510
MB 310-432510/1-A	Method Blank	Total/NA	Water	6020B	432510
LCS 310-432510/2-A	Lab Control Sample	Total/NA	Water	6020B	432510

Eurofins Cedar Falls

QC Association Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Metals

Analysis Batch: 433905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-3	Dup-01	Dissolved	Water	6020B	432510
310-289905-7	MW-7	Dissolved	Water	6020B	432510
310-289905-16	MW-17	Dissolved	Water	6020B	432510
MB 310-432510/1-A	Method Blank	Total/NA	Water	6020B	432510
LCS 310-432510/2-A	Lab Control Sample	Total/NA	Water	6020B	432510

General Chemistry

Prep Batch: 432584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-3	Dup-01	Total/NA	Water	SM 4500 S2 C	
310-289905-5	MW-1	Total/NA	Water	SM 4500 S2 C	
310-289905-7	MW-7	Total/NA	Water	SM 4500 S2 C	
310-289905-11	MW-12	Total/NA	Water	SM 4500 S2 C	
310-289905-16	MW-17	Total/NA	Water	SM 4500 S2 C	
MB 310-432584/1-A	Method Blank	Total/NA	Water	SM 4500 S2 C	
LCS 310-432584/2-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 C	

Analysis Batch: 432585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-3	Dup-01	Total/NA	Water	SM 4500 S2 F	432584
310-289905-5	MW-1	Total/NA	Water	SM 4500 S2 F	432584
310-289905-7	MW-7	Total/NA	Water	SM 4500 S2 F	432584
310-289905-11	MW-12	Total/NA	Water	SM 4500 S2 F	432584
310-289905-16	MW-17	Total/NA	Water	SM 4500 S2 F	432584
MB 310-432584/1-A	Method Blank	Total/NA	Water	SM 4500 S2 F	432584
LCS 310-432584/2-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	432584

Analysis Batch: 432858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-289905-3	Dup-01	Total/NA	Water	9060A	
310-289905-5	MW-1	Total/NA	Water	9060A	
310-289905-7	MW-7	Total/NA	Water	9060A	
310-289905-11	MW-12	Total/NA	Water	9060A	
310-289905-16	MW-17	Total/NA	Water	9060A	
MB 310-432858/11	Method Blank	Total/NA	Water	9060A	
LCS 310-432858/12	Lab Control Sample	Total/NA	Water	9060A	

Lab Chronicle

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: TB-01
Date Collected: 09/04/24 09:00
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/10/24 22:12

Client Sample ID: EB-01
Date Collected: 09/04/24 11:00
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/10/24 22:34

Client Sample ID: Dup-01
Date Collected: 09/05/24 00:00
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/10/24 23:20
Total/NA	Analysis	RSK-175		25	478757	F5GP	EET CAL 4	09/09/24 15:53
Total/NA	Analysis	RSK-175		1	626299	JBN	EET CLE	09/10/24 04:43
Total/NA	Analysis	RSK-175		10	626623	JBN	EET CLE	09/11/24 13:52
Total/NA	Analysis	9056A		1	432734	QTZ5	EET CF	09/06/24 16:26
Total/NA	Analysis	9056A		10	432734	QTZ5	EET CF	09/10/24 09:50
Dissolved	Prep	3005A			432510	QTZ5	EET CF	09/09/24 09:30
Dissolved	Analysis	6020B		4	433905	NFT2	EET CF	09/20/24 20:03
Dissolved	Prep	3005A			432510	QTZ5	EET CF	09/09/24 09:30
Dissolved	Analysis	6020B		1	432910	NFT2	EET CF	09/11/24 17:18
Total/NA	Analysis	9060A		1	432858	HE7K	EET CF	09/10/24 19:30
Total/NA	Prep	SM 4500 S2 C			432584	ENB7	EET CF	09/09/24 09:56
Total/NA	Analysis	SM 4500 S2 F		1	432585	ENB7	EET CF	09/09/24 09:56

Client Sample ID: Dup-02
Date Collected: 09/05/24 00:00
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/10/24 23:42

Client Sample ID: MW-1
Date Collected: 09/05/24 08:40
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 00:05
Total/NA	Analysis	RSK-175		25	478757	F5GP	EET CAL 4	09/09/24 16:29
Total/NA	Analysis	RSK-175		1	626623	JBN	EET CLE	09/11/24 12:44
Total/NA	Analysis	9056A		1	432734	QTZ5	EET CF	09/06/24 16:38

Lab Chronicle

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-1

Date Collected: 09/05/24 08:40

Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	432734	QTZ5	EET CF	09/10/24 10:01
Dissolved	Prep	3005A			432510	QTZ5	EET CF	09/09/24 09:30
Dissolved	Analysis	6020B		1	432910	NFT2	EET CF	09/11/24 17:20
Total/NA	Analysis	9060A		1	432858	HE7K	EET CF	09/10/24 20:06
Total/NA	Prep	SM 4500 S2 C			432584	ENB7	EET CF	09/09/24 09:56
Total/NA	Analysis	SM 4500 S2 F		1	432585	ENB7	EET CF	09/09/24 09:56

Client Sample ID: MW-6

Date Collected: 09/04/24 15:37

Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 00:28

Client Sample ID: MW-7

Date Collected: 09/05/24 13:13

Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 00:50
Total/NA	Analysis	RSK-175		25	478757	F5GP	EET CAL 4	09/09/24 16:44
Total/NA	Analysis	RSK-175		1	626299	JBN	EET CLE	09/10/24 05:17
Total/NA	Analysis	RSK-175		10	626623	JBN	EET CLE	09/11/24 14:09
Total/NA	Analysis	9056A		1	432734	QTZ5	EET CF	09/06/24 16:49
Total/NA	Analysis	9056A		10	432734	QTZ5	EET CF	09/10/24 10:13
Dissolved	Prep	3005A			432510	QTZ5	EET CF	09/09/24 09:30
Dissolved	Analysis	6020B		4	433905	NFT2	EET CF	09/20/24 20:22
Dissolved	Prep	3005A			432510	QTZ5	EET CF	09/09/24 09:30
Dissolved	Analysis	6020B		1	432910	NFT2	EET CF	09/11/24 17:23
Total/NA	Analysis	9060A		10	432858	HE7K	EET CF	09/10/24 21:55
Total/NA	Prep	SM 4500 S2 C			432584	ENB7	EET CF	09/09/24 09:56
Total/NA	Analysis	SM 4500 S2 F		1	432585	ENB7	EET CF	09/09/24 09:56

Client Sample ID: MW-8

Date Collected: 09/04/24 10:32

Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 01:13

Lab Chronicle

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-9
Date Collected: 09/04/24 12:00
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 01:35

Client Sample ID: MW-11
Date Collected: 09/04/24 17:00
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 01:58

Client Sample ID: MW-12
Date Collected: 09/05/24 15:00
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 02:20
Total/NA	Analysis	RSK-175		25	478757	F5GP	EET CAL 4	09/09/24 17:00
Total/NA	Analysis	RSK-175		1	626299	JBN	EET CLE	09/10/24 05:34
Total/NA	Analysis	9056A		1	432734	QTZ5	EET CF	09/06/24 17:01
Total/NA	Analysis	9056A		10	432734	QTZ5	EET CF	09/10/24 10:25
Dissolved	Prep	3005A			432510	QTZ5	EET CF	09/09/24 09:30
Dissolved	Analysis	6020B		1	432910	NFT2	EET CF	09/11/24 17:25
Total/NA	Analysis	9060A		1	432858	HE7K	EET CF	09/10/24 22:31
Total/NA	Prep	SM 4500 S2 C			432584	ENB7	EET CF	09/09/24 09:56
Total/NA	Analysis	SM 4500 S2 F		1	432585	ENB7	EET CF	09/09/24 09:56

Client Sample ID: MW-13
Date Collected: 09/05/24 16:45
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 02:43

Client Sample ID: MW-14
Date Collected: 09/05/24 15:49
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 03:05

Client Sample ID: MW-15
Date Collected: 09/04/24 14:17
Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 03:28

Eurofins Cedar Falls

Lab Chronicle

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Client Sample ID: MW-16

Date Collected: 09/04/24 13:23

Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 03:51

Client Sample ID: MW-17

Date Collected: 09/05/24 11:55

Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 04:13
Total/NA	Analysis	RSK-175		25	478757	F5GP	EET CAL 4	09/09/24 17:15
Total/NA	Analysis	RSK-175		1	626623	JBN	EET CLE	09/11/24 14:43
Total/NA	Analysis	RSK-175		20	627155	JBN	EET CLE	09/16/24 14:01
Total/NA	Analysis	9056A		1	432734	QTZ5	EET CF	09/06/24 17:47
Total/NA	Analysis	9056A		10	432734	QTZ5	EET CF	09/10/24 10:36
Dissolved	Prep	3005A			432510	QTZ5	EET CF	09/09/24 09:30
Dissolved	Analysis	6020B		4	433905	NFT2	EET CF	09/20/24 20:25
Dissolved	Prep	3005A			432510	QTZ5	EET CF	09/09/24 09:30
Dissolved	Analysis	6020B		1	432910	NFT2	EET CF	09/11/24 17:27
Total/NA	Analysis	9060A		1	432858	HE7K	EET CF	09/10/24 23:07
Total/NA	Prep	SM 4500 S2 C			432584	ENB7	EET CF	09/09/24 09:56
Total/NA	Analysis	SM 4500 S2 F		1	432585	ENB7	EET CF	09/09/24 09:56

Client Sample ID: MW-18

Date Collected: 09/05/24 18:25

Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 04:36

Client Sample ID: MW-19

Date Collected: 09/05/24 17:21

Date Received: 09/06/24 10:20

Lab Sample ID: 310-289905-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	432618	WSE8	EET CF	09/11/24 04:58

Laboratory References:

- EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494
- EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
- EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Stantec Consulting Services, Inc.
 Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24
Arkansas DEQ	State	88-0161	07-02-25
California	Los Angeles County Sanitation Districts	9257304	08-01-24 *
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-25
Nevada	State	CA00111	09-12-24
Oregon	NELAP	4175	02-02-25
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-24

Laboratory: Eurofins Cleveland

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	421	06-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
RSK-175		Water	Ethane
RSK-175		Water	Ethene
RSK-175		Water	Methane

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Rockwell Collins – 35th Street/Main Plant

Job ID: 310-289905-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
RSK-175	Dissolved Gases (GC)	RSK	EET CAL 4
RSK-175	Dissolved Gases (GC)	RSK	EET CLE
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
9060A	Organic Carbon, Total (TOC)	SW846	EET CF
SM 4500 S2 F	Sulfide, Total	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
SM 4500 S2 C	Sulfide, Sample Pretreatment/Concentration	SM	EET CF

Protocol References:

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

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

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

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



Environment Testing
America



310-289905 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>Stantec</u>			
City/State:	CITY	STATE	Project:
		<u>IA</u>	
Receipt Information			
Date/Time Received:	DATE	TIME	Received By:
	<u>9/6/24</u>	<u>1020</u>	<u>[Signature]</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input checked="" type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>2</u>	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID:	<u>R</u>	Correction Factor (°C):	<u>0.0</u>
*Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>1.3</u>	Corrected Temp (°C):	<u>1.3</u>
Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			





Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>Stantec</u>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <u>9/6/24</u>	TIME <u>1020</u>	Received By: <u>M</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input checked="" type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>2</u> of <u>2</u>	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<u>MW-18, Dup 02, MW-19, MW-13, MW-17, MW-14</u> <u>MW-12, Dup 01, MW-7, MW-1 (HCL), MW-16, MW-8, AB-01, MW-9</u>			
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID:	<u>R</u>	Correction Factor (°C): <u>+0.0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>-0.4</u>	Corrected Temp (°C) <u>-0.4</u>	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			
<u>MW-15, MW-11, MW-6</u>			

Eurofins Cedar Falls

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

Chain of Custody Record

TestAmerica Des Moines SC

euofins

214

Client Information				Sampler <i>Sean Clay/Emma Bark</i>	Lab PM Bindert, Zach T	Carrier Tracking No(s):	COC No: 310-87244-24434 1		
Client Contact: Steve Varsa <i>515730820/</i>				Phone: <i>913 980 0281</i>	E-Mail Zach.Bindert@et.eurofinsus.com	State of Origin: <i>IA</i>	Page: Page 1 of 2		
Company: Stantec Consulting Services Inc				PWSID:	Analysis Requested			Job #:	
Address: 11311 Aurora Avenue				Due Date Requested:	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8260D - Volatile Standard Sublist RSK_176 - Methane, Ethane, Ethene 8060A - TOC Chloride, Sulfate - 8068A_ORGFM_28D, Nitrate - 8068A_ORGFM_48H 6020B - Dissolved Iron and Manganese RSK_176_CO2 - RSK-176 CO2 SM4500_S2_F - Sulfide, Total	Preservation Codes:			
City: Des Moines				TAT Requested (days): <i>STD</i>		A - HCL	M - Hexane		
State, Zip: IA, 50322-7904				Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		B - NaOH	N - None		
Phone:				PO #: 193709909 100 001		C - Zn Acetate	O - AsNaO2		
Email steve.varsa@stantec.com				WO #:		D - Nitric Acid	P - Na2O4S		
Project Name: Rockwell Collins - 35th Street				Project #: 31012345		E - NaHSO4	Q - Na2SO3		
Site:				SSOW#:	F - MeOH	R - Na2SO3			
Sample Identification				Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Total Number of Containers	Special Instructions/Note:
TB-01				9/4/2024	0900	G	Water	2	Nitrate - 48 Hour Hold Time
LB-01				9/4/2024	1100	G	Water	3	
DUP 01				9/5/2024	---	G	Water	14	
DUP-02				9/5/2024	---	G	Water	3	
MW-1				9/5/2024	0640	G	Water	14	
MW-6				9/4/2024	1537	G	Water	3	
MW-7				9/5/2024	1313	G	Water	14	
MW-8				9/4/2024	1032	G	Water	3	
MW-9				9/4/2024	1200	G	Water	3	
MW-11				9/4/2024	1700	G	Water	9	MSMSD
MW-12				9/5/2024	1500	G	Water	14	
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> 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: <i>[Signature]</i>			Date/Time: <i>9/6/2024 1015</i>	Company: <i>STN</i>	Received by: <i>[Signature]</i>		Date/Time: <i>9/24 1030</i>	Company:	
Relinquished by:			Date/Time:	Company:	Received by:		Date/Time:	Company:	
Relinquished by:			Date/Time:	Company:	Received by:		Date/Time:	Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No			Cooler Temperature(s) °C and Other Remarks:				

Page 55 of 62

9/23/2024



Eurofins Cedar Falls

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

Chain of Custody Record

TestAmerica Des Moines SC

214

eurofins |

Client Information		Sampler <i>Sean Clwy/Emma Brady</i>		Lab PM Bindert, Zach T		Carrier Tracking No(s)		COC No: 310-87244-24434.2			
Client Contact: Steve Varsa		Phone: <i>515 253 0830</i>		E-Mail: Zach.Bindert@et.eurofinsus.com		State of Origin: <i>IA</i>		Page: Page 2 of 2			
Company Stantec Consulting Services Inc		PWSID:		Analysis Requested						Job #:	
Address: 11311 Aurora Avenue		Due Date Requested:		Field Filtered Sample (Yes or No)		Perform, MS/MSD (Yes or No)		Total Number of Containers		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)	
City: Des Moines		TAT Requested (days): <i>STD</i>									
State, Zip: IA, 50322-7904		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									
Phone:		PO #: 193709909 100 001									
Email: steve.varsa@stantec.com		WO #:									
Project Name: Rockwell Collins - 35th Street		Project #: 31012345		RSK_176 - Methane, Ethane, Ethene 9060A - TOC Chloride, Sulfate - 9056A_ORGFIM_28D, Nitrate - 9056A_ORGFIM_48H 6020B - Dissolved Iron and Manganese RSK_176_CO2 - RSK-176 CO2 SM4600_S2_F - Sulfide, Total		ERS					
Site:		SSOW#:									
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=wastefall, BT=Tissue, A=Air)		Special Instructions/Note:	
										Preservation Code:	
										A A S N D N CB Nitrate - 48 Hour Hold Time	
MW-13		9/5/2024		1645		G		Water		3	
MW-14		9/5/2024		1549		G		Water		3	
MW-15		9/4/2024		147		G		Water		3	
MW-16		9/4/2024		1323		G		Water		3	
MW-17		9/5/2024		1135		G		Water		14	
MW-18		9/5/2024		1825		G		Water		3	
MW-19		9/5/2024		1721		G		Water		3	
								Water		ERS	
								Water		ERS	
								Water		ERS	
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> 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: <i>[Signature]</i>			Date/Time: <i>9/6/2024 1015</i>			Company: <i>STN</i>			Received by: <i>[Signature]</i>		
Relinquished by:			Date/Time:			Company:			Received by:		
Relinquished by:			Date/Time:			Company:			Received by:		
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.				Cooler Temperature(s) °C and Other Remarks:					

Page 56 of 62

9/23/2024



Eurofins Cedar Falls

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

Chain of Custody Record

1.3
1.2



eurofins Environment Testing

Client Information (Sub Contract Lab)		Sampler:		Lab PM: Bindert, Zach T		Carrier Tracking No(s):		COC No: 310-76078.1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: Zach.Bindert@et.eurofinsus.com		State of Origin: Iowa		Page: Page 1 of 1			
Company: Eurofins Environment Testing North Cent				Accreditations Required (See note): State - Iowa				Job #: 310-289905-1			
Address: 180 S. Van Buren Avenue, Barberton, OH, 44203		Duo Date Requested: 9/19/2024		Analysis Requested						Preservation Codes:	
City: Barberton		TAT Requested (days):								Other:	
State, Zip: OH, 44203		PO #:									
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:									
Email:		Project #: 31012345		Project Name: Rockwell Collins - Ralston		SSOW#:		Site:			
Sample Identification - Client ID (Lab ID)		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)	RSK_175/ Methane, Ethane, Ethene	Total Number of containers	Special Instructions/Note: RSK	
Dup-01 (310-289905-3)		9/5/24	Central	G	Water		X				3
MW-1 (310-289905-5)		9/5/24	08:40 Central	G	Water		X		3		
MW-7 (310-289905-7)		9/5/24	13:13 Central	G	Water		X		3		
MW-12 (310-289905-11)		9/5/24	15:00 Central	G	Water		X		3		
MW-17 (310-289905-16)		9/5/24	11:55 Central	G	Water		X		3		
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.</p>											
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)			Primary Deliverable Rank: 2			Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:					
Relinquished by: <i>TR</i>		Date/Time: 9/6/24 1425		Company:		Received by: JESSE MOROSKO		Date/Time: 09/10/24 0930		Company: <i>ETM</i>	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:				Cooler Temperature(s) °C and Other Remarks:					



Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Eurofins Cedar Falls Site Name _____ Cooler unpacked by: J MOROSKO
Cooler Received on 09/07/24 Opened on 09/09/24
FedEx 1st Grd Ext UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____
Packing material used. Bubble Wrap Foam Plastic Bag None Other _____
COOLANT Wet Ice Blue Ice Dry Ice Water None _____

1 Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # 22 (CF -01 °C) Observed Cooler Temp 13 °C Corrected Cooler Temp 1-2 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kuts (LLHg/MeHg)? Yes No
-Were tamper/custody seals intact and uncompromised? Yes No NA

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

13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC442471
14 Were VOAs on the COC? Yes No
15 Were air bubbles >6 mm in any VOA vials? Yes ← Larger than this. Yes No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
17 Was a LL Hg or Me Hg trip blank present? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
Concerning _____

Tests that are not checked for pH by Receiving
VOAs
Oil and Grease
TOC

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by: _____

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

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

SHIP ID ALOR (319) 277-2401
SAMPLE RECEIVING
EUROFINS TESTAMERICA
3019 VENTUREWAY
CEDAR FALLS, IA 50613
UNITED STATES US

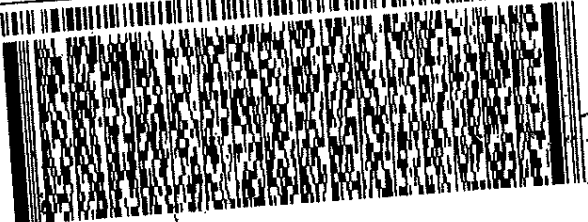
SHIP DATE 06SEP24
ACTWGT 19.72 LB
CAD 0870950/CAFE3808

BILL SENDER

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

BARBERTON OH 44203

(330) 497-9396
REF S310-96613



FedEx
Express



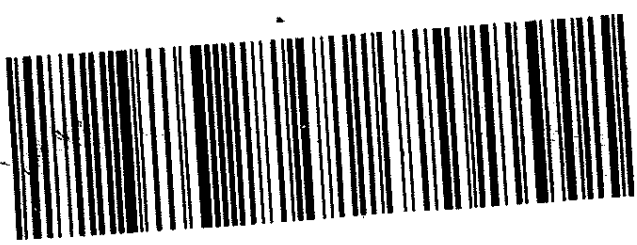
J2418231122014V

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRKH 0201 7008 5812 3798

X0 CAKA

44203
OH-US CLE

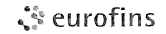


5852/AEFS/C64

Eurofins Cedar Falls

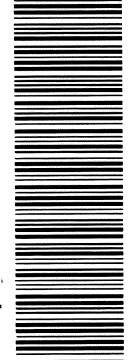
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record



Loc: 310
289905
Environment Testing

Client Information (Sub Contract Lab)		Sampler:		Lab PM: Bindert, Zach T		Carrier Tracking No(s):		COC No: 310-76074.1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: Zach.Bindert@et.eurofinsus.com		State of Origin: Iowa		Page: Page 1 of 1			
Company: Eurofins Environment Testing Southwest,				Accreditations Required (See note): State - Iowa				Job #: 310-289905-1			
Address: 2841 Dow Avenue, Suite 100,		Due Date Requested: 9/19/2024		Analysis Requested						Preservation Codes: Other:	
City: Tustin		TAT Requested (days):									
State, Zip: CA, 92780		PO #:									
Phone: 714-895-5494(Tel)		WO #:									
Email:		Project #: 31012345		Project Name: Rockwell Collins - Ralston		SSOW#:		Site:			
Project Name: Rockwell Collins - Ralston		Project #: 31012345		SSOW#:		Site:		Special Instructions/Note:			
Sample Identification - Client ID (Lab ID)		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)	RSK_175_CO2	RSK-175 CO2	Total Number of containers	Special Instructions/Note:
Dup-01 (310-289905-3)		9/5/24	Central	G	Water	X				3	
MW-1 (310-289905-5)		9/5/24	08:40 Central	G	Water	X				3	
MW-7 (310-289905-7)		9/5/24	13:13 Central	G	Water	X				3	
MW-12 (310-289905-11)		9/5/24	15:00 Central	G	Water	X				3	
MW-17 (310-289905-16)		9/5/24	11:55 Central	G	Water	X				3	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.</p>											
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)				Primary Deliverable Rank: 2		Special Instructions/QC Requirements:					
Empty Kit Relinquished by:			Date:		Time:		Method of Shipment:				
Relinquished by:			Date/Time:		Company		Received by:		Date/Time:		Company
Relinquished by:			Date/Time:		Company		Received by:		Date/Time:		Company
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: 21/21 SC12					



310-289905 Chain of Custody

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

Login Sample Receipt Checklist

Client: Stantec Consulting Services, Inc.

Job Number: 310-289905-1

Login Number: 289905

List Number: 1

Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

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



Login Sample Receipt Checklist

Client: Stantec Consulting Services, Inc.

Job Number: 310-289905-1

Login Number: 289905

List Number: 3

Creator: Skinner, Alma D

List Source: Eurofins Calscience

List Creation: 09/09/24 08:45 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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	2.1
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?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





ANALYTICAL REPORT

PREPARED FOR

Attn: Steve Varsa
Stantec Consulting Services, Inc.
11311 Aurora Avenue
Des Moines, Iowa 50322-7904

Generated 9/23/2024 9:04:00 AM

JOB DESCRIPTION

Main Campus PFAS

JOB NUMBER

410-187434-1

Job Notes

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

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

Authorization



Generated
9/23/2024 9:04:00 AM

Authorized for release by
Amek Carter, Project Manager
Loran.Carter@et.eurofinsus.com
(717)556-7252

Compliance Statement

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

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

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

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

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

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.





Table of Contents

Cover Page	1
Table of Contents	4
Definitions/Glossary	5
Case Narrative	6
Detection Summary	7
Client Sample Results	8
Isotope Dilution Summary	16
QC Sample Results	18
QC Association Summary	32
Lab Chronicle	33
Certification Summary	34
Method Summary	35
Sample Summary	36
Chain of Custody	37
Receipt Checklists	38

Definitions/Glossary

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: Stantec Consulting Services, Inc.
Project: Main Campus PFAS

Job ID: 410-187434-1

Job ID: 410-187434-1

Eurofins Lancaster Laboratories Environment

Job Narrative 410-187434-1

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 9/10/2024 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 0.8°C.

Receipt Exceptions

Water samples will be frozen after receipt per 1633 protocol.

PFAS

Method 1633_Final: The recovery for a target analyte(s) Perfluoroundecanoic acid (PFUnA) and Perfluorododecanoic acid (PFDoA) in the laboratory control spike samples associated with the following samples: EB-PFAS (410-187434-1), MW-6 (410-187434-2), MW-7 (410-187434-3) and DUP-01 (410-187434-4) is outside the QC acceptance limits. Since Perfluoroundecanoic acid (PFUnA) and Perfluorododecanoic acid (PFDoA) are biased high and non-detect in the samples, the data is reported.

Method 1633_Final: Target analytes Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) were detected in the equipment blank sample: EB-PFAS (410-187434-1) The following action was taken: This sample was re-extracted within the required holding time and target analyte(s) were again detected in the re-extracted equipment blank sample.

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

Detection Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Client Sample ID: EB-PFAS

Lab Sample ID: 410-187434-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	1.1	J cn	2.4	0.95	ng/L	1		Draft-4 1633	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 410-187434-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	15		3.3	0.90	ng/L	1		Draft-4 1633	Total/NA
Perfluoropentanoic acid (PFPeA)	2.5		1.6	0.49	ng/L	1		Draft-4 1633	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.3		2.5	0.98	ng/L	1		Draft-4 1633	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 410-187434-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	53		3.3	0.91	ng/L	1		Draft-4 1633	Total/NA
Perfluoropentanoic acid (PFPeA)	73		1.7	0.50	ng/L	1		Draft-4 1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	13		1.7	0.41	ng/L	1		Draft-4 1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	6.9		1.7	0.66	ng/L	1		Draft-4 1633	Total/NA
Perfluorooctanoic acid (PFOA)	18		1.7	0.75	ng/L	1		Draft-4 1633	Total/NA
Perfluorononanoic acid (PFNA)	4.4		1.7	0.41	ng/L	1		Draft-4 1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.4		1.7	0.41	ng/L	1		Draft-4 1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.1		1.7	0.66	ng/L	1		Draft-4 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	15		1.7	0.41	ng/L	1		Draft-4 1633	Total/NA
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.87	J	1.7	0.41	ng/L	1		Draft-4 1633	Total/NA

Client Sample ID: DUP-01

Lab Sample ID: 410-187434-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	53		3.3	0.92	ng/L	1		Draft-4 1633	Total/NA
Perfluoropentanoic acid (PFPeA)	69		1.7	0.50	ng/L	1		Draft-4 1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	12		1.7	0.42	ng/L	1		Draft-4 1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	6.8		1.7	0.67	ng/L	1		Draft-4 1633	Total/NA
Perfluorooctanoic acid (PFOA)	18		1.7	0.75	ng/L	1		Draft-4 1633	Total/NA
Perfluorononanoic acid (PFNA)	4.3		1.7	0.42	ng/L	1		Draft-4 1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.3		1.7	0.42	ng/L	1		Draft-4 1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.0		1.7	0.67	ng/L	1		Draft-4 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		1.7	0.42	ng/L	1		Draft-4 1633	Total/NA
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.89	J	1.7	0.42	ng/L	1		Draft-4 1633	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Client Sample ID: EB-PFAS

Lab Sample ID: 410-187434-1

Date Collected: 09/04/24 15:10

Matrix: Water

Date Received: 09/10/24 10:30

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		3.2	0.87	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.47	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.63	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.71	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluoroundecanoic acid (PFUnA)	ND	*+ cn	1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorododecanoic acid (PFDoA)	ND	*+ cn	1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorotridecanoic acid (PFTTrDA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.63	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorononanesulfonic acid (PFNS)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.6	0.47	ng/L		09/17/24 15:21	09/19/24 14:24	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.2	0.79	ng/L		09/17/24 15:21	09/19/24 14:24	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.2	0.79	ng/L		09/17/24 15:21	09/19/24 14:24	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.2	0.79	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.9	2.0	ng/L		09/17/24 15:21	09/19/24 14:24	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.9	2.0	ng/L		09/17/24 15:21	09/19/24 14:24	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	1.1	J cn	2.4	0.95	ng/L		09/17/24 15:21	09/19/24 14:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Client Sample ID: EB-PFAS

Lab Sample ID: 410-187434-1

Date Collected: 09/04/24 15:10

Matrix: Water

Date Received: 09/10/24 10:30

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND	*1	1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	ND		1.6	0.40	ng/L		09/17/24 15:21	09/19/24 14:24	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.2	0.79	ng/L		09/17/24 15:21	09/19/24 14:24	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.9	2.2	ng/L		09/17/24 15:21	09/19/24 14:24	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.9	2.0	ng/L		09/17/24 15:21	09/19/24 14:24	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4-PFBA	79.2		5 - 130				09/17/24 15:21	09/19/24 14:24	1
13C5-PFPeA	71.6		40 - 130				09/17/24 15:21	09/19/24 14:24	1
13C5-PFHxA	75.6		40 - 130				09/17/24 15:21	09/19/24 14:24	1
13C4-PFHpA	74.6		40 - 130				09/17/24 15:21	09/19/24 14:24	1
13C8-PFOA	77.8		40 - 130				09/17/24 15:21	09/19/24 14:24	1
13C9-PFNA	83.1		40 - 130				09/17/24 15:21	09/19/24 14:24	1
13C6-PFDA	78.9		40 - 130				09/17/24 15:21	09/19/24 14:24	1
13C7-PFUnA	78.5		30 - 130				09/17/24 15:21	09/19/24 14:24	1
13C2-PFTeDA	57.7		10 - 130				09/17/24 15:21	09/19/24 14:24	1
13C3-PFBS	82.6		40 - 135				09/17/24 15:21	09/19/24 14:24	1
13C3-PFHxS	83.9		40 - 130				09/17/24 15:21	09/19/24 14:24	1
13C8-PFOS	77.8		40 - 130				09/17/24 15:21	09/19/24 14:24	1
13C8-PFOSA	68.1		40 - 130				09/17/24 15:21	09/19/24 14:24	1
d3-NMeFOSAA	85.5		40 - 170				09/17/24 15:21	09/19/24 14:24	1
d5-NEtFOSAA	97.9		25 - 135				09/17/24 15:21	09/19/24 14:24	1
13C2 4:2 FTS	102		40 - 200				09/17/24 15:21	09/19/24 14:24	1
13C2 6:2 FTS	100		40 - 200				09/17/24 15:21	09/19/24 14:24	1
13C2 8:2 FTS	89.7		40 - 300				09/17/24 15:21	09/19/24 14:24	1
13C3-HFPO-DA	70.8		40 - 130				09/17/24 15:21	09/19/24 14:24	1
D7-NMeFOSE	57.4		10 - 130				09/17/24 15:21	09/19/24 14:24	1
D9-NEtFOSE	51.0		10 - 130				09/17/24 15:21	09/19/24 14:24	1
d5-NEtPFOSA	58.1		10 - 130				09/17/24 15:21	09/19/24 14:24	1
d3-NMePFOSA	60.6		10 - 130				09/17/24 15:21	09/19/24 14:24	1
13C2 PFDoA	69.3		10 - 130				09/17/24 15:21	09/19/24 14:24	1

Client Sample ID: MW-6

Lab Sample ID: 410-187434-2

Date Collected: 09/04/24 15:37

Matrix: Water

Date Received: 09/10/24 10:30

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	15		3.3	0.90	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluoropentanoic acid (PFPeA)	2.5		1.6	0.49	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.66	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.74	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluoroundecanoic acid (PFUnA)	ND	*+ cn	1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorododecanoic acid (PFDoA)	ND	*+ cn	1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Client Sample ID: MW-6

Lab Sample ID: 410-187434-2

Date Collected: 09/04/24 15:37

Matrix: Water

Date Received: 09/10/24 10:30

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic acid (PFTrDA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.66	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorononanesulfonic acid (PFNS)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.6	0.49	ng/L		09/17/24 15:21	09/19/24 14:38	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.3	0.82	ng/L		09/17/24 15:21	09/19/24 14:38	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.3	0.82	ng/L		09/17/24 15:21	09/19/24 14:38	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.3	0.82	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		8.2	2.1	ng/L		09/17/24 15:21	09/19/24 14:38	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		8.2	2.1	ng/L		09/17/24 15:21	09/19/24 14:38	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.3		2.5	0.98	ng/L		09/17/24 15:21	09/19/24 14:38	1
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND *1		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.6	0.41	ng/L		09/17/24 15:21	09/19/24 14:38	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.3	0.82	ng/L		09/17/24 15:21	09/19/24 14:38	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		8.2	2.3	ng/L		09/17/24 15:21	09/19/24 14:38	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		8.2	2.1	ng/L		09/17/24 15:21	09/19/24 14:38	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Client Sample ID: MW-6

Lab Sample ID: 410-187434-2

Date Collected: 09/04/24 15:37

Matrix: Water

Date Received: 09/10/24 10:30

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4-PFBA	79.7		5 - 130	09/17/24 15:21	09/19/24 14:38	1
13C5-PFPeA	73.8		40 - 130	09/17/24 15:21	09/19/24 14:38	1
13C5-PFHxA	76.0		40 - 130	09/17/24 15:21	09/19/24 14:38	1
13C4-PFHpA	77.1		40 - 130	09/17/24 15:21	09/19/24 14:38	1
13C8-PFOA	76.8		40 - 130	09/17/24 15:21	09/19/24 14:38	1
13C9-PFNA	74.8		40 - 130	09/17/24 15:21	09/19/24 14:38	1
13C6-PFDA	67.4		40 - 130	09/17/24 15:21	09/19/24 14:38	1
13C7-PFUnA	58.4		30 - 130	09/17/24 15:21	09/19/24 14:38	1
13C2-PFTeDA	24.7		10 - 130	09/17/24 15:21	09/19/24 14:38	1
13C3-PFBS	84.2		40 - 135	09/17/24 15:21	09/19/24 14:38	1
13C3-PFHxS	77.2		40 - 130	09/17/24 15:21	09/19/24 14:38	1
13C8-PFOS	52.6		40 - 130	09/17/24 15:21	09/19/24 14:38	1
13C8-PFOSA	62.3		40 - 130	09/17/24 15:21	09/19/24 14:38	1
d3-NMeFOSAA	73.8		40 - 170	09/17/24 15:21	09/19/24 14:38	1
d5-NEtFOSAA	76.5		25 - 135	09/17/24 15:21	09/19/24 14:38	1
13C2 4:2 FTS	102		40 - 200	09/17/24 15:21	09/19/24 14:38	1
13C2 6:2 FTS	98.3		40 - 200	09/17/24 15:21	09/19/24 14:38	1
13C2 8:2 FTS	81.7		40 - 300	09/17/24 15:21	09/19/24 14:38	1
13C3-HFPO-DA	71.8		40 - 130	09/17/24 15:21	09/19/24 14:38	1
D7-NMeFOSE	30.1		10 - 130	09/17/24 15:21	09/19/24 14:38	1
D9-NEtFOSE	24.7		10 - 130	09/17/24 15:21	09/19/24 14:38	1
d5-NEtPFOSA	44.2		10 - 130	09/17/24 15:21	09/19/24 14:38	1
d3-NMePFOSA	49.9		10 - 130	09/17/24 15:21	09/19/24 14:38	1
13C2 PFDaA	42.4		10 - 130	09/17/24 15:21	09/19/24 14:38	1

Client Sample ID: MW-7

Lab Sample ID: 410-187434-3

Date Collected: 09/05/24 13:13

Matrix: Water

Date Received: 09/10/24 10:30

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	53		3.3	0.91	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluoropentanoic acid (PFPeA)	73		1.7	0.50	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorohexanoic acid (PFHxA)	13		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluoroheptanoic acid (PFHpA)	6.9		1.7	0.66	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorooctanoic acid (PFOA)	18		1.7	0.75	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorononanoic acid (PFNA)	4.4		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluoroundecanoic acid (PFUnA)	ND	*+ cn	1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorododecanoic acid (PFDaA)	ND	*+ cn	1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorotridecanoic acid (PFTTrDA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorobutanesulfonic acid (PFBS)	2.4		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorohexanesulfonic acid (PFHxS)	4.1		1.7	0.66	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorooctanesulfonic acid (PFOS)	15		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Client Sample ID: MW-7

Lab Sample ID: 410-187434-3

Date Collected: 09/05/24 13:13

Matrix: Water

Date Received: 09/10/24 10:30

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanesulfonic acid (PFNS)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.7	0.50	ng/L		09/17/24 15:21	09/19/24 14:52	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.3	0.83	ng/L		09/17/24 15:21	09/19/24 14:52	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.3	0.83	ng/L		09/17/24 15:21	09/19/24 14:52	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.3	0.83	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		8.3	2.1	ng/L		09/17/24 15:21	09/19/24 14:52	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		8.3	2.1	ng/L		09/17/24 15:21	09/19/24 14:52	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.5	0.99	ng/L		09/17/24 15:21	09/19/24 14:52	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.87	J	1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND	*1	1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.7	0.41	ng/L		09/17/24 15:21	09/19/24 14:52	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.3	0.83	ng/L		09/17/24 15:21	09/19/24 14:52	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		8.3	2.3	ng/L		09/17/24 15:21	09/19/24 14:52	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		8.3	2.1	ng/L		09/17/24 15:21	09/19/24 14:52	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4-PFBA	79.3		5 - 130	09/17/24 15:21	09/19/24 14:52	1
13C5-PFPeA	75.0		40 - 130	09/17/24 15:21	09/19/24 14:52	1
13C5-PFHxA	78.2		40 - 130	09/17/24 15:21	09/19/24 14:52	1
13C4-PFHpA	74.5		40 - 130	09/17/24 15:21	09/19/24 14:52	1
13C8-PFOA	77.4		40 - 130	09/17/24 15:21	09/19/24 14:52	1
13C9-PFNA	81.7		40 - 130	09/17/24 15:21	09/19/24 14:52	1
13C6-PFDA	76.1		40 - 130	09/17/24 15:21	09/19/24 14:52	1
13C7-PFUnA	63.7		30 - 130	09/17/24 15:21	09/19/24 14:52	1

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Client Sample ID: MW-7

Lab Sample ID: 410-187434-3

Date Collected: 09/05/24 13:13

Matrix: Water

Date Received: 09/10/24 10:30

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-PFTeDA	26.2		10 - 130	09/17/24 15:21	09/19/24 14:52	1
13C3-PFBS	83.4		40 - 135	09/17/24 15:21	09/19/24 14:52	1
13C3-PFHxS	77.5		40 - 130	09/17/24 15:21	09/19/24 14:52	1
13C8-PFOS	66.3		40 - 130	09/17/24 15:21	09/19/24 14:52	1
13C8-PFOSA	74.5		40 - 130	09/17/24 15:21	09/19/24 14:52	1
d3-NMeFOSAA	111		40 - 170	09/17/24 15:21	09/19/24 14:52	1
d5-NEtFOSAA	102		25 - 135	09/17/24 15:21	09/19/24 14:52	1
13C2 4:2 FTS	185		40 - 200	09/17/24 15:21	09/19/24 14:52	1
13C2 6:2 FTS	130		40 - 200	09/17/24 15:21	09/19/24 14:52	1
13C2 8:2 FTS	108		40 - 300	09/17/24 15:21	09/19/24 14:52	1
13C3-HFPO-DA	66.5		40 - 130	09/17/24 15:21	09/19/24 14:52	1
D7-NMeFOSE	53.3		10 - 130	09/17/24 15:21	09/19/24 14:52	1
D9-NEtFOSE	41.4		10 - 130	09/17/24 15:21	09/19/24 14:52	1
d5-NEtPFOSA	51.2		10 - 130	09/17/24 15:21	09/19/24 14:52	1
d3-NMePFOSA	57.4		10 - 130	09/17/24 15:21	09/19/24 14:52	1
13C2 PFDoA	48.6		10 - 130	09/17/24 15:21	09/19/24 14:52	1

Client Sample ID: DUP-01

Lab Sample ID: 410-187434-4

Date Collected: 09/05/24 07:00

Matrix: Water

Date Received: 09/10/24 10:30

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	53		3.3	0.92	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluoropentanoic acid (PFPeA)	69		1.7	0.50	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorohexanoic acid (PFHxA)	12		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluoroheptanoic acid (PFHpA)	6.8		1.7	0.67	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorooctanoic acid (PFOA)	18		1.7	0.75	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorononanoic acid (PFNA)	4.3		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluoroundecanoic acid (PFUnA)	ND	*+ cn	1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorododecanoic acid (PFDoA)	ND	*+ cn	1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorobutanesulfonic acid (PFBS)	2.3		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorohexanesulfonic acid (PFHxS)	4.0		1.7	0.67	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorooctanesulfonic acid (PFOS)	14		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorononanesulfonic acid (PFNS)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.7	0.50	ng/L		09/17/24 15:21	09/19/24 15:05	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.3	0.84	ng/L		09/17/24 15:21	09/19/24 15:05	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.3	0.84	ng/L		09/17/24 15:21	09/19/24 15:05	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Client Sample ID: DUP-01

Lab Sample ID: 410-187434-4

Date Collected: 09/05/24 07:00

Matrix: Water

Date Received: 09/10/24 10:30

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.3	0.84	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		8.4	2.1	ng/L		09/17/24 15:21	09/19/24 15:05	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		8.4	2.1	ng/L		09/17/24 15:21	09/19/24 15:05	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.5	1.0	ng/L		09/17/24 15:21	09/19/24 15:05	1
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.89	J	1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND	*1	1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.7	0.42	ng/L		09/17/24 15:21	09/19/24 15:05	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.3	0.84	ng/L		09/17/24 15:21	09/19/24 15:05	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		8.4	2.3	ng/L		09/17/24 15:21	09/19/24 15:05	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		8.4	2.1	ng/L		09/17/24 15:21	09/19/24 15:05	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4-PFBA	70.8		5 - 130	09/17/24 15:21	09/19/24 15:05	1
13C5-PFPeA	73.7		40 - 130	09/17/24 15:21	09/19/24 15:05	1
13C5-PFHxA	75.5		40 - 130	09/17/24 15:21	09/19/24 15:05	1
13C4-PFHpA	74.7		40 - 130	09/17/24 15:21	09/19/24 15:05	1
13C8-PFOA	79.3		40 - 130	09/17/24 15:21	09/19/24 15:05	1
13C9-PFNA	81.2		40 - 130	09/17/24 15:21	09/19/24 15:05	1
13C6-PFDA	76.5		40 - 130	09/17/24 15:21	09/19/24 15:05	1
13C7-PFUnA	63.6		30 - 130	09/17/24 15:21	09/19/24 15:05	1
13C2-PFTeDA	27.9		10 - 130	09/17/24 15:21	09/19/24 15:05	1
13C3-PFBS	78.5		40 - 135	09/17/24 15:21	09/19/24 15:05	1
13C3-PFHxS	75.8		40 - 130	09/17/24 15:21	09/19/24 15:05	1
13C8-PFOS	65.0		40 - 130	09/17/24 15:21	09/19/24 15:05	1
13C8-PFOSA	73.4		40 - 130	09/17/24 15:21	09/19/24 15:05	1
d3-NMeFOSAA	116		40 - 170	09/17/24 15:21	09/19/24 15:05	1
d5-NEtFOSAA	101		25 - 135	09/17/24 15:21	09/19/24 15:05	1
13C2 4:2 FTS	171		40 - 200	09/17/24 15:21	09/19/24 15:05	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Stantec Consulting Services, Inc.
 Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Client Sample ID: DUP-01

Lab Sample ID: 410-187434-4

Date Collected: 09/05/24 07:00

Matrix: Water

Date Received: 09/10/24 10:30

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 6:2 FTS	134		40 - 200	09/17/24 15:21	09/19/24 15:05	1
13C2 8:2 FTS	108		40 - 300	09/17/24 15:21	09/19/24 15:05	1
13C3-HFPO-DA	66.3		40 - 130	09/17/24 15:21	09/19/24 15:05	1
D7-NMeFOSE	60.8		10 - 130	09/17/24 15:21	09/19/24 15:05	1
D9-NEtFOSE	51.4		10 - 130	09/17/24 15:21	09/19/24 15:05	1
d5-NEtPFOSA	56.5		10 - 130	09/17/24 15:21	09/19/24 15:05	1
d3-NMePFOSA	57.2		10 - 130	09/17/24 15:21	09/19/24 15:05	1
13C2 PFDoA	51.5		10 - 130	09/17/24 15:21	09/19/24 15:05	1



Isotope Dilution Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (5-130)	PFPeA (40-130)	13C5PHA (40-130)	C4PFHA (40-130)	C8PFOA (40-130)	C9PFNA (40-130)	C6PFDA (40-130)	13C7PUA (30-130)
410-187434-1	EB-PFAS	79.2	71.6	75.6	74.6	77.8	83.1	78.9	78.5
410-187434-2	MW-6	79.7	73.8	76.0	77.1	76.8	74.8	67.4	58.4
410-187434-3	MW-7	79.3	75.0	78.2	74.5	77.4	81.7	76.1	63.7
410-187434-4	DUP-01	70.8	73.7	75.5	74.7	79.3	81.2	76.5	63.6
LCS 410-550486/2-A	Lab Control Sample	118	177 *5+	119	120	104	108	103	104
LCS 410-552370/2-A	Lab Control Sample	79.0	73.5	74.1	74.0	75.1	74.4	73.1	77.7
LCS 410-552370/3-A	Lab Control Sample Dup	48.9	44.2	47.5	50.9	61.3	61.7	59.3	63.5
LLCS 410-550486/3-A	Lab Control Sample	113	167 *5+	113	117	99.9	98.9	97.8	105
LLCS 410-552370/4-A	Lab Control Sample	82.2	70.8	68.8	63.7	66.0	62.6	60.6	60.7
MB 410-550486/1-A	Method Blank	110	165 *5+	113	111	99.3	99.6	95.6	91.5
MB 410-552370/1-A	Method Blank	74.7	60.5	59.5	62.3	65.3	63.7	60.2	63.8

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFTDA (10-130)	C3PFBS (40-135)	C3PFHS (40-130)	C8PFOS (40-130)	PFOSA (40-130)	d3NMFOS (40-170)	d5NEFOS (25-135)	M242FTS (40-200)
410-187434-1	EB-PFAS	57.7	82.6	83.9	77.8	68.1	85.5	97.9	102
410-187434-2	MW-6	24.7	84.2	77.2	52.6	62.3	73.8	76.5	102
410-187434-3	MW-7	26.2	83.4	77.5	66.3	74.5	111	102	185
410-187434-4	DUP-01	27.9	78.5	75.8	65.0	73.4	116	101	171
LCS 410-550486/2-A	Lab Control Sample	120	102	105	105	91.0	90.4	90.9	112
LCS 410-552370/2-A	Lab Control Sample	60.0	78.2	77.9	76.7	68.8	87.3	98.0	98.2
LCS 410-552370/3-A	Lab Control Sample Dup	57.8	57.7	63.5	64.2	50.7	75.2	78.2	61.7
LLCS 410-550486/3-A	Lab Control Sample	126	101	97.1	96.5	83.3	87.0	81.9	111
LLCS 410-552370/4-A	Lab Control Sample	48.5	68.8	63.4	59.7	62.3	75.2	81.1	103
MB 410-550486/1-A	Method Blank	106	102	98.9	92.4	82.4	84.2	78.3	107
MB 410-552370/1-A	Method Blank	50.4	61.9	60.2	62.7	61.3	75.5	83.7	88.2

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (40-200)	M282FTS (40-300)	HFPODA (40-130)	NMFM (10-130)	NEFM (10-130)	d5NPFSA (10-130)	d3NMFSA (10-130)	PFDoA (10-130)
410-187434-1	EB-PFAS	100	89.7	70.8	57.4	51.0	58.1	60.6	69.3
410-187434-2	MW-6	98.3	81.7	71.8	30.1	24.7	44.2	49.9	42.4
410-187434-3	MW-7	130	108	66.5	53.3	41.4	51.2	57.4	48.6
410-187434-4	DUP-01	134	108	66.3	60.8	51.4	56.5	57.2	51.5
LCS 410-550486/2-A	Lab Control Sample	95.4	101	108	93.8	105	52.9	50.3	94.0
LCS 410-552370/2-A	Lab Control Sample	93.9	84.1	70.8	43.1	34.4	52.9	54.6	71.9
LCS 410-552370/3-A	Lab Control Sample Dup	71.9	71.7	43.6	45.5	39.3	45.9	44.2	63.4
LLCS 410-550486/3-A	Lab Control Sample	93.3	93.8	101	79.8	81.6	42.2	40.5	88.9
LLCS 410-552370/4-A	Lab Control Sample	84.2	73.4	66.4	41.0	35.4	43.7	44.3	57.0
MB 410-550486/1-A	Method Blank	92.9	94.1	99.7	84.9	87.0	42.5	42.0	85.3
MB 410-552370/1-A	Method Blank	75.1	68.2	59.8	35.3	28.9	42.5	44.2	59.8

Surrogate Legend

- PFBA = 13C4-PFBA
- PFPeA = 13C5-PFPeA
- 13C5PHA = 13C5-PFHxA
- C4PFHA = 13C4-PFHpA
- C8PFOA = 13C8-PFOA
- C9PFNA = 13C9-PFNA
- C6PFDA = 13C6-PFDA
- 13C7PUA = 13C7-PFUnA

Isotope Dilution Summary

Client: Stantec Consulting Services, Inc.

Job ID: 410-187434-1

Project/Site: Main Campus PFAS

PFTDA = 13C2-PFTeDA
C3PFBS = 13C3-PFBS
C3PFHS = 13C3-PFHxS
C8PFOS = 13C8-PFOS
PFOSA = 13C8-PFOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = 13C2 4:2 FTS
M262FTS = 13C2 6:2 FTS
M282FTS = 13C2 8:2 FTS
HFPODA = 13C3-HFPO-DA
NMFm = D7-NMeFOSE
NEFM = D9-NEtFOSE
d5NPFSA = d5-NEtPFOSA
d3NMFSA = d3-NMePFOSA
PFD_oA = 13C2 PFD_oA

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

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 410-550486/1-A
Matrix: Water
Analysis Batch: 551181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550486

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	ND		4.0	1.1	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.60	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.80	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.90	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorotridecanoic acid (PFTTrDA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluoropentanesulfonic acid (PFPeS)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.80	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorononanesulfonic acid (PFNS)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.60	ng/L		09/12/24 06:56	09/14/24 14:49	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		4.0	1.0	ng/L		09/12/24 06:56	09/14/24 14:49	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		4.0	1.0	ng/L		09/12/24 06:56	09/14/24 14:49	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		4.0	1.0	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		10	2.5	ng/L		09/12/24 06:56	09/14/24 14:49	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		10	2.5	ng/L		09/12/24 06:56	09/14/24 14:49	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	4.24		3.0	1.2	ng/L		09/12/24 06:56	09/14/24 14:49	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 410-550486/1-A
Matrix: Water
Analysis Batch: 551181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550486

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	ND		2.0	0.50	ng/L		09/12/24 06:56	09/14/24 14:49	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		4.0	1.0	ng/L		09/12/24 06:56	09/14/24 14:49	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		10	2.8	ng/L		09/12/24 06:56	09/14/24 14:49	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		10	2.5	ng/L		09/12/24 06:56	09/14/24 14:49	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4-PFBA	110		5 - 130	09/12/24 06:56	09/14/24 14:49	1
13C5-PFPeA	165	*5+	40 - 130	09/12/24 06:56	09/14/24 14:49	1
13C5-PFHxA	113		40 - 130	09/12/24 06:56	09/14/24 14:49	1
13C4-PFHpA	111		40 - 130	09/12/24 06:56	09/14/24 14:49	1
13C8-PFOA	99.3		40 - 130	09/12/24 06:56	09/14/24 14:49	1
13C9-PFNA	99.6		40 - 130	09/12/24 06:56	09/14/24 14:49	1
13C6-PFDA	95.6		40 - 130	09/12/24 06:56	09/14/24 14:49	1
13C7-PFUnA	91.5		30 - 130	09/12/24 06:56	09/14/24 14:49	1
13C2-PFTeDA	106		10 - 130	09/12/24 06:56	09/14/24 14:49	1
13C3-PFBS	102		40 - 135	09/12/24 06:56	09/14/24 14:49	1
13C3-PFHxS	98.9		40 - 130	09/12/24 06:56	09/14/24 14:49	1
13C8-PFOS	92.4		40 - 130	09/12/24 06:56	09/14/24 14:49	1
13C8-PFOSA	82.4		40 - 130	09/12/24 06:56	09/14/24 14:49	1
d3-NMeFOSAA	84.2		40 - 170	09/12/24 06:56	09/14/24 14:49	1
d5-NEtFOSAA	78.3		25 - 135	09/12/24 06:56	09/14/24 14:49	1
13C2 4:2 FTS	107		40 - 200	09/12/24 06:56	09/14/24 14:49	1
13C2 6:2 FTS	92.9		40 - 200	09/12/24 06:56	09/14/24 14:49	1
13C2 8:2 FTS	94.1		40 - 300	09/12/24 06:56	09/14/24 14:49	1
13C3-HFPO-DA	99.7		40 - 130	09/12/24 06:56	09/14/24 14:49	1
D7-NMeFOSE	84.9		10 - 130	09/12/24 06:56	09/14/24 14:49	1
D9-NEtFOSE	87.0		10 - 130	09/12/24 06:56	09/14/24 14:49	1
d5-NEtPFOSA	42.5		10 - 130	09/12/24 06:56	09/14/24 14:49	1
d3-NMePFOSA	42.0		10 - 130	09/12/24 06:56	09/14/24 14:49	1
13C2 PFDoA	85.3		10 - 130	09/12/24 06:56	09/14/24 14:49	1

Lab Sample ID: LCS 410-550486/2-A
Matrix: Water
Analysis Batch: 551181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanoic acid (PFPeA)	40.0	25.5	*-	ng/L		64	65 - 135
Perfluorohexanoic acid (PFHxA)	40.0	36.7		ng/L		92	70 - 145
Perfluoroheptanoic acid (PFHpA)	40.0	36.1		ng/L		90	70 - 150
Perfluorooctanoic acid (PFOA)	40.0	37.9		ng/L		95	70 - 150
Perfluorononanoic acid (PFNA)	40.0	39.2		ng/L		98	70 - 150
Perfluorodecanoic acid (PFDA)	40.0	40.2		ng/L		101	70 - 140

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-550486/2-A

Matrix: Water

Analysis Batch: 551181

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 550486

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
Perfluoroundecanoic acid (PFUnA)	40.0	38.6		ng/L		96	70 - 145
Perfluorododecanoic acid (PFDoA)	40.0	44.2		ng/L		111	70 - 140
Perfluorotridecanoic acid (PFTrDA)	40.0	33.6		ng/L		84	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	40.0	40.7		ng/L		102	60 - 140
Perfluorobutanesulfonic acid (PFBS)	35.4	35.7		ng/L		101	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	37.5	36.9		ng/L		98	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.8		ng/L		96	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	38.1	41.0		ng/L		108	70 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	36.7		ng/L		99	55 - 150
Perfluorononanesulfonic acid (PFNS)	38.4	38.1		ng/L		99	65 - 145
Perfluorodecanesulfonic acid (PFDS)	38.6	37.8		ng/L		98	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.0		ng/L		93	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	74.7	66.4		ng/L		89	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	75.8	74.0		ng/L		98	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	76.6	68.7		ng/L		90	60 - 150
Perfluorooctanesulfonamide (PFOSA)	40.0	36.9		ng/L		92	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	40.0	44.7		ng/L		112	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	40.0	39.3		ng/L		98	65 - 145
N-methylperfluorooctanesulfonamide (NMeFOSAA)	40.0	38.6		ng/L		96	50 - 140
N-ethylperfluorooctanesulfonamide (NEtFOSAA)	40.0	38.5		ng/L		96	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	200	218		ng/L		109	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	200	178		ng/L		89	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	29.0		ng/L		97	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	37.3		ng/L		99	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	40.0	24.1		ng/L		60	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	40.0	23.7	*	ng/L		59	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	40.0	33.5		ng/L		84	50 - 150

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-550486/2-A

Matrix: Water

Analysis Batch: 551181

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 550486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
9-Chlorohexadecafluoro-3-oxan onane-1-sulfonic acid (9Cl-PF3ONS)	37.3	35.2		ng/L		94	70 - 155
11-Chloroeicosafluoro-3-oxaund ecane-1-sulfonic acid (11Cl-PF3OUdS)	37.7	36.0		ng/L		96	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	35.6	30.8		ng/L		87	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	80.0	46.7	*-	ng/L		58	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	200	145		ng/L		72	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	200	117		ng/L		59	50 - 145

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4-PFBA	118		5 - 130
13C5-PFPeA	177	*5+	40 - 130
13C5-PFHxA	119		40 - 130
13C4-PFHpA	120		40 - 130
13C8-PFOA	104		40 - 130
13C9-PFNA	108		40 - 130
13C6-PFDA	103		40 - 130
13C7-PFUnA	104		30 - 130
13C2-PFTeDA	120		10 - 130
13C3-PFBS	102		40 - 135
13C3-PFHxS	105		40 - 130
13C8-PFOS	105		40 - 130
13C8-PFOSA	91.0		40 - 130
d3-NMeFOSAA	90.4		40 - 170
d5-NEtFOSAA	90.9		25 - 135
13C2 4:2 FTS	112		40 - 200
13C2 6:2 FTS	95.4		40 - 200
13C2 8:2 FTS	101		40 - 300
13C3-HFPO-DA	108		40 - 130
D7-NMeFOSE	93.8		10 - 130
D9-NEtFOSE	105		10 - 130
d5-NEtPFOSA	52.9		10 - 130
d3-NMePFOSA	50.3		10 - 130
13C2 PFDoA	94.0		10 - 130

Lab Sample ID: LLCS 410-550486/3-A

Matrix: Water

Analysis Batch: 551181

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 550486

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	8.00	8.22		ng/L		103	70 - 140
Perfluoropentanoic acid (PFPeA)	4.00	2.92		ng/L		73	65 - 135
Perfluorohexanoic acid (PFHxA)	4.00	4.34		ng/L		109	70 - 145
Perfluoroheptanoic acid (PFHpA)	4.00	4.17		ng/L		104	70 - 150
Perfluorooctanoic acid (PFOA)	4.00	4.77		ng/L		119	70 - 150

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 410-550486/3-A

Matrix: Water

Analysis Batch: 551181

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 550486

Analyte	Spike	LLCS	LLCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
Perfluorononanoic acid (PFNA)	4.00	4.41		ng/L		110	70 - 150
Perfluorodecanoic acid (PFDA)	4.00	4.98		ng/L		124	70 - 140
Perfluoroundecanoic acid (PFUnA)	4.00	4.20		ng/L		105	70 - 145
Perfluorododecanoic acid (PFDoA)	4.00	4.96		ng/L		124	70 - 140
Perfluorotridecanoic acid (PFTrDA)	4.00	3.44		ng/L		86	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	4.00	4.36		ng/L		109	60 - 140
Perfluorobutanesulfonic acid (PFBS)	3.54	4.02		ng/L		114	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	3.75	4.32		ng/L		115	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	3.64	4.49		ng/L		123	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	3.81	4.46		ng/L		117	70 - 150
Perfluorooctanesulfonic acid (PFOS)	3.71	4.38		ng/L		118	55 - 150
Perfluorononanesulfonic acid (PFNS)	3.84	4.39		ng/L		114	65 - 145
Perfluorodecanesulfonic acid (PFDS)	3.86	4.24		ng/L		110	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	3.87	4.03		ng/L		104	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	7.47	7.30		ng/L		98	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	7.58	8.60		ng/L		113	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.66	8.35		ng/L		109	60 - 150
Perfluorooctanesulfonamide (PFOSA)	4.00	4.07		ng/L		102	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	4.00	5.05		ng/L		126	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	4.00	4.39		ng/L		110	65 - 145
N-methylperfluorooctanesulfonamide (NMeFOSAA)	4.00	4.08		ng/L		102	50 - 140
N-ethylperfluorooctanesulfonamide (NEtFOSAA)	4.00	4.72		ng/L		118	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	20.0	28.2		ng/L		141	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	20.0	19.6		ng/L		98	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.00	4.51	*+	ng/L		150	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	3.77	4.24		ng/L		112	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.00	2.94		ng/L		74	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.00	2.81		ng/L		70	60 - 150

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 410-550486/3-A
Matrix: Water
Analysis Batch: 551181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550486

Analyte	Spike Added	LLCS	LLCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Nonafluoro-3,6-dioxheptanoic acid (NFDHA)	4.00	4.42		ng/L		110	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	3.73	4.23		ng/L		113	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	3.77	4.23		ng/L		112	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	3.56	3.59		ng/L		101	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	8.00	5.39		ng/L		67	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	20.0	15.7		ng/L		79	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	20.0	11.8		ng/L		59	50 - 145

Isotope Dilution	LLCS	LLCS	Limits
	%Recovery	Qualifier	
13C4-PFBA	113		5 - 130
13C5-PFPeA	167	*5+	40 - 130
13C5-PFHxA	113		40 - 130
13C4-PFHpA	117		40 - 130
13C8-PFOA	99.9		40 - 130
13C9-PFNA	98.9		40 - 130
13C6-PFDA	97.8		40 - 130
13C7-PFUnA	105		30 - 130
13C2-PFTeDA	126		10 - 130
13C3-PFBS	101		40 - 135
13C3-PFHxS	97.1		40 - 130
13C8-PFOS	96.5		40 - 130
13C8-PFOSA	83.3		40 - 130
d3-NMeFOSAA	87.0		40 - 170
d5-NEtFOSAA	81.9		25 - 135
13C2 4:2 FTS	111		40 - 200
13C2 6:2 FTS	93.3		40 - 200
13C2 8:2 FTS	93.8		40 - 300
13C3-HFPO-DA	101		40 - 130
D7-NMeFOSE	79.8		10 - 130
D9-NEtFOSE	81.6		10 - 130
d5-NEtPFOSA	42.2		10 - 130
d3-NMePFOSA	40.5		10 - 130
13C2 PFDoA	88.9		10 - 130

Lab Sample ID: MB 410-552370/1-A
Matrix: Water
Analysis Batch: 553158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 552370

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	ND		4.0	1.1	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.60	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 410-552370/1-A

Matrix: Water

Analysis Batch: 553158

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 552370

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.80	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.90	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorotridecanoic acid (PFTTrDA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluoropentanesulfonic acid (PFPeS)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.80	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorononanesulfonic acid (PFNS)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.60	ng/L		09/17/24 15:20	09/19/24 11:00	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		4.0	1.0	ng/L		09/17/24 15:20	09/19/24 11:00	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		4.0	1.0	ng/L		09/17/24 15:20	09/19/24 11:00	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		4.0	1.0	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		10	2.5	ng/L		09/17/24 15:20	09/19/24 11:00	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		10	2.5	ng/L		09/17/24 15:20	09/19/24 11:00	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		3.0	1.2	ng/L		09/17/24 15:20	09/19/24 11:00	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		2.0	0.50	ng/L		09/17/24 15:20	09/19/24 11:00	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 410-552370/1-A

Matrix: Water

Analysis Batch: 553158

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 552370

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		4.0	1.0	ng/L		09/17/24 15:20	09/19/24 11:00	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		10	2.8	ng/L		09/17/24 15:20	09/19/24 11:00	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		10	2.5	ng/L		09/17/24 15:20	09/19/24 11:00	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4-PFBA	74.7		5 - 130	09/17/24 15:20	09/19/24 11:00	1
13C5-PFPeA	60.5		40 - 130	09/17/24 15:20	09/19/24 11:00	1
13C5-PFHxA	59.5		40 - 130	09/17/24 15:20	09/19/24 11:00	1
13C4-PFHpA	62.3		40 - 130	09/17/24 15:20	09/19/24 11:00	1
13C8-PFOA	65.3		40 - 130	09/17/24 15:20	09/19/24 11:00	1
13C9-PFNA	63.7		40 - 130	09/17/24 15:20	09/19/24 11:00	1
13C6-PFDA	60.2		40 - 130	09/17/24 15:20	09/19/24 11:00	1
13C7-PFUnA	63.8		30 - 130	09/17/24 15:20	09/19/24 11:00	1
13C2-PFTeDA	50.4		10 - 130	09/17/24 15:20	09/19/24 11:00	1
13C3-PFBS	61.9		40 - 135	09/17/24 15:20	09/19/24 11:00	1
13C3-PFHxS	60.2		40 - 130	09/17/24 15:20	09/19/24 11:00	1
13C8-PFOS	62.7		40 - 130	09/17/24 15:20	09/19/24 11:00	1
13C8-PFOSA	61.3		40 - 130	09/17/24 15:20	09/19/24 11:00	1
d3-NMeFOSAA	75.5		40 - 170	09/17/24 15:20	09/19/24 11:00	1
d5-NEtFOSAA	83.7		25 - 135	09/17/24 15:20	09/19/24 11:00	1
13C2 4:2 FTS	88.2		40 - 200	09/17/24 15:20	09/19/24 11:00	1
13C2 6:2 FTS	75.1		40 - 200	09/17/24 15:20	09/19/24 11:00	1
13C2 8:2 FTS	68.2		40 - 300	09/17/24 15:20	09/19/24 11:00	1
13C3-HFPO-DA	59.8		40 - 130	09/17/24 15:20	09/19/24 11:00	1
D7-NMeFOSE	35.3		10 - 130	09/17/24 15:20	09/19/24 11:00	1
D9-NEtFOSE	28.9		10 - 130	09/17/24 15:20	09/19/24 11:00	1
d5-NEtPFOSA	42.5		10 - 130	09/17/24 15:20	09/19/24 11:00	1
d3-NMePFOSA	44.2		10 - 130	09/17/24 15:20	09/19/24 11:00	1
13C2 PFDaA	59.8		10 - 130	09/17/24 15:20	09/19/24 11:00	1

Lab Sample ID: LCS 410-552370/2-A

Matrix: Water

Analysis Batch: 553158

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 552370

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanoic acid (PFPeA)	40.0	47.5		ng/L		119	65 - 135
Perfluorohexanoic acid (PFHxA)	40.0	48.2		ng/L		120	70 - 145
Perfluoroheptanoic acid (PFHpA)	40.0	46.4		ng/L		116	70 - 150
Perfluorooctanoic acid (PFOA)	40.0	50.1		ng/L		125	70 - 150
Perfluorononanoic acid (PFNA)	40.0	47.1		ng/L		118	70 - 150
Perfluorodecanoic acid (PFDA)	40.0	47.7		ng/L		119	70 - 140
Perfluoroundecanoic acid (PFUnA)	40.0	57.5		ng/L		144	70 - 145
Perfluorododecanoic acid (PFDaA)	40.0	57.1	*+	ng/L		143	70 - 140

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-552370/2-A

Matrix: Water

Analysis Batch: 553158

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 552370

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorotridecanoic acid (PFTTrDA)	40.0	48.3		ng/L		121	65 - 140
Perfluorotetradecanoic acid (PFTTeDA)	40.0	45.7		ng/L		114	60 - 140
Perfluorobutanesulfonic acid (PFBS)	35.4	42.3		ng/L		120	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	37.5	44.9		ng/L		120	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	36.4	42.7		ng/L		117	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	38.1	41.7		ng/L		110	70 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	42.6		ng/L		115	55 - 150
Perfluorononanesulfonic acid (PFNS)	38.4	40.6		ng/L		106	65 - 145
Perfluorodecanesulfonic acid (PFDS)	38.6	39.5		ng/L		102	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	38.7	35.5		ng/L		92	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	74.7	77.3		ng/L		103	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	75.8	85.3		ng/L		113	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	76.6	84.8		ng/L		111	60 - 150
Perfluorooctanesulfonamide (PFOSA)	40.0	45.5		ng/L		114	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	40.0	50.0		ng/L		125	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	40.0	47.4		ng/L		119	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	46.5		ng/L		116	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	46.9		ng/L		117	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	200	237		ng/L		118	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	200	241		ng/L		120	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	37.6		ng/L		125	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	44.1		ng/L		117	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	40.0	44.7		ng/L		112	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	40.0	47.5		ng/L		119	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	40.0	45.7		ng/L		114	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	37.3	41.2		ng/L		111	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	37.7	40.5		ng/L		108	55 - 160

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-552370/2-A

Matrix: Water

Analysis Batch: 553158

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 552370

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	35.6	36.7		ng/L		103	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	80.0	89.4		ng/L		112	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	200	188		ng/L		94	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	200	175		ng/L		88	50 - 145

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4-PFBA	79.0		5 - 130
13C5-PFPeA	73.5		40 - 130
13C5-PFHxA	74.1		40 - 130
13C4-PFHpA	74.0		40 - 130
13C8-PFOA	75.1		40 - 130
13C9-PFNA	74.4		40 - 130
13C6-PFDA	73.1		40 - 130
13C7-PFUnA	77.7		30 - 130
13C2-PFTeDA	60.0		10 - 130
13C3-PFBS	78.2		40 - 135
13C3-PFHxS	77.9		40 - 130
13C8-PFOS	76.7		40 - 130
13C8-PFOSA	68.8		40 - 130
d3-NMeFOSAA	87.3		40 - 170
d5-NEtFOSAA	98.0		25 - 135
13C2 4:2 FTS	98.2		40 - 200
13C2 6:2 FTS	93.9		40 - 200
13C2 8:2 FTS	84.1		40 - 300
13C3-HFPO-DA	70.8		40 - 130
D7-NMeFOSE	43.1		10 - 130
D9-NEtFOSE	34.4		10 - 130
d5-NEtPFOSA	52.9		10 - 130
d3-NMePFOSA	54.6		10 - 130
13C2 PFDoA	71.9		10 - 130

Lab Sample ID: LCSD 410-552370/3-A

Matrix: Water

Analysis Batch: 553158

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 552370

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	80.0	94.7		ng/L		118	70 - 140	3	30
Perfluoropentanoic acid (PFPeA)	40.0	48.0		ng/L		120	65 - 135	1	30
Perfluorohexanoic acid (PFHxA)	40.0	49.4		ng/L		123	70 - 145	2	30
Perfluoroheptanoic acid (PFHpA)	40.0	48.7		ng/L		122	70 - 150	5	30
Perfluorooctanoic acid (PFOA)	40.0	48.4		ng/L		121	70 - 150	3	30
Perfluorononanoic acid (PFNA)	40.0	46.9		ng/L		117	70 - 150	0	30
Perfluorodecanoic acid (PFDA)	40.0	49.4		ng/L		123	70 - 140	3	30
Perfluoroundecanoic acid (PFUnA)	40.0	63.1	*+	ng/L		158	70 - 145	9	30

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCSD 410-552370/3-A

Matrix: Water

Analysis Batch: 553158

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 552370

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD
									Limit
Perfluorododecanoic acid (PFDoA)	40.0	60.7	*+	ng/L		152	70 - 140	6	30
Perfluorotridecanoic acid (PFTrDA)	40.0	53.5		ng/L		134	65 - 140	10	30
Perfluorotetradecanoic acid (PFTeDA)	40.0	45.0		ng/L		113	60 - 140	2	30
Perfluorobutanesulfonic acid (PFBS)	35.4	46.1		ng/L		130	60 - 145	9	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	43.1		ng/L		115	65 - 140	4	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	41.7		ng/L		115	65 - 145	2	30
Perfluoroheptanesulfonic acid (PFHpS)	38.1	40.3		ng/L		106	70 - 150	3	30
Perfluorooctanesulfonic acid (PFOS)	37.1	42.8		ng/L		115	55 - 150	1	30
Perfluorononanesulfonic acid (PFNS)	38.4	42.0		ng/L		109	65 - 145	3	30
Perfluorodecanesulfonic acid (PFDS)	38.6	39.5		ng/L		102	60 - 145	0	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	38.7		ng/L		100	50 - 145	9	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	74.7	80.6		ng/L		108	70 - 145	4	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	75.8	91.4		ng/L		121	65 - 155	7	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	76.6	87.9		ng/L		115	60 - 150	4	30
Perfluorooctanesulfonamide (PFOSA)	40.0	44.0		ng/L		110	70 - 145	3	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	40.0	46.5		ng/L		116	60 - 150	7	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	40.0	44.8		ng/L		112	65 - 145	6	30
N-methylperfluorooctanesulfonamide (NMeFOSAA)	40.0	44.6		ng/L		112	50 - 140	4	30
N-ethylperfluorooctanesulfonamide (NEtFOSAA)	40.0	46.3		ng/L		116	70 - 145	1	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	200	234		ng/L		117	70 - 145	1	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	200	231		ng/L		115	70 - 135	4	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	37.7		ng/L		126	70 - 140	0	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	47.9		ng/L		127	65 - 145	8	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	40.0	44.1		ng/L		110	55 - 140	1	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	40.0	48.7		ng/L		122	60 - 150	2	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	40.0	48.9		ng/L		122	50 - 150	7	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	37.3	55.0		ng/L		148	70 - 155	29	30

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCSD 410-552370/3-A
Matrix: Water
Analysis Batch: 553158

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 552370

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	37.7	57.9	*1	ng/L		154	55 - 160	35	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	35.6	42.7		ng/L		120	70 - 140	15	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	80.0	80.2		ng/L		100	65 - 130	11	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	200	175		ng/L		88	70 - 135	7	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	200	195		ng/L		98	50 - 145	11	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	LCSD Limits
13C4-PFBA	48.9		5 - 130
13C5-PFPeA	44.2		40 - 130
13C5-PFHxA	47.5		40 - 130
13C4-PFHpA	50.9		40 - 130
13C8-PFOA	61.3		40 - 130
13C9-PFNA	61.7		40 - 130
13C6-PFDA	59.3		40 - 130
13C7-PFUnA	63.5		30 - 130
13C2-PFTeDA	57.8		10 - 130
13C3-PFBS	57.7		40 - 135
13C3-PFHxS	63.5		40 - 130
13C8-PFOS	64.2		40 - 130
13C8-PFOSA	50.7		40 - 130
d3-NMeFOSAA	75.2		40 - 170
d5-NEtFOSAA	78.2		25 - 135
13C2 4:2 FTS	61.7		40 - 200
13C2 6:2 FTS	71.9		40 - 200
13C2 8:2 FTS	71.7		40 - 300
13C3-HFPO-DA	43.6		40 - 130
D7-NMeFOSE	45.5		10 - 130
D9-NEtFOSE	39.3		10 - 130
d5-NEtPFOSA	45.9		10 - 130
d3-NMePFOSA	44.2		10 - 130
13C2 PFDoA	63.4		10 - 130

Lab Sample ID: LLCS 410-552370/4-A
Matrix: Water
Analysis Batch: 553158

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 552370

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	8.00	9.67		ng/L		121	70 - 140
Perfluoropentanoic acid (PFPeA)	4.00	4.69		ng/L		117	65 - 135
Perfluorohexanoic acid (PFHxA)	4.00	4.92		ng/L		123	70 - 145
Perfluoroheptanoic acid (PFHpA)	4.00	4.82		ng/L		121	70 - 150
Perfluorooctanoic acid (PFOA)	4.00	4.47		ng/L		112	70 - 150
Perfluorononanoic acid (PFNA)	4.00	4.68		ng/L		117	70 - 150
Perfluorodecanoic acid (PFDA)	4.00	4.52		ng/L		113	70 - 140

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 410-552370/4-A

Matrix: Water

Analysis Batch: 553158

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 552370

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	4.00	5.46		ng/L		136	70 - 145
Perfluorododecanoic acid (PFDoA)	4.00	5.74	*+	ng/L		143	70 - 140
Perfluorotridecanoic acid (PFTrDA)	4.00	4.92		ng/L		123	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	4.00	4.58		ng/L		115	60 - 140
Perfluorobutanesulfonic acid (PFBS)	3.54	4.04		ng/L		114	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	3.75	4.79		ng/L		128	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	3.64	4.51		ng/L		124	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	3.81	3.75		ng/L		99	70 - 150
Perfluorooctanesulfonic acid (PFOS)	3.71	4.85		ng/L		131	55 - 150
Perfluorononanesulfonic acid (PFNS)	3.84	4.13		ng/L		108	65 - 145
Perfluorodecanesulfonic acid (PFDS)	3.86	3.54		ng/L		92	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	3.87	3.49		ng/L		90	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	7.47	8.83		ng/L		118	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	7.58	9.64		ng/L		127	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.66	10.3		ng/L		134	60 - 150
Perfluorooctanesulfonamide (PFOSA)	4.00	4.16		ng/L		104	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	4.00	5.13		ng/L		128	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	4.00	4.58		ng/L		115	65 - 145
N-methylperfluorooctanesulfonamide (NMeFOSAA)	4.00	4.27		ng/L		107	50 - 140
N-ethylperfluorooctanesulfonamide (NEtFOSAA)	4.00	4.05		ng/L		101	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	20.0	22.3		ng/L		111	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	20.0	22.0		ng/L		110	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.00	3.75		ng/L		125	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	3.77	4.02		ng/L		107	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.00	4.27		ng/L		107	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.00	4.36		ng/L		109	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.00	4.11		ng/L		103	50 - 150

QC Sample Results

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 410-552370/4-A

Matrix: Water

Analysis Batch: 553158

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 552370

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
9-Chlorohexadecafluoro-3-oxan onane-1-sulfonic acid (9Cl-PF3ONS)	3.73	3.13		ng/L		84	70 - 155
11-Chloroeicosafluoro-3-oxaund ecane-1-sulfonic acid (11Cl-PF3OUdS)	3.77	3.17		ng/L		84	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	3.56	3.02		ng/L		85	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	8.00	9.35		ng/L		117	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	20.0	21.0		ng/L		105	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	20.0	17.5		ng/L		87	50 - 145

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
13C4-PFBA	82.2		5 - 130
13C5-PFPeA	70.8		40 - 130
13C5-PFHxA	68.8		40 - 130
13C4-PFHpA	63.7		40 - 130
13C8-PFOA	66.0		40 - 130
13C9-PFNA	62.6		40 - 130
13C6-PFDA	60.6		40 - 130
13C7-PFUnA	60.7		30 - 130
13C2-PFTeDA	48.5		10 - 130
13C3-PFBS	68.8		40 - 135
13C3-PFHxS	63.4		40 - 130
13C8-PFOS	59.7		40 - 130
13C8-PFOSA	62.3		40 - 130
d3-NMeFOSAA	75.2		40 - 170
d5-NEtFOSAA	81.1		25 - 135
13C2 4:2 FTS	103		40 - 200
13C2 6:2 FTS	84.2		40 - 200
13C2 8:2 FTS	73.4		40 - 300
13C3-HFPO-DA	66.4		40 - 130
D7-NMeFOSE	41.0		10 - 130
D9-NEtFOSE	35.4		10 - 130
d5-NEtPFOSA	43.7		10 - 130
d3-NMePFOSA	44.3		10 - 130
13C2 PFDoA	57.0		10 - 130

QC Association Summary

Client: Stantec Consulting Services, Inc.
 Project/Site: Main Campus PFAS

Job ID: 410-187434-1

LCMS

Prep Batch: 550486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-550486/1-A	Method Blank	Total/NA	Water	1633	
LCS 410-550486/2-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 410-550486/3-A	Lab Control Sample	Total/NA	Water	1633	

Analysis Batch: 551181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-550486/1-A	Method Blank	Total/NA	Water	Draft-4 1633	550486
LCS 410-550486/2-A	Lab Control Sample	Total/NA	Water	Draft-4 1633	550486
LLCS 410-550486/3-A	Lab Control Sample	Total/NA	Water	Draft-4 1633	550486

Prep Batch: 552370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-187434-1	EB-PFAS	Total/NA	Water	1633	
410-187434-2	MW-6	Total/NA	Water	1633	
410-187434-3	MW-7	Total/NA	Water	1633	
410-187434-4	DUP-01	Total/NA	Water	1633	
MB 410-552370/1-A	Method Blank	Total/NA	Water	1633	
LCS 410-552370/2-A	Lab Control Sample	Total/NA	Water	1633	
LCSD 410-552370/3-A	Lab Control Sample Dup	Total/NA	Water	1633	
LLCS 410-552370/4-A	Lab Control Sample	Total/NA	Water	1633	

Analysis Batch: 553158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-187434-1	EB-PFAS	Total/NA	Water	Draft-4 1633	552370
410-187434-2	MW-6	Total/NA	Water	Draft-4 1633	552370
410-187434-3	MW-7	Total/NA	Water	Draft-4 1633	552370
410-187434-4	DUP-01	Total/NA	Water	Draft-4 1633	552370
MB 410-552370/1-A	Method Blank	Total/NA	Water	Draft-4 1633	552370
LCS 410-552370/2-A	Lab Control Sample	Total/NA	Water	Draft-4 1633	552370
LCSD 410-552370/3-A	Lab Control Sample Dup	Total/NA	Water	Draft-4 1633	552370
LLCS 410-552370/4-A	Lab Control Sample	Total/NA	Water	Draft-4 1633	552370

Lab Chronicle

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Client Sample ID: EB-PFAS

Lab Sample ID: 410-187434-1

Date Collected: 09/04/24 15:10

Matrix: Water

Date Received: 09/10/24 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			552370	XBL5	ELLE	09/17/24 15:21
Total/NA	Analysis	Draft-4 1633		1	553158	QY4X	ELLE	09/19/24 14:24

Client Sample ID: MW-6

Lab Sample ID: 410-187434-2

Date Collected: 09/04/24 15:37

Matrix: Water

Date Received: 09/10/24 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			552370	XBL5	ELLE	09/17/24 15:21
Total/NA	Analysis	Draft-4 1633		1	553158	QY4X	ELLE	09/19/24 14:38

Client Sample ID: MW-7

Lab Sample ID: 410-187434-3

Date Collected: 09/05/24 13:13

Matrix: Water

Date Received: 09/10/24 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			552370	XBL5	ELLE	09/17/24 15:21
Total/NA	Analysis	Draft-4 1633		1	553158	QY4X	ELLE	09/19/24 14:52

Client Sample ID: DUP-01

Lab Sample ID: 410-187434-4

Date Collected: 09/05/24 07:00

Matrix: Water

Date Received: 09/10/24 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			552370	XBL5	ELLE	09/17/24 15:21
Total/NA	Analysis	Draft-4 1633		1	553158	QY4X	ELLE	09/19/24 15:05

Laboratory References:

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

Accreditation/Certification Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Draft-4 1633	1633	Water	Perfluoro-4-methoxybutanoic acid (PFMBA)



Method Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Method	Method Description	Protocol	Laboratory
Draft-4 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	ELLE
1633	Solid-Phase Extraction (SPE)	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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



Sample Summary

Client: Stantec Consulting Services, Inc.
Project/Site: Main Campus PFAS

Job ID: 410-187434-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-187434-1	EB-PFAS	Water	09/04/24 15:10	09/10/24 10:30
410-187434-2	MW-6	Water	09/04/24 15:37	09/10/24 10:30
410-187434-3	MW-7	Water	09/05/24 13:13	09/10/24 10:30
410-187434-4	DUP-01	Water	09/05/24 07:00	09/10/24 10:30

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



410-187434 Chain of Custody

nvironme

Chain of Custody Record



Environment Testing

Sampler: <u>Sean Clary</u>	Lab PM: <u>Carter, Amek</u>	Carrier Tracking No(s):	COC No: <u>410-130089-2634;1</u>
Phone: <u>515 253 0830</u>	E-Mail: <u>Loran.Carter@et.eurofinsus.com</u>	State of Origin: <u>IA</u>	Page: <u>Page 1 of 1</u>

Steve Varsa Company: <u>Stantec Consulting Services, Inc.</u> Address: <u>11311 Aurora Avenue</u> City: <u>Des Moines</u> State, Zip: <u>IA, 50322-7904</u> Phone: _____ Email: <u>steve.varsa@stantec.com</u> Project Name: <u>Main Campus PFAS</u> Site: _____	PWSID: _____	Analysis Requested	Job #: <u>193709909</u>
Due Date Requested:	TAT Requested (days): <u>STD</u>	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 1633 - 40 PFAS Compounds	Total Number of Containers
Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	PO #: <u>193709909</u>		
Project #: <u>41015906</u>	WO #: _____		
SSOW#: _____	Project #: _____	Other: _____	Preservation Codes: N - None

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)	1633 - 40 PFAS Compounds	Total Number of Containers	Special Instructions/Note:
EB-PFAS	9/4/2024	1510	G	Water	-	X	_____	2	_____
MW-6	9/4/2024	1537	G	Water	-	X	_____	2	_____
MW-7	9/5/2024	1313	G	Water	-	X	_____	2	_____
DUP-01	9/5/2024	0700	G	Water	-	X	_____	2	_____

Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Deliverable Requested: <u>I, II, III, IV, Other (specify)</u>	Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____	Date: _____	Time: _____	Method of Shipment: _____
Relinquished by: <u>Sean R Clary</u>	Date/Time: <u>9/4/2024 1700</u>	Company: <u>STW</u>	Received by: _____
Relinquished by: _____	Date/Time: _____	Company: _____	Received by: _____
Relinquished by: _____	Date/Time: _____	Company: _____	Received by: <u>JM</u>
			Date/Time: <u>9/10/24 10:30</u>

Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.: _____	Cooler temperature(s) °C and Other Remarks: <u>12 - 0.8 C: 0.8</u>
---	-------------------------	--

Handwritten initials



Login Sample Receipt Checklist

Client: Stantec Consulting Services, Inc.

Job Number: 410-187434-1

Login Number: 187434

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

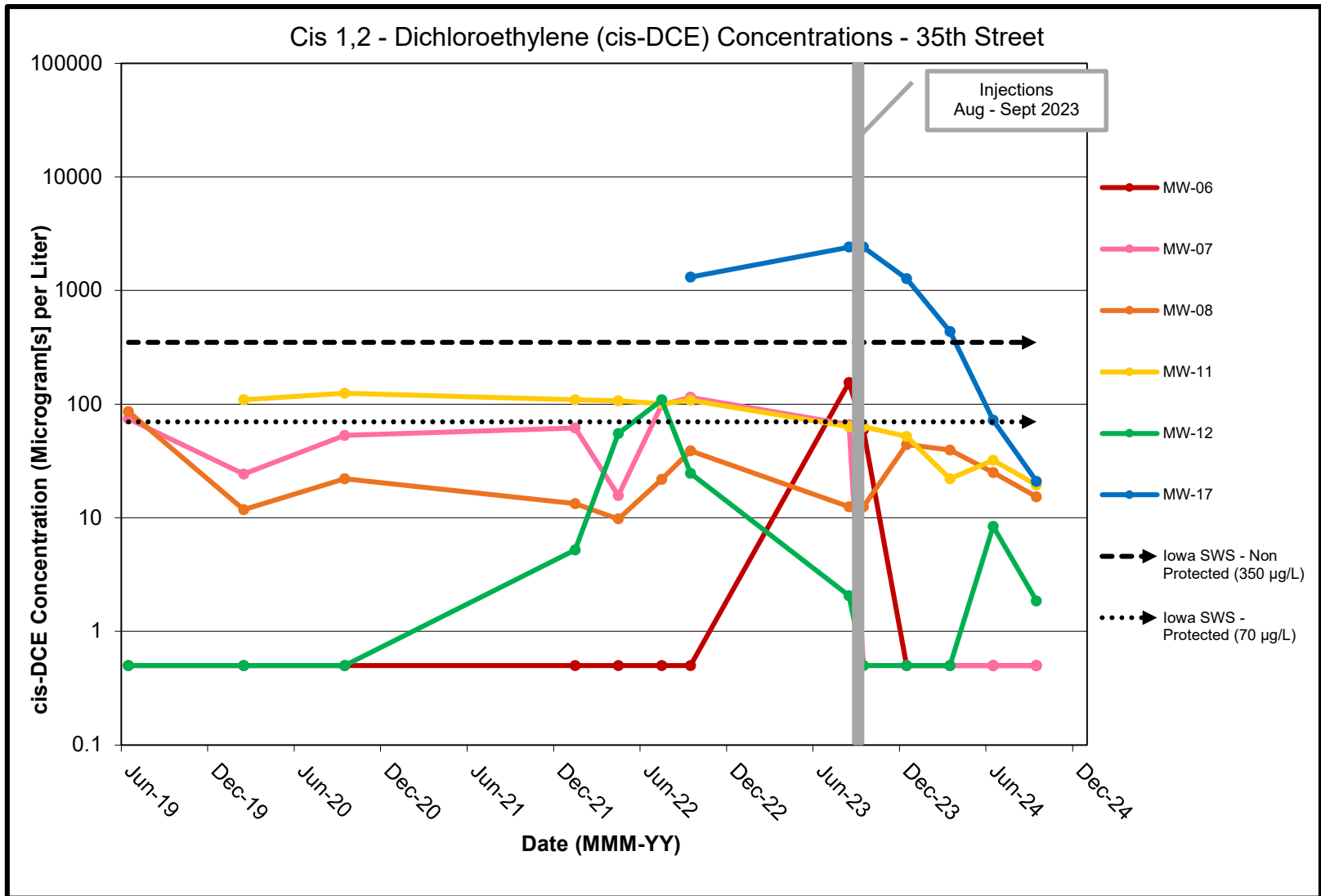
Creator: Arroyo, Haley

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

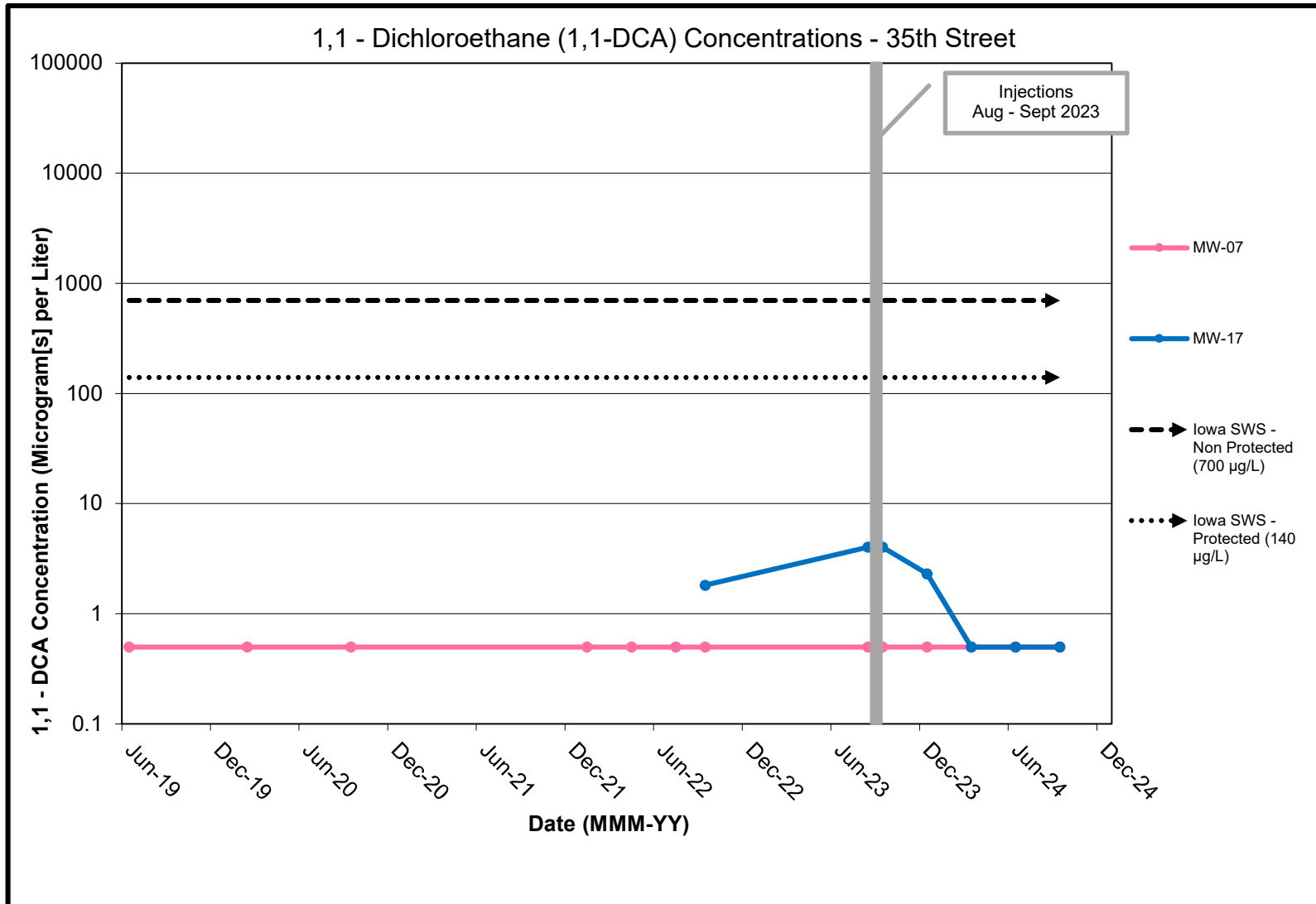


ATTACHMENT C

**GROUNDWATER ANALYTICAL RESULTS - Cis DCE
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA**



GROUNDWATER ANALYTICAL RESULTS - 1,1 DCA
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA



GROUNDWATER ANALYTICAL RESULTS - VC
ROCKWELL COLLINS
855 35TH STREET - CEDAR RAPIDS, IOWA

