Texas Commission on Environmental Quality

Remediation Division Correspondence Identification Form

SITE & PROGRAM AREA IDENTIFICATION					
SITE LOCATION				**REMEDIATION DIVISION PROGRAM AND FACILITY IDENTIFICATION**	
Site Name: **Former Cameron Iron Works Facility**				Is This Site Being Managed Under A State Lead Contract? ☐ Yes ☑ No	
Address 1: **1000 Silber Road**				Program Area: **VOLUNTARY CLEANUP PROGRAM**	
Address 2:				Mail Code: **MC-221**	
City: **Houston**		State: **Texas**		Is This A New Site To This Program Area? ☐ Yes ☑ No	
Zip Code: **77055**	County: **Harris**			**VCP No.:**	**221**
TCEQ Region: **Region 12 - Houston**				**--Leave This Field Blank--**	**--Leave This Field Blank--**

DOCUMENT(S) IDENTIFICATION		
	PHASE OF REMEDIATION	**DOCUMENT NAME**
1.	**REMEDIATION**	**RESPONSE ACTION EFFECTIVENESS REPORT (RAER)**
2.		
3.		
4.		
5.		

CONTACT INFORMATION

RESPONSIBLE PARTY/APPLICANT/CUSTOMER

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TCEQ INTERNAL USE ONLY			
Document No.	TCEQ Database Term	Document No.	TCEQ Database Term
1.	**RAER**	4.	
2.		5.	
3.			

2021 Response Action Effectiveness Report

Voluntary Cleanup Program No. 221
Former Cameron Iron Works Facility
1000 Silber Road, Houston, Texas

March 2022

Prepared for:

CAMERON

Prepared by:

ch2m

Cameron International Corporation
121 Industrial Blvd.
Sugar Land, TX 77478
Tel: (318) 393-6480

March 30, 2022

Mrs. Vitalie Morrison, Project Manager
Voluntary Cleanup Section
Texas Commission on Environmental Quality
Mail Code 221
12100 Park 35 Circle, Building D
Austin, Texas 78753

Subject: **2021 Response Action Effectiveness Report**
Former Cameron Iron Works Facility
1000 Silber Road, Houston, Texas
Voluntary Cleanup Program (VCP) No. 221
RN101474880; CN600374821

Dear Mrs. Morrison,

Cameron International Corporation (Cameron), a Schlumberger Company, is pleased to provide the 2021 Response Action Effectiveness Report for the Former Cameron Iron Works Facility located at 1000 Silber Road in Houston, Harris County, Texas.

This report fulfills the annual progress reporting requirements set forth in the Groundwater Response Action Plan (RAP) and RAP Addendum approved by the Texas Commission on Environmental Quality. A chronology of corrective actions and groundwater monitoring for January through December 2021 is included, along with maps, data results tables, and a 2022 schedule of events.

Please contact me at (318) 393-6480 with any questions or concerns. I can also be reached by e-mail at DGreening@slb.com.

Sincerely,

Dawn Greening
Remediation Manager on behalf of Cameron

Bret R Rahe, P.G. (Texas, 2798)
Senior Hydrogeologist, CH2M HILL Engineers, Inc.

c: Alma L. Jefferson, Region 12 Waste Section Manager
Matthew Parish, Taunton, Snyder & Slade
Monica Schneider, CH2M HILL Engineers, Inc.
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2021 Response Action Effectiveness Report

Voluntary Cleanup Program No. 221

Former Cameron Iron Works Facility
1000 Silber Road, Houston, Texas

Prepared for

Cameron International Corporation

March 2022

ch2m

Geoscientist Signature/Seal

The *2021 Response Action Effectiveness Report, Former Cameron Iron Works Facility, Houston, Texas,* dated March 2022, has been prepared under my supervision. I believe the report to be accurate and suitable for the intended purpose.

Bret R. Rahe	2798	November 30, 2022
Professional Geoscientist TBPG Firm No. 50264	Geoscientist License No.	Expiration Date
Signature	3/30/2022 Date	
210-403-6326 Telephone No.	210-494-4525 Fax No.	Bret.Rahe@jacobs.com Email

Seals, as applicable:

Contents

Figures

Acronyms and Abbreviations

AAL	attenuation action level
AMP	attenuation monitoring point
Cameron	Cameron International Corporation (a Schlumberger Company)
CH2M	CH2M HILL Engineers, Inc.
COC	chemical of concern
cPCL	critical protective concentration level
1,1-DCA	1,1-dichloroethane
1,2-DCA	1,2-dichloroethane
1,1-DCE	1,1-dichloroethene
cis-1,2-DCE	cis-1,2-dichloroethene
DPT	direct-push technology
ERM	Environmental Resources Management Group, Inc.
GAC	granular activated carbon
HCFCD	Harris County Flood Control Ditch
I-10	Interstate Highway 10
mg/L	milligrams per liter
MK	Mann-Kendall
MNA	monitored natural attenuation
PCE	tetrachloroethene
PCL	protective concentration level
PCLE	protective concentration level exceedance
PMZ	plume management zone
POE	point of exposure
RAER	Response Action Effectiveness Report
RAP	Response Action Plan
site	Former Cameron Iron Works Facility, 1000 Silber Road, Houston, Texas
TCE	trichloroethene
TCEQ	Texas Commission on Environmental Quality
TRRP	Texas Risk Reduction Program
VC	vinyl chloride
VOC	volatile organic compound

SECTION 1

Introduction

This 2021 Response Action Effectiveness Report (RAER) fulfills the annual progress reporting requirements at the Former Cameron Iron Works Facility, for Cameron International Corporation (Cameron; a Schlumberger Company), as set forth in the Response Action Plan (RAP) dated August 28, 2003 (Environmental Resources Management Group, Inc. [ERM] 2003), subsequently modified in the July 2009 RAP Addendum (ERM 2009), and recently modified in the February 2018 RAP Addendum (CH2M HILL Engineers, Inc. [CH2M] 2018). The Texas Commission on Environmental Quality (TCEQ) conditionally approved the 2018 RAP Addendum with comments on February 7, 2019 (TCEQ 2019). On April 28, 2020, the Response to TCEQ Comments on the 2018 RAP Addendum, which included a revised RAP Addendum, was submitted to TCEQ (CH2M 2020).

In the revised RAP Addendum, discontinuing the semiannual sampling event was proposed and subsequently approved by TCEQ via email on June 4, 2020 (TCEQ 2020). In addition, Cameron planned to continue sampling groundwater and surface water for an additional 2 years until December 2021, providing a total of 5 years of data (2017 through 2021) that will be used to verify plume stability with the North and South Treatment Systems shut down and to evaluate an alternate response action if needed to supplement the monitored natural attenuation (MNA) remedy. The onsite plume is dilute with relatively low chemical of concern (COC) concentrations. As a result, continued operation of the North Treatment System would not be necessary to efficiently contain and treat the low-COC-concentration plume.

On August 31, 2021, TCEQ provided comments on the 2020 RAER (CH2M 2021a) dated March 30, 2021, and requested a written response for each comment (TCEQ 2021). On October 29, 2021, Cameron submitted a Response to TCEQ Comments on the 2020 RAER (CH2M 2021b). On January 24, 2022, TCEQ provided additional comments, following review of the response to TCEQ comments dated October 29, 2021 (TCEQ 2022). This RAER addresses TCEQ comments (TCEQ 2021; 2022), including the following:

- Update the current plume management zone (PMZ) monitoring network to have only point of exposure (POE) wells along the southern downgradient boundary of the PMZ.
- Include all historical COC concentration data and updated concentration trend graphs for all existing monitor wells.
- Evaluate plume stability and effectiveness of MNA, per the Texas Risk Reduction Program (TRRP)-33 guidance document (TCEQ 2010) using site monitoring data collected from 2015 through 2021.

Based on the property owner's demand to remove the South Treatment System and monitor well MW-173 from their property, Cameron proposed to decommission the South Treatment System and abandon MW-173 prior to the end of the access agreement (in August 2022) in the 2020 RAER (CH2M 2021a). TCEQ approved decommissioning of the South Treatment System on August 31, 2021 (TCEQ 2021a) and requested that the decommissioning be documented in the RAER for 2021. Decommissioning activities and of the replacement of MW-173 are included in this report.

The RAER requirements supplemental to those addressed in the 2003 RAP and the 2009 and 2018 RAP Addendums are included in this report and are as follows:

- Chronology of activities for the period of January 1 to December 31, 2021
- Tabulation of groundwater elevations
- Groundwater elevation map
- Tabulation of groundwater sampling analytical results
- Maps showing the delineation and concentration of site COCs
- MNA Evaluation

- Changes in the monitor well network in 2021
- Updated schedule of events planned for 2022
- Analytical laboratory results data packages

Appendix A includes the RAER completeness checklist and defines the document in which the data and information are provided (2003 RAP, 2009 RAP Addendum, 2018 RAP Addendum, 2018 RAP Addendum [Revised] and this report). Table 1-1 summarizes activities that occurred in 2021.

1.1 Site Information

The Former Cameron Iron Works Facility is a historical manufacturing facility located at 1000 Silber Road in Houston, Texas, northeast of the intersection of Silber Road and Interstate Highway 10 (I-10), in Harris County (County Code 713), Houston, Texas, 77055 (site; Figure 1-1). Typical processes conducted at the site included machining metals, degreasing, and lubricating parts. The facility was decommissioned in the 1980s. The 2003 RAP (ERM 2003) established an onsite PMZ, in conjunction with operation of a groundwater pump-and-treat system in September 2003.

After the approval of the 2009 RAP Addendum (ERM 2009), the South Treatment System was installed to establish hydraulic control of the offsite plume south of I-10. The two treatment systems were shut off in 2016, as approved by TCEQ in 2016, to evaluate the aquifer response compared to model predictions for the PMZ (onsite) and MNA (offsite) remedies. The South Treatment System and associated extraction wells were decommissioned between November 29 and December 3, 2021 (refer to Section 3 for details). Since the manufacturing facility was decommissioned, the site location has been improved and is currently used as a commercial area for shopping, dining, and entertainment. Surrounding land use is mixed commercial and residential.

SECTION 3

Groundwater Quality Assessment

This section describes monitoring network modification and summarizes groundwater and surface water monitoring activities that occurred in 2021.

2.1 Monitoring Network Modification and 2021 Activities

Groundwater sampling in 2021 was performed in accordance with the well network as described in the 2018 RAP Addendum submitted February 2018 (CH2M 2018) and approved (with comments) by TCEQ on February 7, 2019 (TCEQ 2019) and email correspondence on June 4, 2020 (TCEQ 2020).

Based on TCEQ comments on the 2020 RAER (TCEQ 2022), well designations for MW-108 through MW-112 located along the southern boundary of the PMZ were revised from attenuation monitoring point (AMP) wells to POE wells, and alternate point of exposure well MW-113 was changed to a POE well in this 2021 RAER. In addition, two new AMP wells MW-181 and MW-182 are proposed along the flow line within the PMZ to monitor onsite plume stability (refer to Section 4).

MW-16R was not sampled because permanganate was observed in the HydraSleeve. MW-180 was covered by stabilized rock during a construction project in 2019 and was not able to be sampled in 2019 and 2020. The well was located in 2021 but not sampled in 2021 because TCEQ approved removing this well from the monitoring network (TCEQ 2021; 2022).

Table 2-1 lists the monitor wells and surface water locations sampled in December 2021 and describes issues encountered, if any, during the sampling event. Figure 2-1 shows the monitor well and surface water sampling locations and designations in the current monitoring network.

The sampling event was conducted in December 2021 in accordance with the sampling network described in the TCEQ conditionally approved 2018 RAP Addendum (CH2M 2018), with minor modifications in the revised RAP Addendum (CH2M 2020). Annual sampling of monitor wells and surface water occurred between December 14 and 20, 2021. This report details the sampling efforts and analytical results. Appendix B includes residential letter notifications for the annual event performed in December 2021. Also, in response to comments provided by TCEQ during a meeting held on August 11, 2021, notifications were sent to property owners with property overlying the protective concentration level exceedance (PCLE) zone that had not previously received notification as required by the TRRP. Appendix B contains a list of the property owners who received notification letters in February and March 2022. Appendix C provides groundwater analytical laboratory reports and data usability summary for the 2021 annual groundwater event.

2.2 Groundwater Elevations, and Groundwater Flow Directions

Figure 2-2 shows the potentiometric surface map for the annual 2021 sampling event performed in December 2021. As illustrated by the potentiometric surface map, the direction of groundwater flow was toward the south and southeast, consistent with historical flow patterns. Groundwater in the southwest portion of the site, near well MW-92, flows to the southwest towards the Harris County Flood Control Ditch (HCFCD). Table 2-2 provides the gauging data collected during the annual event.

In response to TCEQ comments related to the plume being connected between MW-89, MW-106, and historical well MW-107 (TCEQ 2022), Figures 2-3a and 2-3b provide cross-sections of the geology and hydrogeology in the area of MW-89, MW-106, and the HCFCD as surveyed in 2003 (ERM 2003).

As shown on these figures, the shallow groundwater-bearing zone intersects the HCFCD south of MW-89 and west of MW-106. Also, the groundwater elevations at MW-89 and MW-106 were higher than the base of the HCFCD. The observations suggest that groundwater may discharge to the HCFCD in this area of the site (the HCFCD is a gaining stream), and the HCFCD likely acts as a groundwater flow boundary. Based on this, the groundwater PCLE zones at MW-89 and MW-106 are separated based on the alignment of the HCFCD. The groundwater PCLE zone to the south of the HCFCD at MW-106 could possibly have been connected with the plume to the east in the past.

2.3 Groundwater and Surface Water Sampling Events

2.3.1 Methods

Monitor wells were sampled during the 2021 event using HydraSleeve samplers, and field indicator and groundwater quality parameters (pH, temperature, specific conductance, and turbidity) were measured as approved in the 2016 Annual Progress Report (CH2M 2017). Monitor wells where HydraSleeves were deployed were allowed to re-equilibrate for 24 hours prior to sampling. Grab samples were collected at surface water sample locations along the HCFCD.

Groundwater and surface water samples were collected in laboratory-supplied, preserved containers and were immediately placed on ice. Samples were dropped off following standard chain-of-custody protocol and were analyzed by Eurofins Xenco, in Stafford, Texas. The samples were analyzed for a site-specific list of seven volatile organic compounds (VOCs) by U.S. Environmental Protection Agency Method 8260C. The site-specific VOCs are as follows:

- 1,1-Dichloroethane (1,1-DCA)
- 1,2-Dichloroethane (1,2-DCA)
- 1,1-Dichloroethene (1,1-DCE)
- cis-1,2-Dichloroethene (cis-1,2-DCE)
- Tetrachloroethene (PCE)
- Trichloroethene (TCE)
- Vinyl chloride (VC)

Appropriate quality assurance and quality control samples were collected based on the following protocols:

- Field duplicate samples at 10 percent
- Matrix spike and matrix spike duplicate samples at 5 percent
- One equipment blank per event
- One trip blank in every cooler containing VOC samples

Appendix C contains complete laboratory analytical reports and a data usability summary for the December 2021 sampling event.

2.3.2 Results

Monitor well inspections were completed at the time of annual sampling. The monitor wells sampled in December 2021 appear to be functioning properly.

Table 2-3 presents the available field indicator parameters for wells sampled during the annual event. The values in this table represent the stabilized field readings recorded immediately following sample collection. The field parameters indicate aerobic conditions as evidenced by the dissolved oxygen (minimum value of 2.12 milligrams per liter [mg/L] with average of 2.93 mg/L) and oxidation-reduction potential values (minimum value of 23.6 millivolts with average of 157 millivolts). The pH of the groundwater is neutral with an average of 6.79 and values ranging from 6.35 through 7.00.

Tables 2-4 through 2-6 summarize the analytical data results from the December 2021 sampling event. Detected concentrations are compared to their respective critical protective concentration level (cPCL) or established Attenuation Action Level (AAL) for each COC, as applicable for each location. An AAL was not established for 1,1-DCA in the 2018 RAP Addendum (CH2M 2018); therefore, the Tier 1 protective concentration level (PCL) is used for data comparison.

The results from the December 2021 annual monitoring event were compared against the cPCLs for each of the site-specific VOCs to illustrate the extent of each COC exceeding its cPCL. Figures 2-4 through 2-7 present concentration maps for COCs exceeding cPCLs, including 1,1-DCE, PCE, TCE, and VC, respectively.

Maps were not prepared for 1,1-DCA, 1,2-DCA, and cis-1,2-DCE because detected concentrations did not exceed their respective cPCL during the December 2021 sampling event. 1,1-DCA has remained less than the cPCL for the past 18 years.

Since the North and South Treatment Systems were shut down in November 2016, groundwater data show that the once contiguous onsite and offsite plumes have “separated.” Based on available existing monitor well sampling data, the plume onsite and north of the HCFCD appears to be shrinking, and the extent of the offsite plume west of the HCFCD has reduced significantly. Figure 2-8 depicts the PCLE zone using the December 2021 data. Figure 2-9 depicts the PCLE zones between 2019 and 2021. Appendix D includes plots of COC concentrations over time for all existing monitor wells. Appendix E provides the historical data used to create the plots.

COC concentrations over time in the onsite and offsite portion of the PCLE zone have remained relatively stable, except for increasing concentrations at several locations along the southeast leading plume edge as discussed in detail in Section 4.1. The extent of the groundwater PCLE zone between 2019 and 2021 appears to be similar based on available existing well data. Cameron acknowledged the comment received from TCEQ in a letter dated January 24, 2022 (TCEQ 2022) regarding the PCLE zone extent not considering historical monitor wells plugged and abandoned in 2017. Cameron will be collecting grab groundwater samples as part of a predesign investigation during the first half of 2022. The predesign investigation is further described in detail in Section 4.4, and the data will be used to refine the PCLE zone extent at locations with uncertainty. The PCLE zone extent will be updated in future deliverables after completion of the investigation.

Surface water grab samples collected from the HCFCD during the annual event indicated that there are no exceedances of cPCLs. Two surface sampling locations, SWD-12 and SWD-14, were not accessible due to heavy rains, flooding, erosion, and debris leading to unsafe conditions. Alternate paths were identified; however, approval to access the HCFCD through those properties was not granted. Therefore, these two locations were unable to be sampled during the December 2021 sampling event. Table 2-6 presents the surface water analytical data.

SECTION 3

Groundwater Response Actions

This section summarizes activities pertaining to the groundwater response actions as described in the RAP (ERM 2003), RAP Addendum (ERM 2009), and revised RAP Addendum documents (CH2M 2018; 2020):

- Groundwater at the site was treated through a recovery and treatment system, referred to as the North Treatment System. The North Treatment System was shut down on November 16, 2016, as part of remedy optimization. The system includes six extraction wells that captured water from the southern property boundary. The water was pumped through two granular activated carbon (GAC) vessels. Effluent from the GAC vessels was then injected into nine injection wells located along the northern property boundary.
- A second recovery and treatment system, referred to as the South Treatment System, located in the Stablewood subdivision in the downgradient plume area, was shut down on November 16, 2016, as part of remedy optimization. The South Treatment System consisted of five extraction wells that captured affected groundwater, which was then discharged to a City of Houston Publicly Owned Treatment Works collection system under City of Houston Industrial Waste Permit Number 10799 (City of Houston 2018, 2020). In accordance with the permit, two semiannual system discharge reports were submitted to the City of Houston Department of Public Works and Engineering on July 15, 2021 (CH2M 2021c) and January 13, 2022 (CH2M 2022). TCEQ approved decommissioning of the South Treatment System on August 31, 2021 (TCEQ 2021). The South Treatment System (including extraction wells, piezometers, pumps, and conveyance lines) was decommissioned, plugged and abandoned, or removed from the site between November 29 and December 3, 2021.
- To comply with the requirements in the *Amendment and Registration of Class V Aquifer Remediation Injection Wells* letter from the TCEQ Underground Injection Control and Remediation Division, dated April 11, 2011 (TCEQ 2011), a Class V Aquifer Remediation Injection Well Report was submitted on December 13, 2021 (CH2M 2021d). The report provided injection-related activities associated with onsite groundwater treatment between October 1, 2020, and September 30, 2021.
- Routine water levels and groundwater samples were collected from the monitor well network to demonstrate plume stability and declining trends.

Cameron submitted a response to comments and final revised RAP Addendum to TCEQ on April 28, 2020 (CH2M 2020). The current annual sampling of groundwater and surface water is in accordance with the revised RAP Addendum and approved via email correspondence on June 4, 2020 (TCEQ 2020).

During extension of the access agreement for the property where the South Treatment System and monitor well MW-173 is located, the property owner demanded that the system and monitor well be removed from the property prior to the end of the current access agreement period in August 2022. The TCEQ acknowledged decommissioning of the South Treatment System in the comment letter provided for the 2020 RAER (TCEQ 2021). As a result, Cameron decommissioned the South Treatment System from November 29 through December 3, 2021. The system, including electrical control panel, carbon vessels, filter bag, and pumps, was removed from the site. The polyvinyl chloride well casing that was successfully removed from the ground was disposed. Bentonite grout and Portland cement were used to plug the extraction wells, piezometers, and monitor well. Appendix F contains well plugging reports for EW-1 through EW-5, MW-173, and P-3 through P-5. Surface completions and in-ground well vaults were removed from the ground, and dirt was added as backfill. Sod was used to restore areas where surface completions associated with EW-1/P-1, EW-4/P-4, and EW-5/P-5 were removed. Conveyance lines were welded and capped below ground with high-density polyethylene caps. All other

field lines were plugged with 1 foot of concrete. The system vault was filled, leveled with concrete, and left in place at the direction of the property owner.

On November 29, 2021, Cameron abandoned monitor well MW-173. An attempt was made to remove the well casing and screen; however, only the well casing was able to be removed. The remaining well screen was grouted in place as part of the plugging and abandonment of the well. Bentonite grout was applied to seal the casing up to 2 feet below ground surface followed by Portland cement to plug the remaining borehole. The surface completion was left in place at the direction of the property owner as a means of maintaining road integrity. Cameron is working with the property owner to obtain access to install a replacement monitor well (MW-173R) and plans to install the replacement well during the predesign investigation.

SECTION 4

Monitored Natural Attenuation Evaluation and Proposed Predesign Investigation

As stated in the revised RAP Addendum (CH2M 2020), the North and South Treatment Systems were shut down in 2016 to perform a rebound study and evaluate the effectiveness of an MNA remedy. After reviewing the 2020 RAER, TCEQ provided comments on further evaluating plume stability and effectiveness of MNA (TCEQ 2022). This section presents an evaluation of MNA effectiveness using the past 7 years of data (2015 through 2021) per the TRRP-33 guidance document, as follows:

- Evaluation of historical COC concentrations over time for all existing monitor wells.
- A figure showing the groundwater PCLE zone extent for the 3 most recent years.
- Evaluation of geochemical parameters in existing monitor wells.
- Evaluation of COC (PCE, TCE, 1,1-DCE, and VC) concentration trends for the last 7 years of data (2015–2021) using Mann-Kendall (MK) analysis. The MK analysis included the 2 years before the North and South Treatment System shutdown as a baseline to better evaluate trends during the rebound study period.

The following subsections summarize evaluation results.

4.1 COC Concentrations over Time and Comparison of Historical PCLE Zones

As discussed in Section 2.3.2 and presented on the plots of historical COC concentrations over time (Appendix D), the onsite and offsite portions of the PCLE zone have remained relatively stable or decreasing, based on available historical data from 1991 to date. However, increasing concentrations are observed at some well locations and along the southeast leading edge of the plume based on an MK analysis of COC concentration data from 2015 to 2021 (see Section 4.2).

Geochemical parameters collected during annual groundwater sampling indicate that groundwater within the plume is aerobic, and limited reductive dechlorination of 1,1-DCE to VC and of PCE and TCE to cis-1,2-DCE appears to be occurring. cis-1,2-DCE is detected but at concentrations less than the PCL. The localized distribution and lower concentrations of 1,2-DCA and VC indicate that minimal biodegradation of parent COCs is occurring. For an aerobic plume, the primary mechanisms for natural attenuation of chlorinated solvents are driven by a combination of dilution, adsorption, and advection. In some cases, abiotic degradation may also contribute to attenuation of chlorinated solvents under aerobic conditions.

The extent of the groundwater PCLE zone in each of the previous 3 years (2019 through 2021) are similar (Figure 2-9). Observations from the figure suggest the PCLE zone may have slightly migrated to the southeast. Further, to address concerns received from TCEQ in a letter dated January 24, 2022 (TCEQ 2022) regarding the factoring of historical data from previously abandoned monitor wells into interpretations of the PCLE zone, Cameron will complete additional characterization as part of a predesign investigation during the first half of 2022, described in Section 4.4. Results will be used to verify the extent of the PCLE zone in these areas. An updated interpretation of the PCLE zone will be presented in the revised RAP and future RAER.

4.2 Mann-Kendall Analysis

The MK trend analysis was used to analyze data collected over time to identify consistently increasing or decreasing trends. The MK analysis analyzes differences between data points and was conducted using groundwater data for PCE, TCE, 1,1-DCE, and VC from the most recent 7-year timeframe (2015–2021). These compounds were selected as indicator COCs for statistical analyses because they currently define the plume extent. Analyses assume that the data are independent, but samples collected close in time may not be independent. The minimum sample spacing for these data was 11 days, with an average minimum sample spacing of 228 days. For duplicate samples, trend analysis was conducted using the maximum concentration.

The MK results are presented in Table 4-1 and Figures 4-1a through 4-1e for PCE, TCE, 1,1-DCE, and VC respectively. Appendix G contains additional trend plots. The combination plots in Appendix G show the last measured value plotted as a function of the first-order attenuation rate for each parameter.
The following is a summary of the MK analysis:

- Thirty-nine wells were evaluated as part of the MK trend analysis.
- PCE shows a decreasing concentration trend in 5 wells, stable (13 wells) or nondetect (16 wells) results as indicated by No Trend in 29 wells, and an increasing concentration trend in 5 wells.
- TCE shows a decreasing concentration trend in 11 wells, stable (9 wells) or nondetect (14 wells) results as indicated by No Trend in 23 wells, and an increasing concentration trend in 5 wells.
- 1,1-DCE shows a decreasing concentration trend in 10 wells, stable (17 wells) or nondetect (5 wells) results as indicated by No Trend in 22 wells, and an increasing concentration trend in 7 wells.
- VC shows a decreasing trend in 4 wells, stable (12 wells) or nondetect (22 wells) results as indicated by No Trend in 34 wells, and an increasing concentration trend in 1 well.
- Two wells have varying results (decreasing 1,1-DCE concentration trend with increasing PCE and TCE concentration trends).
- The median first-order decay rates of PCE, TCE, 1,1-DCE, and VC are 0.154 $year^{-1}$, 0.05 $year^{-1}$, 0.046 $year^{-1}$, and 0.086 $year^{-1}$, respectively.

4.3 MNA Evaluation Conclusions

The COC concentration trends in a large portion of the offsite PCLE zone have remained relatively stable. This is supported by the majority of trend analyses (Appendix G) indicating either a decreasing or stable trend (the latter based on the coefficient of variation where No Trend was indicated). Additionally, the concentration of 1,1-DCE in MW-163 exceeded the cPCL. The northern plume, western plume, and north portion of the southern plume (MW-147 and MW-83) continues to see declining COC concentration trends. The extent of the groundwater PCLE zone in 2019 through 2021 is similar.

Increasing COC concentration trends are observed primarily at the southeast leading edge of the plume (monitor wells MW-161, MW-168, MW-97, MW-93R) and a small portion of the northern plume (monitor wells MW-113, MW-74, and MW-15R) and western plume (monitor well MW-122).

As shown in Table 2-3, dissolved oxygen ranged from 2.1 to 3.8 mg/L, and oxidation-reduction potential ranged from 23.6 to 206 millivolts in monitor wells in December 2021. The field parameters continue to indicate the plume is aerobic. The primary mechanisms for natural attenuation for the COCs under aerobic conditions are a combination of dilution, adsorption, and advection. Some degree of abiotic

degradation may also be occurring. The median first-order attenuation rates of COCs ranged from 0.046 $year^{-1}$ to 0.154 $year^{-1}$.

The MNA evaluation indicates that natural attenuation is occurring at the site. Groundwater modeling is being performed to predict the cleanup time to meet PCLs. Cameron will be completing a predesign investigation to refine the PCLE zone extent (see Section 4.4) and implement an additional groundwater response action to mitigate downgradient plume migration and decrease COC concentrations at strategic locations that have increasing concentration trends. Results will be provided in the planned RAP Addendum to be submitted by June 30, 2022.

4.4 Predesign Investigation

Based on the evaluation, the predesign investigation will:

- Provide a better understanding of groundwater stratification and COC distribution within the aquifer.
- Verify current groundwater COC concentrations at locations where previously existing monitor wells were plugged and abandoned within the PCLE zone.
- Collect predesign data for a proposed in situ chemical oxidation remedy at strategic locations to mitigate further downgradient plume migration. The in situ chemical oxidation remedy design will be proposed in the RAP Addendum submitted to TCEQ by June 30, 2022.

Cameron will perform the predesign investigation during the first half of 2022. The purpose of the investigation will be to further define the plume extent, to better understand the potential vertical stratification of COC concentrations in the uppermost groundwater-bearing unit, and to verify current groundwater concentrations at locations where historical wells were plugged and abandoned in 2017. The data collected during the predesign investigation will be used to support design of the in situ chemical oxidation remedy that will be proposed in the RAP Addendum. The investigation will include installation of two new AMP wells (MW-181 and MW-182), and installation of 33 temporary direct-push technology (DPT) borings (Figure 4-2). At each DPT location, a soil boring will be advanced to obtain geologic descriptions and determine depths to collect grab groundwater samples. A second boring will be advanced adjacent to the initial soil boring, and grab groundwater samples will be collected from multiple depths within the uppermost groundwater-bearing unit. Figure 4-2 includes the DPT locations and new AMP well locations to be advanced/installed. Several soil samples from the saturated zone will also be collected for testing of natural oxidant demand to assist in evaluating potential oxidant doses for in situ chemical oxidation groundwater treatment.

After the plugging and abandonment of MW-173, new monitor well MW-173R was scheduled to be installed as a replacement well (Figure 4-2). Due to access delays, MW-173R was not installed in 2021. As part of the 2022 schedule, MW-173R will be installed during the same mobilization as the predesign investigation, pending the property owner's access approval.

The results of the predesign investigation and groundwater modeling will be included in the 2022 RAP Addendum. The RAP Addendum will be submitted to TCEQ for review by June 30, 2022.

SECTION 5

Waste Management

Investigation-derived groundwater and decontamination water generated from groundwater sampling events were containerized in two 55-gallon steel drums. The drums were transported and disposed of offsite on November 3, 2021.

One roll-off of Class 1 nonhazardous waste was generated during the South Treatment System decommissioning and consisted of:

- Three supersacs filled with used GAC
- Decommissioning construction debris and debris from well plugging and abandonment

The roll-off was removed and transported for offsite disposal on December 13, 2021 (Appendix H).

SECTION 6

Schedule

Table 6-1 provides a projected schedule of site activities in 2022. Table 6-2 lists monitor well sample locations. Field activities located on private property are contingent upon property owner access and consent.

SECTION 7

Conclusions and Recommendations

Based on a review of the 2021 data and remedial strategy evaluation presented herein, the conclusions and recommendations are as follows:

- Based on TCEQ comments on the 2020 RAER (TCEQ 2022), well designations for MW-108 through MW-112 located along the southern boundary of PMZ were changed from AMP wells to POE wells, and alternate point of exposure well MW-113 was changed to a POE well in this 2021 RAER. In addition, two new AMP wells MW-181 and MW-182 will be installed (during the predesign investigation) along the flow line within the PMZ to monitor onsite plume stability.
- The groundwater and surface water sampling performed during 2021 is consistent with that outlined in the 2018 RAP Addendum and associated TCEQ comments (CH2M 2018; TCEQ 2019a), except three monitor wells and two surface water sampling locations that could not be sampled. A sample from MW-16R was not collected due to the presence of permanganate in the HydraSleeve, MW-173 was abandoned in November 2021, and the designation of MW-180 was changed to "Other Monitor Well" and the well removed from the monitoring network with TCEQ approval in 2021 (TCEQ 2021). Monitor well MW-173R will be installed to replace MW-173 during the predesign investigation. The two surface water sampling locations (SWD-12 and SWD-14), were not sampled because the locations were not accessible.
- Groundwater flow direction was documented to the south/southeast in 2021, consistent with historical flow patterns. Groundwater in the southwest portion of the site, near well MW-92, flows to the southwest towards the HCFCD.VOCs (1,1-DCE, TCE, PCE, and VC) were detected in groundwater samples at concentrations exceeding their applicable cPCLs from wells at the site and downgradient of the site during 2021.
- No VOCs (1,1-DCE, 1,2-DCA, cis-1,2-DCE, TCE, PCE, and VC) were detected in groundwater samples at concentrations exceeding their applicable AAL from AMP wells at the site during 2021.
- 1,1-DCA concentrations reported in groundwater were below the cPCL during 2021 and the 18 years prior.
- 1,2-DCA concentrations reported in groundwater were below the cPCL during 2018 and 2019. The concentration slightly exceeded the PCL in POE well MW-89 in 2020, but concentrations were below the cPCL in 2021.
- The PCLE zone has been defined to the east (MW-178, MW-146, and MW-162), west (MW-01, MW-71, and MW-121), southwest (MW-89), and southeast (MW-98 and MW-179). Since the North and South Treatment Systems were shut down in November 2016, the groundwater data show that the onsite and offsite plumes have "separated."
- The results of the MNA evaluation provide multiple lines of evidence, including COC concentrations over time, PCLE zone versus time comparison, and MK trend analyses to demonstrate overall success of MNA at the site. The COC concentration trends in a large portion of the offsite PCLE zone have remained relatively stable. This is supported by the majority of trend analyses (Appendix G) indicating either a decreasing or stable trend (the latter based on the coefficient of variation where No Trend was indicated). The north portion of the southern plume (MW-147 and MW-83) continues to see declining trends for concentrations, with a reduction in the extent of the PCLE zone. The analysis also suggests slight migration of the southeast leading edge of the plume based on increasing concentration trends, as well as at a few upgradient and midplume locations. Increasing trends are observed primarily at the southeast leading edge of the plume (MW-161, MW-168,

MW-97, MW-93R) and a small portion of the northern plume (MW-113, MW-74, and MW-15R) and western plume (MW-122). The extent of the groundwater PCLE zone in 2019 through 2021 is similar based on existing data. MK results indicate a higher number of wells with decreasing concentration. Cameron will continue to monitor these trends.

- Cameron will complete the predesign investigation during the first half of 2022, and it will include installation of up to 33 temporary DPT borings to collect grab groundwater samples. The predesign investigation will be completed to better understand the potential vertical stratification of COC concentrations in the uppermost groundwater-bearing unit and to verify current groundwater concentrations at key locations where historical wells were plugged and abandoned in 2017.
- Cameron will submit a 2022 RAP Addendum that includes the groundwater modeling and predesign investigation results. The RAP Addendum will be submitted to TCEQ for review by June 30, 2022. Once TCEQ approves the RAP Addendum, Cameron plans to implement an in situ chemical oxidation remedy in select portions of the plume to supplement MNA and expedite plume cleanup, reduce COC concentrations at strategic locations with increasing concentration trends, and mitigate further downgradient plume migration.

SECTION 8

Works Cited

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Tables

Table 1-1. 2021 Chronology of Events

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Date of Action	Event	Description of the Activities
January 2021	COH Submittal	Semiannual System Discharge Report, dated January 8, 2021, submitted to COH as required by Industrial Waste Permit Number 10799.
March 2021	TCEQ Submittal	2020 RAER Voluntary Cleanup Program No. 221, dated March 30, 2021, documenting the results of the 2020 annual sampling event.
July 2021	COH Submittal	Semiannual System Discharge Report, dated July 15, 2021, submitted to COH as required by Industrial Waste Permit Number 10799.
August 2021	TCEQ Comments on 2020 RAER	TCEQ provided comments on 2020 RAER in a letter dated August 31, 2021, which requested a written response for each comment.
October 2021	TCEQ Submittal	Submitted Response to Comments on the 2020 RAER, dated October 29, 2021.
November 2021	COH Submittal	Renewal of COH Facility Permits, dated November 5, 2021.
	Treatment System O&M	Decommissioning of the South Treatment System and abandonment of associated extraction wells and piezometers as approved by TCEQ in the 2020 Response Action Effectiveness Report dated August 31, 2021.
December 2021	Groundwater Sampling	Annual 2021 groundwater sampling event occurred from December 13 to 20, 2021.
	O&M Inspections	Conduct site wide O&M inspections on recovery systems during annual sampling event.
	TCEQ Submittal	Class V Aquifer Remediation Injection Well report, dated December 13, 2021, documenting the results between October 1, 2020, through September 30, 2021.

Notes:

COH = City of Houston

O&M = Operations and Maintenance

RAER = Response Action Effectiveness Report

TCEQ = Texas Commission on Environmental Quality

Table 2-1. Well Sampling List, 2021 Annual Event

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Well Number	Well Designations	Sampled	Comments
Monitor Wells			
MW-50R	AMP Well	X	Revised RAP Addendum 04/28/2020
MW-01	APOE Well	X	Revised RAP Addendum 04/28/2020
MW-65	APOE Well	X	Revised RAP Addendum 04/28/2020
MW-15R	POE Well	X	Revised RAP Addendum 04/28/2020
MW-16R	POE Well		Revised RAP Addendum 04/28/2020 (Permanganate observed in HydraSleeve)
MW-17R	POE Well	X	Revised RAP Addendum 04/28/2020
MW-70	POE Well	X	Revised RAP Addendum 04/28/2020
MW-71	POE Well	X	Revised RAP Addendum 04/28/2020
MW-74	POE Well	X	Revised RAP Addendum 04/28/2020
MW-76	POE Well	X	Revised RAP Addendum 04/28/2020
MW-77	POE Well	X	Revised RAP Addendum 04/28/2020
MW-83	POE Well	X	Revised RAP Addendum 04/28/2020
MW-88	POE Well	X	Revised RAP Addendum 04/28/2020
MW-89	POE Well	X	Revised RAP Addendum 04/28/2020
MW-90	POE Well	X	Revised RAP Addendum 04/28/2020
MW-92	POE Well	X	Revised RAP Addendum 04/28/2020
MW-93R	POE Well	X	Revised RAP Addendum 04/28/2020
MW-97	POE Well	X	Revised RAP Addendum 04/28/2020
MW-98	POE Well	X	Revised RAP Addendum 04/28/2020
MW-100	POE Well	X	Revised RAP Addendum 04/28/2020
MW-106	POE Well	X	Revised RAP Addendum 04/28/2020
MW-108	POE Well	X	Changed from AMP to POE per TCEQ comment letter dated January 24, 2022
MW-109	POE Well	X	Changed from AMP to POE per TCEQ comment letter dated January 24, 2022
MW-110	POE Well	X	Changed from AMP to POE per TCEQ comment letter dated January 24, 2022
MW-111	POE Well	X	Changed from AMP to POE per TCEQ comment letter dated January 24, 2022
MW-112	POE Well	X	Changed from AMP to POE per TCEQ comment letter dated January 24, 2022
MW-113	POE Well	X	Changed from APOE to POE per TCEQ comment letter dated January 24, 2022
MW-121	POE Well	X	Revised RAP Addendum 04/28/2020
MW-122	POE Well	X	Revised RAP Addendum 04/28/2020
MW-145	POE Well	X	Revised RAP Addendum 04/28/2020
MW-146	POE Well	X	Revised RAP Addendum 04/28/2020
MW-147	POE Well	X	Revised RAP Addendum 04/28/2020
MW-160	POE Well	X	Revised RAP Addendum 04/28/2020
MW-161	POE Well	X	Revised RAP Addendum 04/28/2020
MW-162	POE Well	X	Revised RAP Addendum 04/28/2020
MW-163	POE Well	X	Revised RAP Addendum 04/28/2020
MW-168	POE Well	X	Revised RAP Addendum 04/28/2020
MW-173	Abandoned		Well abandoned November 29, 2021
MW-173R	POE Well		Replacement Well of MW-173 to be installed

Table 2-1. Well Sampling List, 2021 Annual Event

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Well Number	Well Designations	Sampled	Comments
MW-178	POE Well	X	Revised RAP Addendum 04/28/2020
MW-179	POE Well	X	Revised RAP Addendum 04/28/2020
MW-180	Other Monitor Well		POE well MW-180 changed as "other monitor well", per TCEQ comment letter dated January 24, 2022.
Surface Water Locations			
SWD-12	HCFCD		Revised RAP Addendum 04/28/2020 (Location could not be reached due to recent flooding)
SWD-14	HCFCD		Revised RAP Addendum 04/28/2020 (Location could not be reached due to recent flooding)
SWD-15	HCFCD	X	Revised RAP Addendum 04/28/2020
SWD-17	HCFCD	X	Revised RAP Addendum 04/28/2020
SWD-18	HCFCD	X	Revised RAP Addendum 04/28/2020
SWD-20	HCFCD	X	Revised RAP Addendum 04/28/2020

Notes:

AMP = attenuation monitoring point

APOE = alternate point of exposure

HCFCD = Harris County Flood Control Ditch

MW = monitor well

POE = point of exposure

R = replacement well

RAP = response action plan

SWD = surface water sampling location

Table 2-2. Monitor Well Groundwater Elevations, 2021 Annual Event

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Well ID	Date Installed	Casing Diameter (inches)	Constructed Total Depth (feet btoc)	Top of Screen Depth (feet btoc)	Top of Casing Elevation[a] (feet amsl)	Date Measured	Measured Depth to Water (feet btoc)	Groundwater Elevation (feet amsl)
MW-01	8/9/1991	2	28.58	18.58	65.78	12/13/2021	17.05	48.73
MW-15R	9/2/2003	2	39.00	27.00	65.23	12/13/2021	19.09	46.14
MW-16R	9/2/2003	2	32.00	20.00	64.23	12/13/2021	18.43	45.80
MW-17R	9/3/2003	2	32.00	20.00	65.44	12/13/2021	21.00	44.44
MW-50R	2/7/2010	2	32.00	--	66.93	12/13/2021	17.71	49.22
MW-65	--	2	32.00	--	65.17	12/13/2021	18.45	46.72
MW-70	2/2/2001	2	32.00	--	65.08	12/13/2021	19.29	45.79
MW-71	2/2/2001	2	32.00	--	63.45	12/13/2021	19.18	44.27
MW-74	6/4/2001	2	34.00	22.00	63.50	12/13/2021	20.36	43.14
MW-76	2/5/2001	2	32.00	--	62.64	12/13/2021	21.81	40.83
MW-77	5/30/2001	2	37.00	25.00	63.50	12/13/2021	19.75	43.75
MW-83	5/29/2001	2	37.00	25.00	61.52	12/13/2021	24.25	37.27
MW-88	5/22/2001	2	45.00	33.00	62.48	12/13/2021	28.20	34.28
MW-89	5/31/2001	2	44.00	32.00	62.18	12/13/2021	30.71	31.47
MW-90	5/23/2001	2	42.00	30.00	62.50	12/13/2021	29.52	32.98
MW-92	5/24/2001	2	50.00	38.00	63.32	12/13/2021	34.91	28.41
MW-93R	4/12/2017	2	42.00	32.00	59.99	12/13/2021	31.11	28.88
MW-97	2/4/2002	2	45.00	33.00	60.71	12/13/2021	30.00	30.71
MW-98	2/6/2002	2	43.00	31.00	60.43	12/13/2021	33.01	27.42
MW-100	6/13/2002	2	37.60	--	65.07	12/13/2021	20.64	44.43
MW-106	11/11/2001	2	50.00	--	59.42	12/13/2021	34.97	24.45
MW-108	--	2	33.50	--	64.47	12/13/2021	17.17	47.30
MW-109	--	2	33.50	--	65.47	12/13/2021	17.39	48.08
MW-110	--	2	33.50	--	64.92	12/13/2021	18.10	46.82
MW-111	--	2	32.50	--	64.40	12/14/2021	17.97	46.43
MW-112	--	2	33.00	--	65.94	12/13/2021	19.89	46.05
MW-113	--	2	33.50	--	64.20	12/13/2021	18.38	45.82
MW-121	6/11/2003	2	34.50	--	63.29	12/13/2021	22.90	40.39
MW-122	6/10/2003	2	34.00	--	62.78	12/13/2021	23.50	39.28
MW-145	5/18/2007	1	27.55	17.55	62.04	12/13/2021	22.35	39.69
MW-146	5/18/2007	1	35.00	25.00	61.74	12/13/2021	22.95	38.79
MW-147	5/16/2007	1	38.00	28.00	61.22	12/13/2021	23.35	37.87
MW-160	8/22/2007	1	32.75	22.75	60.85	12/13/2021	25.25	35.60
MW-161	8/22/2007	1	36.02	26.02	59.03	12/13/2021	25.25	33.78
MW-162	8/22/2007	1	37.50	27.50	59.13	12/13/2021	27.50	31.63
MW-163	8/22/2007	1	33.25	23.25	61.74	12/13/2021	24.01	37.73
MW-168	12/27/2007	1	40.00	30.00	60.44	12/13/2021	28.12	32.32
MW-178	4/12/2017	2	45.00	35.00	64.34	12/13/2021	24.98	39.36
MW-179	11/27/2017	2	44.39	34.00	60.95	12/13/2021	33.50	27.45

Notes:

[a] - Monitor wells top-of-casing elevations were resurveyed March 27 - April 16, 2018.

-- = Information not available

amsl = above mean sea level

btoc = below top of casing

ID = identification

MW = monitor well

NM = not measured

R = replacement well

Table 2-3. Indicator Field Parameters, 2021 Annual Event

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Well ID	Date Measured	pH (SU)	Temperature (°C)	Specific Conductance (mS/cm)	Oxidation-Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
Annual Event							
MW-01	12/14/2021	6.55	24.6	0.689	107.0	3.48	7.60
MW-15R	12/14/2021	6.93	23.1	0.526	180.0	2.85	9.11
MW-16R	12/14/2021	NS	NS	NS	NS	NS	NS
MW-17R	12/14/2021	6.98	23.8	0.867	181.2	2.82	6.68
MW-50R	12/14/2021	6.62	23.3	0.747	42.1	3.24	1.20
MW-65	12/14/2021	7.00	23.3	0.796	175.0	2.62	3.87
MW-70	12/14/2021	6.87	23.9	0.797	145.8	2.98	20.60
MW-71	12/14/2021	6.92	23.3	0.762	163.2	3.21	6.54
MW-74	12/14/2021	6.98	24.8	0.795	98.0	2.65	10.20
MW-76	12/14/2021	6.61	22.4	1.029	176.0	2.68	13.50
MW-77	12/15/2021	6.89	22.9	1.268	184.0	2.61	8.32
MW-83	12/14/2021	6.83	23.8	1.243	178.4	2.97	14.00
MW-88	12/14/2021	6.97	23.4	1.498	179.2	2.98	12.80
MW-89	12/14/2021	6.72	23.6	1.345	206.0	3.21	450
MW-90	12/14/2021	6.85	23.7	1.930	176.9	3.82	1.75
MW-92	12/14/2021	7.00	23.7	0.939	200.1	3.28	3.23
MW-93R	12/15/2021	6.78	22.3	1.721	197.4	2.35	12.50
MW-97	12/14/2021	6.80	23.4	1.371	142.8	3.28	7.69
MW-98	12/14/2021	6.60	24.0	1.844	152.1	3.28	5.60
MW-100	12/14/2021	6.64	24.0	0.802	164.2	3.08	22.50
MW-106	12/14/2021	6.87	23.2	0.795	42.8	2.12	7.69
MW-108	12/14/2021	6.35	21.3	0.538	139.0	3.06	12.70
MW-109	12/14/2021	6.60	21.4	1.062	165.0	2.70	6.10
MW-110	12/14/2021	6.64	21.6	0.654	151.0	2.83	4.10
MW-111	12/15/2021	6.98	22.8	0.865	175.0	2.62	28.70
MW-112	12/14/2021	6.79	22.3	0.877	163.0	2.86	14.00
MW-113	12/14/2021	6.79	23.2	0.890	175.0	3.11	14.00
MW-121	12/14/2021	6.58	23.6	0.968	205.0	2.98	9.17
MW-122	12/14/2021	6.84	24.2	1.537	205.2	3.02	13.60
MW-145	12/14/2021	NM	NM	NM	NM	NM	NM
MW-146	12/20/2021	6.72	17.1	0.734	101.6	2.89	650
MW-147	12/14/2021	6.71	24.8	1.130	186.3	3.20	99.00
MW-160	12/20/2021	6.80	17.3	1.016	23.6	3.01	230
MW-161	12/14/2021	6.75	25.2	1.630	164.2	3.12	91.00
MW-162	12/20/2021	6.90	16.6	0.856	203.8	2.38	12.20
MW-163	12/20/2021	6.93	17.9	1.092	178.2	2.32	720
MW-168	12/14/2021	NM	NM	NM	NM	NM	NM
MW-178	12/14/2021	6.87	24.0	0.956	130.5	2.98	10.40
MW-179	12/15/2021	6.95	23.1	1.394	199.4	2.85	11.60

Notes:

Values represent the field parameter from residual water remaining after sample collection with HydraSleeve.

°C = degrees Celsius
ID = identification
mg/L = milligram per liter
mS/cm = millisiemens per centimeter
mV = millivolt
MW = monitor well
NM = parameter not measured due to insufficient sample volume
NS = Not Sampled
NTU = nephelometric turbidity unit
R = replacement well
SU = standard unit

Table 2-4. Attenuation Monitoring Point and Alternative Point of Exposure Well Data Summary, 2021 Annual Event

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Analyte Group (Method):			Volatile Organic Compounds (SW8260C)						
		CAS:	75-34-3	75-35-4	107-06-2	156-59-2	127-18-4	79-01-6	75-01-4
		Analyte:	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
		AAL	4.9 [a]	2.40	0.021	0.438	0.582	0.836	0.480
Well ID	**Well Type**	**Date Collected**							
MW-50R	AMP	12/14/2021	**0.00622 J**	< 0.000216	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
MW-01	APOE	12/14/2021	**0.000584 J**	**0.00164**	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
MW-65	APOE	12/14/2021	**0.00592**	**0.00906**	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234

Notes:

The concentrations are presented in milligrams per liter (mg/L).

Bold values indicate a detected concentration.

[a] The AAL for 1,1-dichloroethane is the lower of the $^{GW}GW_{Ing}$ and $^{Air}GW_{Inh\text{-}V}$ Tier I PCLs for residential land use based on the latest PCL tables (January 2021).

< = nondetected result less than the sample detection limit

AAL = attenuation action level

AMP = attenuation monitoring point

APOE = alternative point of exposure

CAS = Chemical Abstracts Service

$^{GW}GW_{Ing}$ = groundwater ingestion pathway

$^{Air}GW_{Inh\text{-}V}$ = inhalation of volatiles from groundwater

ID = identification

J = estimated concentration

MW = monitor well

PCL = protective concentration level

R = replacement well

Table 2-5. Point of Exposure Well Data Summary, 2021 Annual Event

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

		Analyte Group (Method):	Volatile Organic Compounds (SW8260C)						
		CAS:	75-34-3	75-35-4	107-06-2	156-59-2	127-18-4	79-01-6	75-01-4
		Analyte:	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
		cPCL:	4.9	0.007	0.005	0.07	0.005	0.005	0.002
Well ID	**Well Type**	**Date Collected**							
MW-100	POE	12/14/2021	< 0.000244	< 0.000216	< 0.000285	**0.000211 J**	< 0.0005	< 0.000424	< 0.000234
MW-106	POE	12/14/2021	**0.00164**	< 0.000216	< 0.000285	**0.00648**	< 0.0005	< 0.000424	**0.0118**
MW-108	POE	12/14/2021	< 0.000244	**0.0552**	< 0.000285	**0.00711**	< 0.0005	**0.0172**	< 0.000234
MW-109	POE	12/14/2021	**0.0815**	**0.0346**	< 0.000285	**0.0397**	**0.019**	**0.00497 J**	**0.0163**
MW-110	POE	12/14/2021	**0.00277**	**0.00311**	< 0.000285	**0.00142**	< 0.0005	< 0.000424	**0.000372 J**
MW-111	POE	12/15/2021	**0.799**	**0.547**	**0.0036**	**0.00466**	**0.0196**	**0.00719**	**0.0941**
MW-112	POE	12/14/2021	**0.0225**	**0.0291**	**0.00282**	**0.000379 J**	< 0.0005	< 0.000424	**0.00511**
MW-113	POE	12/14/2021	**0.00973**	**0.0175**	< 0.000285	**0.00288**	**0.0121**	**0.00728**	**0.000751 J**
MW-121	POE	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
MW-122	POE	12/14/2021	**0.00227**	**0.0258**	< 0.000285	**0.000254 J**	**0.00122**	**0.00104 J**	< 0.000234
MW-145	POE	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
MW-146	POE	12/20/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
MW-147	POE	12/14/2021	**0.00075 J**	**0.00164**	< 0.000285	**0.00233**	**0.00304**	**0.00111 J**	< 0.000234
MW-15R	POE	12/14/2021	**0.00303**	**0.0403**	< 0.000285	< 0.000174	< 0.0005	< 0.000424	**0.00205**
MW-160	POE	12/20/2021	**0.00103**	**0.00235**	< 0.000285	**0.00287**	**0.00276**	**0.00169 J**	< 0.000234
MW-161	POE	12/14/2021	**0.0111**	**0.0482**	< 0.000285	**0.00137**	**0.00147**	**0.000726 J**	< 0.000234
MW-162	POE	12/20/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
MW-163	POE	12/20/2021	**0.0148**	**0.0168**	< 0.000285	**0.00148**	**0.000835 J**	**0.000683 J**	**0.0011 J**
MW-168	POE	12/14/2021	**0.00282**	**0.00983**	**0.000794 J**	**0.00638**	**0.0952**	**0.0138**	**0.000252 J**
MW-178	POE	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
MW-179	POE	12/15/2021	< 0.000244	**0.00433**	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
MW-17R	POE	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
MW-70	POE	12/14/2021	**0.000919 J**	**0.00145**	< 0.000285	**0.00115**	< 0.0005	**0.000429 J**	< 0.000234
MW-71	POE	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
MW-74	POE	12/14/2021	< 0.000244	**0.00338**	< 0.000285	**0.0416**	**0.00172**	**0.0088**	**0.0182**
MW-76	POE	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	**0.000577 J**	< 0.000424	< 0.000234
MW-77	POE	12/14/2021	**0.00133**	**0.00518**	< 0.000285	**0.00163**	**0.000878 J**	**0.0015 J**	< 0.000234
MW-83	POE	12/14/2021	**0.00815**	**0.0339**	**0.00174**	**0.0115**	**0.0409**	**0.00701**	**0.00222**

Table 2-5. Point of Exposure Well Data Summary, 2021 Annual Event

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Analyte Group (Method):			Volatile Organic Compounds (SW8260C)						
		CAS:	75-34-3	75-35-4	107-06-2	156-59-2	127-18-4	79-01-6	75-01-4
		Analyte:	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
		cPCL:	4.9	0.007	0.005	0.07	0.005	0.005	0.002
Well ID	**Well Type**	**Date Collected**							
MW-88	POE	12/14/2021	**0.00391**	**0.0197**	< 0.000285	**0.00186**	**0.0163**	**0.00331 J**	< 0.000234
MW-89	POE	12/14/2021	**0.00335**	**0.0892**	**0.00134**	**0.000901 J**	**0.000568 J**	**0.00477 J**	**0.00746**
MW-90	POE	12/14/2021	**0.0191**	**0.0454**	< 0.000285	**0.00134**	**0.0213**	**0.00293 J**	< 0.000234
MW-92	POE	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	**0.000922 J**	< 0.000424	< 0.000234
MW-93R	POE	12/15/2021	**0.00221**	**0.0098**	< 0.000285	**0.000885 J**	**0.11 JH**	**0.00596**	< 0.000234
MW-97	POE	12/14/2021	**0.00352**	**0.0199**	**0.00107**	**0.00523**	**0.261**	**0.0218**	< 0.000234
MW-98	POE	12/14/2021	< 0.000244	**0.00146**	< 0.000285	< 0.000174	**0.00162**	< 0.000424	< 0.000234

Notes:

The concentrations are presented in milligrams per liter (mg/L).

The cPCLs are the lower of the $^{GW}GW_{Ing}$ and $^{Air}GW_{Inh\text{-}V}$ Tier I PCLs for residential land use based on the latest PCL tables (January 2021).

Bold values indicate a detected concentration.

Bold and shaded values exceed the cPCL.

POE wells MW-16R could not be sampled due to permanganate in well.

< = nondetected result less than the sample detection limit

$^{GW}GW_{Ing}$ = groundwater ingestion pathway

$^{Air}GW_{Inh\text{-}V}$ = inhalation of volatiles from groundwater

CAS = Chemical Abstracts Service

cPCL = critical protective concentration level

ID = identification

J = estimated concentration

JH = estimated concentration biased high

MW = monitor well

PCL = protective concentration levels

POE = point of exposure

R = replacement well

Table 2-6. Surface Water Data Summary, 2021 Annual Event

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Analyte Group (Method):			Volatile Organic Compounds (SW8260C)						
		CAS:	75-34-3	75-35-4	107-06-2	156-59-2	127-18-4	79-01-6	75-01-4
		Analyte:	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
		cPCL (Surface Water):	4.1	0.05	0.443	7.49	0.632	0.888	0.0269
Well ID	**Well Type**	**Date Collected**							
SWD-15	HCFCD	12/15/2021	< 0.000244	**0.0125**	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
SWD-17	HCFCD	12/15/2021	< 0.000244 J	**0.00591 JL**	< 0.000285 J	< 0.000174 J	< 0.0005 J	< 0.000424 J	< 0.000234 J
SWD-18	HCFCD	12/15/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234
SWD-20	HCFCD	12/15/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.0005	< 0.000424	< 0.000234

Notes:

The concentrations are presented in milligrams per liter (mg/L).

The cPCLs for surface water are 80% of the cPCLs calculated in the *Human Health Ecological Risk Assessment for Surface Water and Sediment* (June 2003).

Bold values indicate a detected concentration.

< = nondetected result less than the sample detection limit

CAS = Chemical Abstracts Service

cPCL = critical protective concentration level

HCFCD = Harris County Flood Control Ditch

ID = identification

J = estimated concentration

JL = estimated concentration biased low

SWD = surface water sampling locations

Table 4-1. Mann-Kendall Summary 2015-2021

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

	December 2021 Result (mg/L)				Trend Analysis			
Well	**PCE**	**TCE**	**1,1-DCE**	**VC**	**PCE**	**TCE**	**1,1-DCE**	**VC**
MW-01	ND (0.001)	ND (0.005)	**0.0016**	ND (0.002)	NT	NT	NT	NT
MW-15R	ND (0.001)	ND (0.005)	**0.0403**	**0.0021**	NT	NT	+	NT
MW-16R	**0.0150**	**0.0104**	**0.0170**	**0.0073**	NT	NT	NT	+
MW-17R	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.002)	NT	NT	NT	NT
MW-50R	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.002)	NT	-	-	-
MW-65	ND (0.001)	ND (0.005)	**0.0091**	ND (0.002)	NT	NT	NT	-
MW-70	ND (0.001)	**0.0004**	**0.0015**	ND (0.002)	-	-	-	NT
MW-71	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.002)	NT	NT	-	NT
MW-74	**0.0017**	**0.0088**	**0.0034**	**0.0182**	+	+	NT	NT
MW-76	**0.0006**	ND (0.005)	ND (0.001)	ND (0.002)	NT	NT	NT	NT
MW-77	**0.0009**	**0.0015**	**0.0052**	ND (0.002)	NT	NT	NT	NT
MW-83	**0.0505**	**0.0071**	**0.0340**	**0.0023**	NT	-	NT	NT
MW-88	**0.0163**	**0.0033**	**0.0197**	ND (0.002)	-	-	NT	NT
MW-89	**0.0008**	**0.0059**	**0.112**	**0.0091**	NT	NT	+	NT
MW-90	**0.0213**	**0.0029**	**0.0454**	ND (0.002)	-	-	NT	NT
MW-92	**0.0009**	ND (0.005)	ND (0.001)	ND (0.002)	-	NT	NT	NT
MW-93R	**0.110**	**0.0060**	**0.0098**	ND (0.002)	NT	+	NT	NT
MW-97	**0.261**	**0.0218**	**0.0199**	ND (0.002)	+	+	+	NT
MW-98	**0.0016**	ND (0.005)	**0.0015**	ND (0.002)	+	NT	+	NT
MW-100	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.002)	NT	-	-	NT
MW-106	ND (0.001)	ND (0.005)	ND (0.001)	**0.0118**	-	-	-	NT
MW-108	ND (0.001)	**0.0172**	**0.0552**	ND (0.002)	NT	NT	NT	NT
MW-109	**0.0190**	**0.0050**	**0.0346**	**0.0163**	NT	-	NT	NT
MW-110	ND (0.001)	ND (0.005)	**0.0031**	**0.0004**	NT	-	NT	NT
MW-111	**0.0196**	**0.0072**	**0.547**	**0.0941**	NT	NT	NT	NT
MW-112	ND (0.001)	ND (0.005)	**0.0291**	**0.0051**	NT	-	NT	NT
MW-113	**0.0129**	**0.0077**	**0.0197**	**0.0009**	NT	NT	+	NT
MW-121	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.002)	NT	NT	-	NT
MW-122	**0.0012**	**0.0010**	**0.0258**	ND (0.002)	NT	-	NT	NT
MW-145	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.002)	NT	NT	-	-
MW-146	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.002)	NT	NT	-	-
MW-147	**0.0030**	**0.0011**	**0.0016**	ND (0.002)	+	+	-	NT
MW-160	**0.0028**	**0.0017**	**0.0024**	ND (0.002)	NT	NT	NT	NT
MW-161	**0.0015**	**0.0007**	**0.0482**	ND (0.002)	NT	NT	+	NT
MW-162	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.002)	NT	NT	NT	NT
MW-163	**0.0008**	**0.0007**	**0.0168**	**0.0011**	NT	NT	NT	NT
MW-168	**0.0952**	**0.0138**	**0.0098**	**0.0003**	+	+	-	NT
MW-178	ND (0.001)	ND (0.005)	ND (0.001)	ND (0.002)	NT	NT	NT	NT
MW-179	ND (0.001)	ND (0.005)	**0.0043**	ND (0.002)	NT	NT	+	NT

Notes:

Bold values indicate a detected concentration.

"-" = decreasing trend

"+" = increasing trend

(0.001) = reporting limit

1,1-DCE = 1,1-dichloroethene

COC = chemical of concern

ND = nondetected result less than the sample detection limit

NT = no trend due to stable COC concentration or wells with nondetect results

PCE = tetrachloroethene

TCE = trichloroethene

VC = vinyl chloride

Table 6-1. Projected 2022 Schedule

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Anticipated Date	Event	Description of the Activities
January 2022	COH Submittal	Semiannual System Discharge Report, dated January 15, 2022, submitted to COH as required by Industrial Waste Permit Number 10799.
March 2022	Notification Letters to Property Owners	Delivery of analytical data to property owners whose residential wells were sampled during the 2021 Annual event in December 2021.
	TCEQ submittal	Submit the 2021 Annual Response Action Effectiveness Report. Results of the 2021 annual event are included within the report.
	Operations and Maintenance Activities	Complete repairs on granular activated carbon vessels at the North Treatment System.
April 2022	Annual Public Meeting	Annual meeting for Settlement Class Members to meet with Cameron regarding the Former Cameron Iron Works Facility remedial activities.
June 2022	Waste Pickup	Clean Harbors Environmental Services, Inc. to pickup site nonhazardous waste.
June 2022	2022 Response Action Plan	Submit 2022 Response Action Plan by end of June 2022.
July 2022	COH Submittal	Submittal of Semiannual System Discharge Report (January 2022 through June 2022).
November 2022	COH Submittal	Submit Facility Permit Renewal.
December 2022	Field Activities	2022 annual groundwater and surface water sampling.
	TCEQ submittal	Class V Aquifer Remediation Injection Well Report (October 1, 2021, through September 30, 2022).

Notes:

COH = City of Houston

TCEQ = Texas Commission on Environmental Quality

Table 6-2. Proposed 2022 Sampling Locations

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Monitor Wells			Surface Water Locations
MW-01	MW-90	MW-122	SWD-12
MW-15R	MW-92	MW-145	SWD-14
MW-16R	MW-93R	MW-146	SWD-15
MW-17R	MW-97	MW-147	SWD-17
MW-50R	MW-98	MW-160	SWD-18
MW-65	MW-100	MW-161	SWD-20
MW-70	MW-106	MW-162	
MW-71	MW-108	MW-163	
MW-74	MW-109	MW-168	
MW-76	MW-110	MW-173R[a]	
MW-77	MW-111	MW-178	
MW-83	MW-112	MW-179	
MW-88	MW-113	MW-181[a]	
MW-89	MW-121	MW-182[a]	

Notes:

[a] MW-173R, MW-181 and MW-182 to be installed in 2022.

The other monitor well MW-180 is not proposed to be sampled in 2022.

MW = monitor well

R = replacement well

SWD = surface water sampling location

Figures

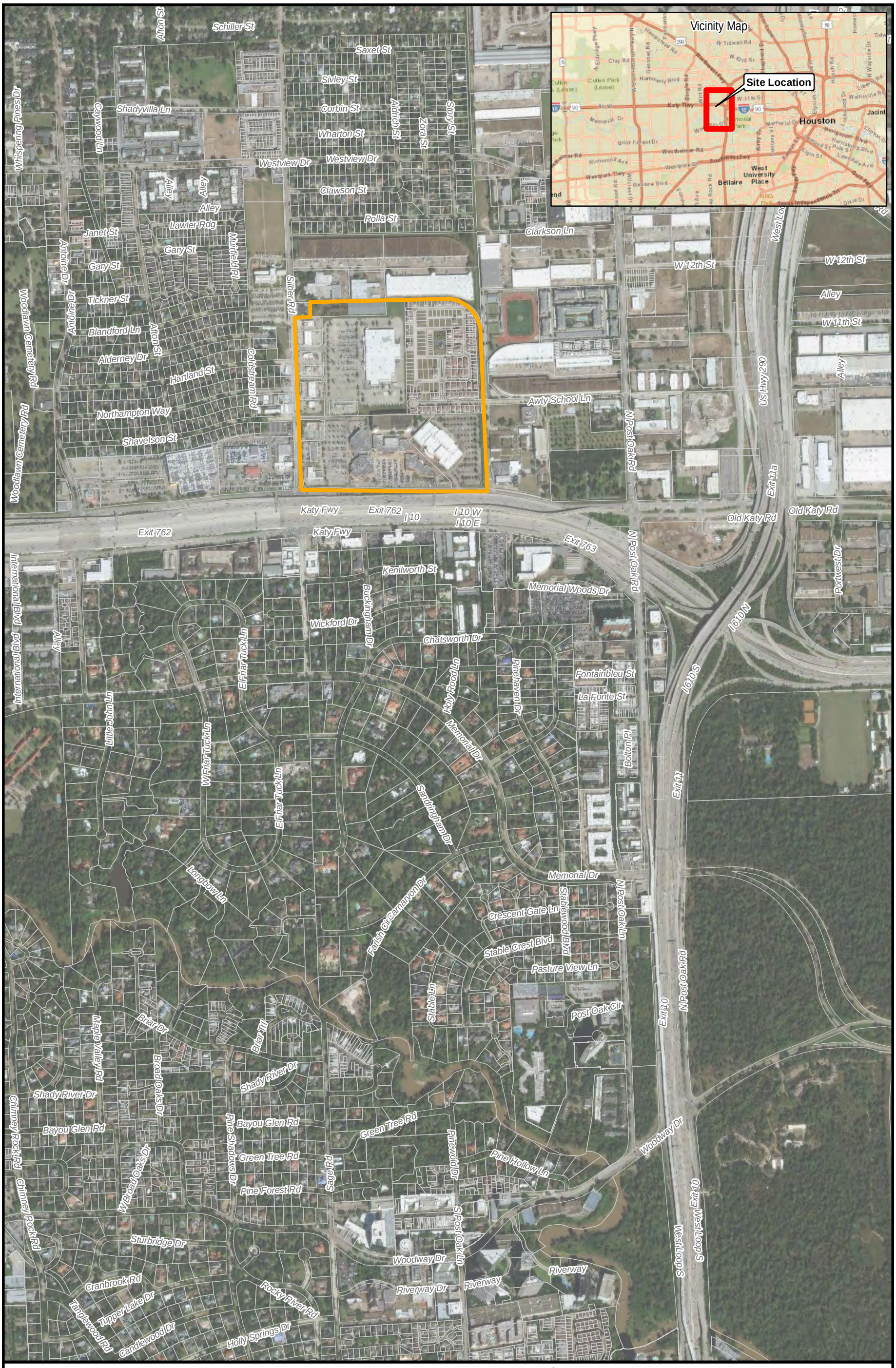

Figure 1-1.
Site Location Map
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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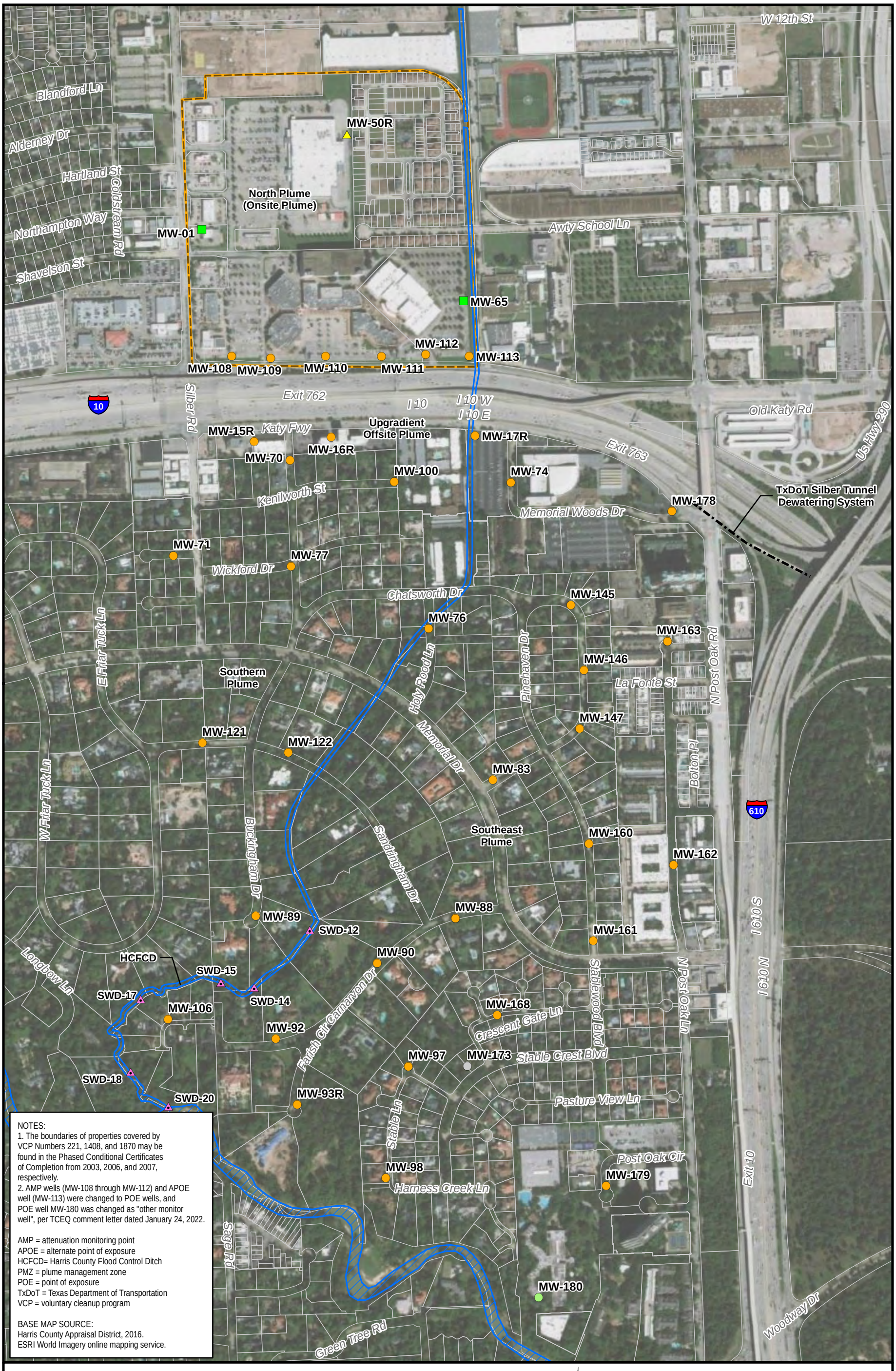

NOTES:
1. The boundaries of properties covered by VCP Numbers 221, 1408, and 1870 may be found in the Phased Conditional Certificates of Completion from 2003, 2006, and 2007, respectively.
2. AMP wells (MW-108 through MW-112) and APOE well (MW-113) were changed to POE wells, and POE well MW-180 was changed as "other monitor well", per TCEQ comment letter dated January 24, 2022.

AMP = attenuation monitoring point
APOE = alternate point of exposure
HCFCD= Harris County Flood Control Ditch
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation
VCP = voluntary cleanup program

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend

- APOE Well
- AMP Well
- POE Well
- Plugged and Abandoned Well (2021)
- Other Monitoring Well
- Surface Water Sample Locations
- Former Facility Boundary
- PMZ Boundary
- HCFCD
- Gaining Portion of Stream
- TxDoT Dewatering System
- Parcel

N

0 325 650

Approximate scale in feet

Figure 2-1
Groundwater and Surface Water Monitoring Network
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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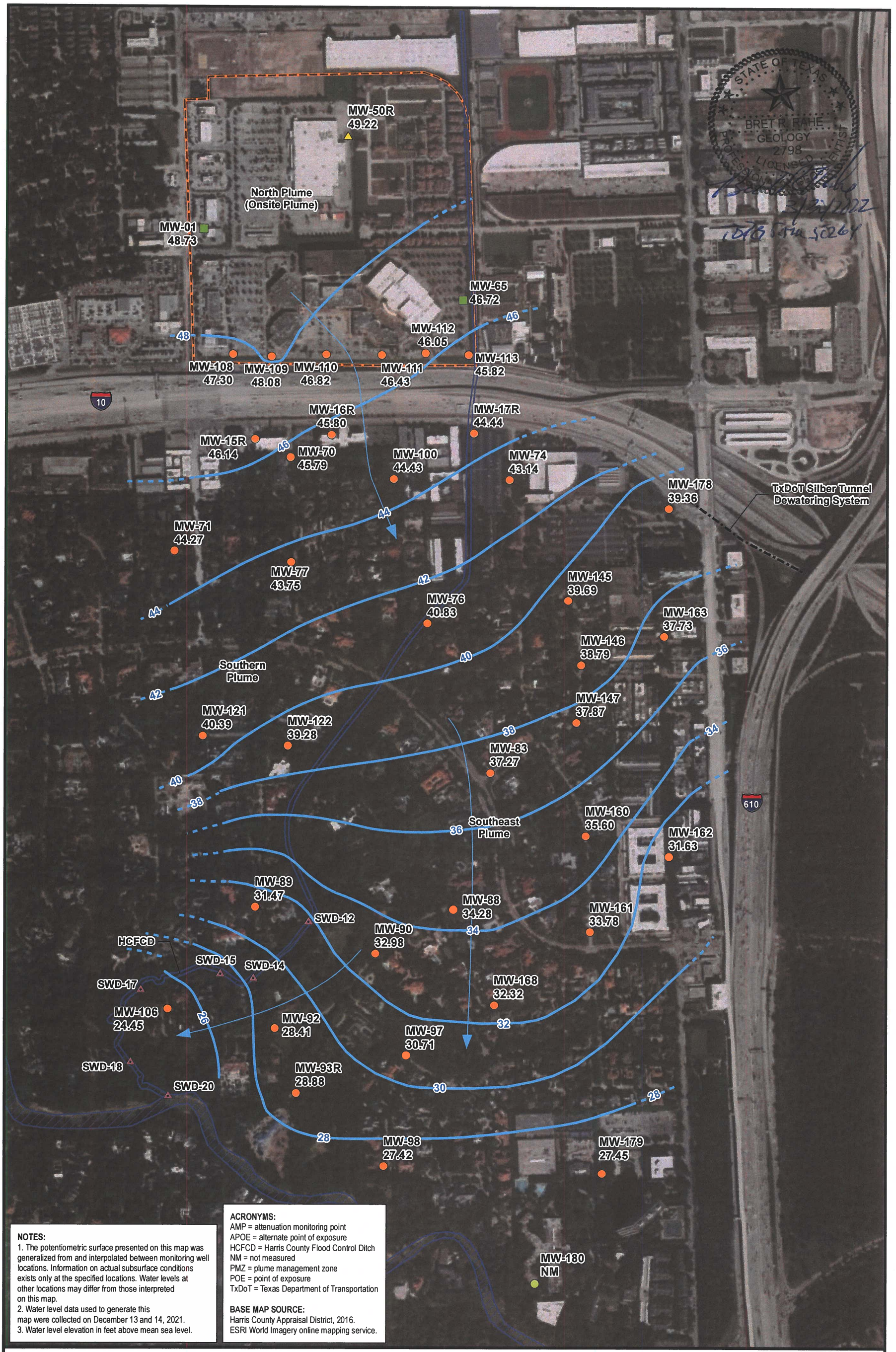

NOTES:
1. The potentiometric surface presented on this map was generalized from and interpolated between monitoring well locations. Information on actual subsurface conditions exists only at the specified locations. Water levels at other locations may differ from those interpreted on this map.
2. Water level data used to generate this map were collected on December 13 and 14, 2021.
3. Water level elevation in feet above mean sea level.

ACRONYMS:
AMP = attenuation monitoring point
APOE = alternate point of exposure
HCFCD = Harris County Flood Control Ditch
NM = not measured
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend

- APOE Well
- AMP Well
- POE Well
- Other Monitor Well
- Former Facility Boundary
- Surface Water Sample Locations
- HCFCD
- Gaining Portion of Stream
- Approximate Groundwater Flow Direction (December 2021)
- TxDoT Dewatering System
- Groundwater Elevation Contour
- (Dashed Where Inferred)
- PMZ Boundary

N

0 325 650

Approximate scale in feet

Figure 2-2.
Potentiometric Surface Map, December 2021
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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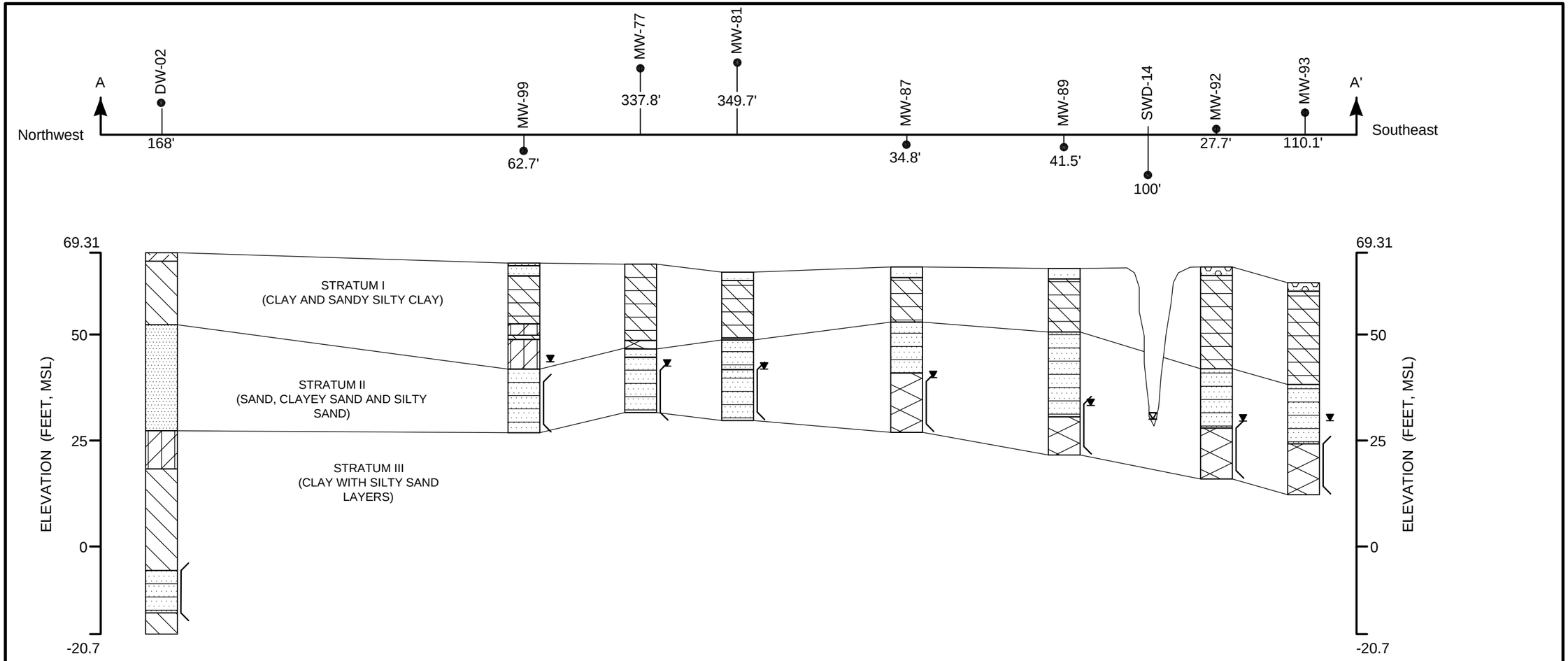
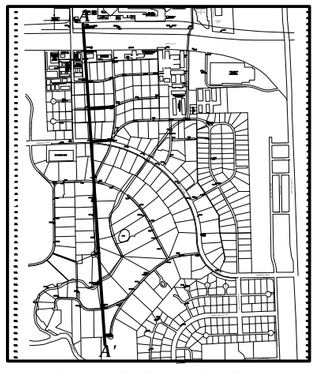




CROSS-SECTION LOCATION
SCALE : 1"=2497'

LEGEND

- CLAY
- SILT
- SAND
- SILTY CLAY
- CLAYEY SILT
- SILTY SAND
- FILL
- CONCRETE
- NO RECOVERY
- HARRIS COUNTY FLOOD CONTROL DITCH
- GROUND WATER ELEVATION FOR DECEMBER 9, 2002
- DITCH SURFACE WATER ELEVATION WAS ESTIMATED USING SURVEYED DATA.
- SCREENED INTERVAL

25' VERTICAL
0 HORIZONTAL 600'

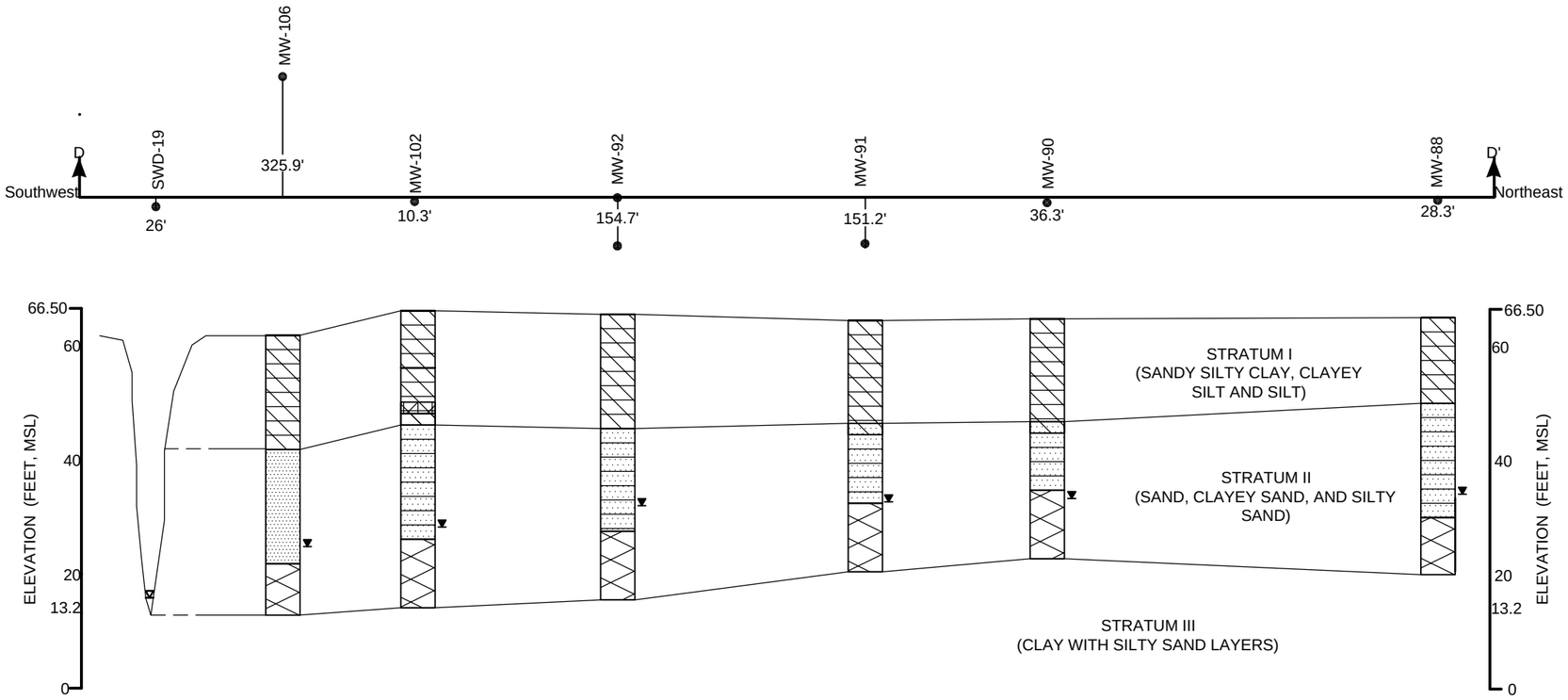
NOTE:
1. THE SIDE SLOPES OF THE HARRIS COUNTY FLOOD CONTROL DITCH WERE ESTIMATED. THE BOTTOM ELEVATION OF THE DITCH WAS SURVEYED.

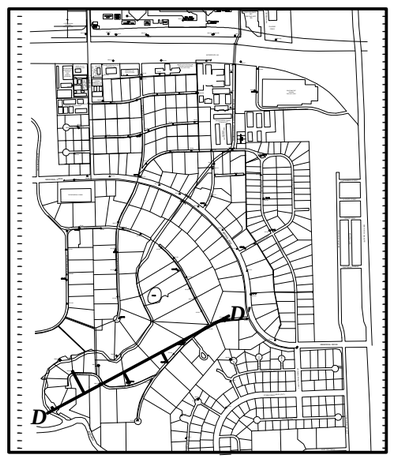
MSL = MEAN SEA LEVEL

Figure 2-3a.
Cross Section A-A'
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

ch2m

Source origin: Response Action Plan (ERM, 2003)

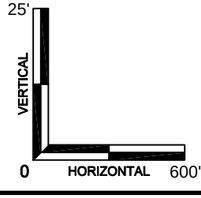




CROSS-SECTION LOCATION
SCALE: 1" =1962'

LEGEND

- CLAY
- SILT
- SAND
- SILTY CLAY
- CLAYEY SILT
- SILTY SAND
- FILL
- CONCRETE
- NO RECOVERY
- HARRIS COUNTY FLOOD CONTROL DITCH
- GROUND WATER ELEVATION FOR DECEMBER 9, 2002
- DITCH SURFACE WATER ELEVATION WAS ESTIMATED USING SURVEYED DATA.
- SCREENED INTERVAL



NOTE:

1. THE SIDE SLOPES OF THE HARRIS COUNTY FLOOD CONTROL DITCH WERE ESTIMATED. THE BOTTOM ELEVATION OF THE DITCH WAS SURVEYED.

MSL = MEAN SEA LEVEL

Figure 2-3b.
Cross Section D-D'
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

ch2m.

Source origin: Response Action Plan (ERM, 2003)

NOTES:
1. The concentrations are presented in milligrams per liter (mg/L).
2. The cPCLs are the lower of the $^{GW}GW_{Ing}$ and $^{Air}GW_{Inh\text{-}V}$ Tier I PCLs for residential land use based on the latest PCL tables (January, 2021).
3. The cPCLs for surface water are 80% of the cPCLs calculated in the *Human Health Ecological Risk Assessment for Surface Water and Sediment (June 2003).*
4. Bold values indicate a detected concentration.
5. Bold/Shaded values exceed the cPCL. There is no exceedance of AAL for AMP wells.
6. The cPCL for 1,1-dichloroethene for groundwater is 0.007 mg/L and surface water is 0.05 mg/L.
7. The established Attenuation Action Level (AAL) for 1,1-dicholoroethene is 2.4 mg/L.
8. Historical concentration data of adjacent abandoned wells were also used to define plume boundary.
9. The extent of 1,1-dichloroethene presented on this map was generalized from and interpolated between monitoring well locations. Information on actual subsurface conditions exists only at the specified locations. Chemical concentrations at other locations may differ from those interpreted on this map.

ACRONYMS:
< = nondetected result less than the sample detection limit
AAL = attenuation action level
AMP = attenuation monitoring point
APOE = alternate point of exposure
cPCL = critical protective concentration level
$^{GW}GW_{Ing}$ = groundwater ingestion pathway
$^{Air}GW_{Inh\text{-}V}$ = inhalation of volatiles from groundwater
HCFCD= Harris County Flood Control Ditch
J = estimated concentration
JL = estimated concentration, biased low
NS = not sampled
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend
- APOE Well
- AMP Well
- POE Well
- Surface Water Sample Locations
- Other Monitor Well
- Former Facility Boundary
- HCFCD
- Gaining Portion of Stream
- PMZ Boundary
- TxDoT Dewatering System
- Parcel
- 1,1-Dichloroethene cPCL Exceedance Boundary
- Dashed Where Inferred

N

0 325 650

Approximate scale in feet

Figure 2-4.
1,1- Dichloroethene Concentration Map
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

\\dc1vs01\gisproj\C\Cameron\Maps\Report\Cameron_Dec2021_11Dichloroethene.mxd gtwigg 3/1/2022 2:30:57 PM

ch2m:

NOTES:
1. The concentrations are presented in milligrams per liter (mg/L).
2. The cPCLs are the lower of the $^{GW}GW_{Ing}$ and $^{Air}GW_{Inh\text{-}V}$ Tier I PCLs for residential land use based on the latest PCL tables (January, 2021).
3. The cPCLs for surface water are 80% of the cPCLs calculated in the *Human Health Ecological Risk Assessment for Surface Water and Sediment (June 2003).*
4. Bold values indicate a detected concentration.
5. Bold/Shaded values exceed the cPCL. There is no exceedance of AAL for AMP wells.
6. The cPCL for tetrachloroethene for groundwater is 0.005 mg/L and surface water is 0.632 mg/L.
7. The established Attenuation Action Level (AAL) for tetracholoroethene is 0.582 mg/L.
8. Historical concentration data of adjacent abandoned wells were also used to define plume boundary.
9. The extent of tetracholoroethene presented on this map was generalized from and interpolated between monitoring well locations. Information on actual subsurface conditions exists only at the specified locations. Chemical concentrations at other locations may differ from those interpreted on this map.

ACRONYMS:
< = nondetected result less than the sample detection limit
AAL = attenuation action level
AMP = attenuation monitoring point
APOE = alternate point of exposure
cPCL = critical protective concentration level
$^{GW}GW_{Ing}$ = groundwater ingestion pathway
$^{Air}GW_{Inh\text{-}V}$ = inhalation of volatiles from groundwater
HCFCD= Harris County Flood Control Ditch
J = estimated concentration
JH = estimated concentration biased high
NS = not sampled
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend
- APOE Well
- AMP Well
- POE Well
- Surface Water Sample Locations
- Other Monitor Well
- Former Facility Boundary
- HCFCD
- Gaining Portion of Stream
- PMZ Boundary
- TxDoT Dewatering System
- Parcel
- Tetrachloroethene cPCL Exceedance Boundary
- Dashed Where Inferred

N

0 325 650
Approximate scale in feet

Figure 2-5.
Tetrachloroethene Concentration Map
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

\\brookside\GIS_SHARE - \\dc1vs01\gisproj\C\Cameron\Maps\Report\Cameron_Dec2021_Tetrachloroethene.mxd gtwigg 3/1/2022 2:29:16 PM

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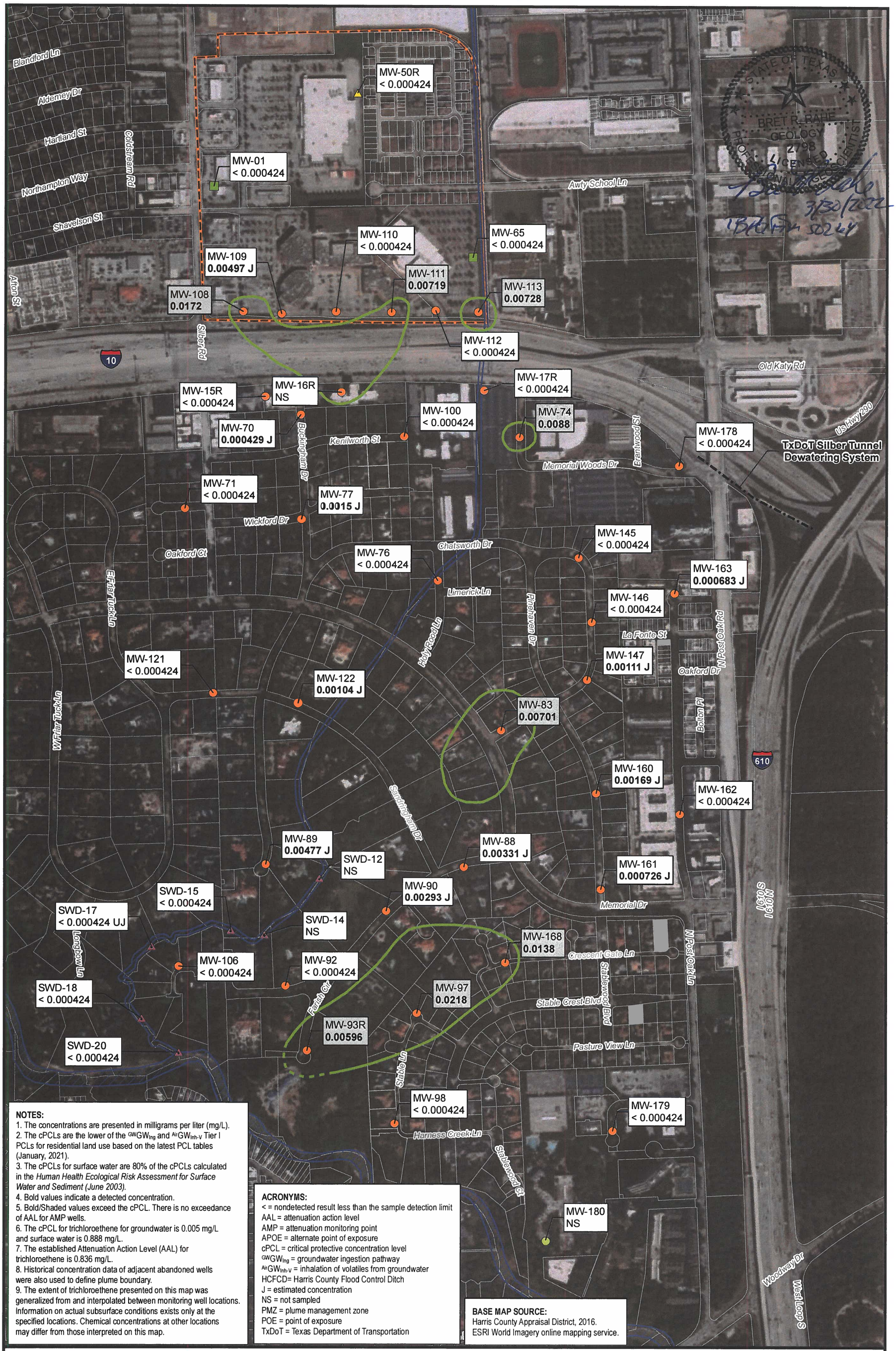

NOTES:
1. The concentrations are presented in milligrams per liter (mg/L).
2. The cPCLs are the lower of the $^{GW}GW_{Ing}$ and $^{Air}GW_{Inh\text{-}V}$ Tier I PCLs for residential land use based on the latest PCL tables (January, 2021).
3. The cPCLs for surface water are 80% of the cPCLs calculated in the *Human Health Ecological Risk Assessment for Surface Water and Sediment (June 2003).*
4. Bold values indicate a detected concentration.
5. Bold/Shaded values exceed the cPCL. There is no exceedance of AAL for AMP wells.
6. The cPCL for trichloroethene for groundwater is 0.005 mg/L and surface water is 0.888 mg/L.
7. The established Attenuation Action Level (AAL) for trichloroethene is 0.836 mg/L.
8. Historical concentration data of adjacent abandoned wells were also used to define plume boundary.
9. The extent of trichloroethene presented on this map was generalized from and interpolated between monitoring well locations. Information on actual subsurface conditions exists only at the specified locations. Chemical concentrations at other locations may differ from those interpreted on this map.

ACRONYMS:
< = nondetected result less than the sample detection limit
AAL = attenuation action level
AMP = attenuation monitoring point
APOE = alternate point of exposure
cPCL = critical protective concentration level
$^{GW}GW_{Ing}$ = groundwater ingestion pathway
$^{Air}GW_{Inh\text{-}V}$ = inhalation of volatiles from groundwater
HCFCD= Harris County Flood Control Ditch
J = estimated concentration
NS = not sampled
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend
- APOE Well
- AMP Well
- POE Well
- Surface Water Sample Locations
- Other Monitor Well
- Former Facility Boundary
- HCFCD
- Gaining Portion of Stream
- PMZ Boundary
- TxDoT Dewatering System
- Parcel
- Trichloroethene cPCL Exceedance Boundary
- Dashed Where Inferred

N

0 325 650

Approximate scale in feet

Figure 2-6.
Trichloroethene Concentration Map
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

ch2m:

NOTES:
1. The concentrations are presented in milligrams per liter (mg/L).
2. The cPCLs are the lower of the $^{GW}GW_{Ing}$ and $^{Air}GW_{Inh\text{-}V}$ Tier I PCLs for residential land use based on the latest PCL tables (January, 2021).
3. The cPCLs for surface water are 80% of the cPCLs calculated in the *Human Health Ecological Risk Assessment for Surface Water and Sediment (June 2003).*
4. Bold values indicate a detected concentration.
5. Bold/Shaded values exceed the cPCL. There is no exceedance of AAL for AMP wells.
6. The cPCL for vinyl chloride for groundwater is 0.002 mg/L and surface water is 0.0269 mg/L.
7. The established Attenuation Action Level (AAL) for vinyl chloride is 0.480 mg/L.
8. Historical concentration data of adjacent abandoned wells were also used to define plume boundary.
9. The extent of vinyl chloride presented on this map was generalized from and interpolated between monitoring well locations. Information on actual subsurface conditions exists only at the specified locations. Chemical concentrations at other locations may differ from those interpreted on this map.

ACRONYMS:
< = nondetected result less than the sample detection limit
AAL = attenuation action level
AMP = attenuation monitoring point
APOE = alternate point of exposure
cPCL = critical protective concentration level
$^{GW}GW_{Ing}$ = groundwater ingestion pathway
$^{Air}GW_{Inh\text{-}V}$ = inhalation of volatiles from groundwater
HCFCD= Harris County Flood Control Ditch
J = estimated concentration
JL = estimated concentration, biased low
NS = not sampled
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend

- APOE Well
- AMP Well
- POE Well
- Surface Water Sample Locations
- Other Monitor Well
- Former Facility Boundary
- HCFCD
- Gaining Portion of Stream
- PMZ Boundary
- TxDoT Dewatering System
- Parcel
- Vinyl Chloride cPCL Exceedance Boundary

N

0 325 650

Approximate scale in feet

Figure 2-7.
Vinyl Chloride Concentration Map
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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Figure 2-8.
Protective Concentration Level Exceedance Zone Map
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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ch2m:

NOTES:
1. Historical concentration data of adjacent abandoned wells were also used to define plume boundary.
2. The PCLE zone presented on this map was generalized from and interpolated between monitoring well locations. Information on actual subsurface conditions exists only at the specified locations. Chemical concentrations at other locations may differ from those interpreted on this map.
3. The boundaries of properties covered by VCP Numbers 221, 1408, and 1870 may be found in the Phased Conditional Certificates of Completion from 2003, 2006, and 2007, respectively.

ACRONYMS:
AMP = attenuation monitoring point
APOE = alternate point of exposure
HCFCD = Harris County Flood Control Ditch
PCLE = protective concentration level exceedance
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation
VCP = voluntary cleanup program

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend

- APOE Well
- AMP Well
- POE Well
- Surface Water Sample Locations
- Other Monitor Well
- HCFCD
- Gaining Portion of Stream
- Former Facility Boundary
- TxDoT Dewatering System
- Parcel
- PMZ Boundary
- PCLE Zone 2021
- PCLE Zone 2020
- PCLE Zone 2019

N

0 325 650

Approximate scale in feet

Figure 2-9.
Protective Concentration Level Exceedance Zone Comparison - 2019 - 2021
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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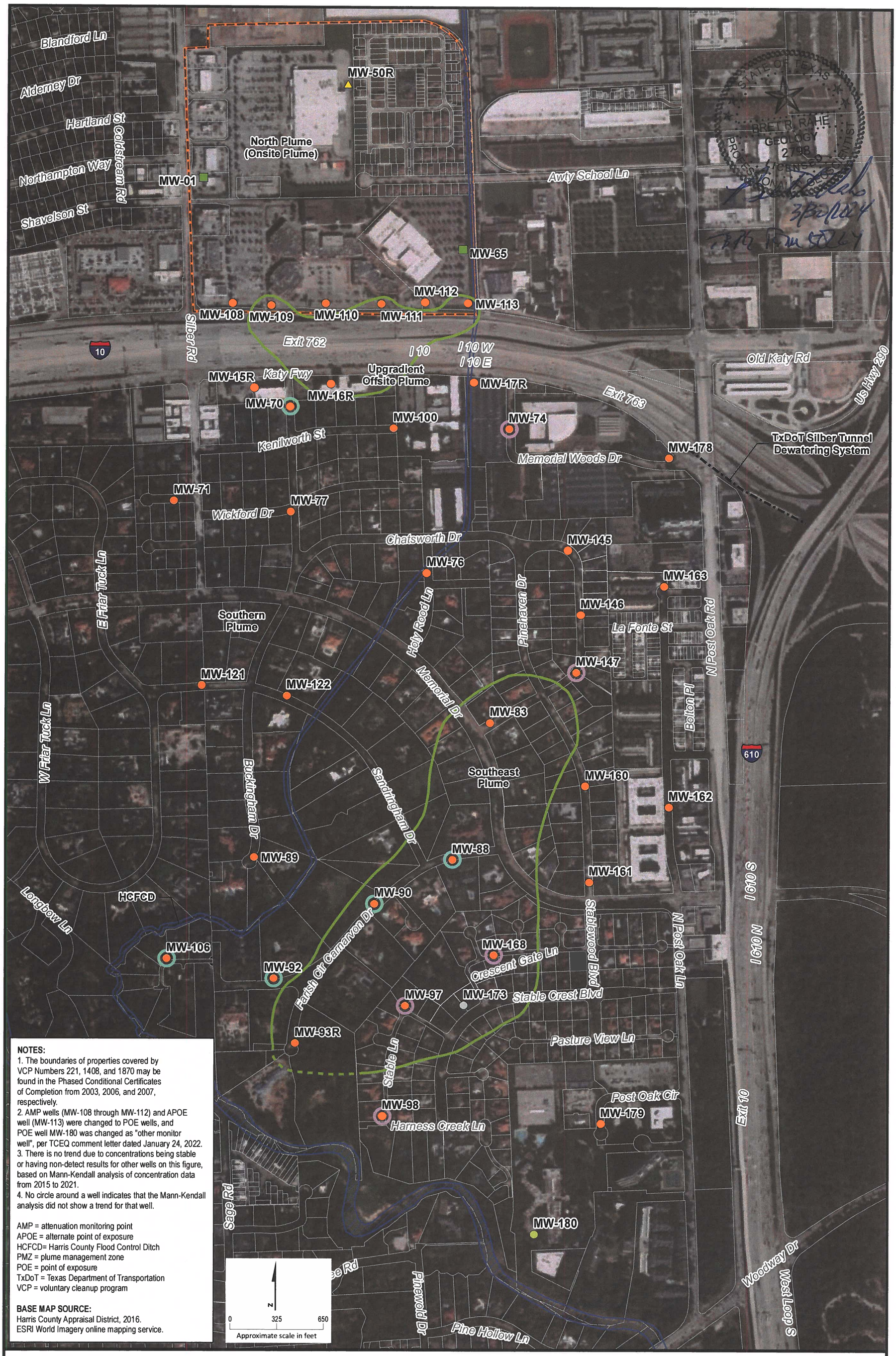

NOTES:
1. The boundaries of properties covered by VCP Numbers 221, 1408, and 1870 may be found in the Phased Conditional Certificates of Completion from 2003, 2006, and 2007, respectively.
2. AMP wells (MW-108 through MW-112) and APOE well (MW-113) were changed to POE wells, and POE well MW-180 was changed as "other monitor well", per TCEQ comment letter dated January 24, 2022.
3. There is no trend due to concentrations being stable or having non-detect results for other wells on this figure, based on Mann-Kendall analysis of concentration data from 2015 to 2021.
4. No circle around a well indicates that the Mann-Kendall analysis did not show a trend for that well.

AMP = attenuation monitoring point
APOE = alternate point of exposure
HCFCD= Harris County Flood Control Ditch
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation
VCP = voluntary cleanup program

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend

- APOE Well
- AMP Well
- POE Well
- Plugged and Abandoned Well (2021)
- Other Monitoring Well
- Former Facility Boundary
- PMZ Boundary
- HCFCD
- Gaining Portion of Stream
- TxDoT Dewatering System
- Increasing Mann-Kendall Trend
- Decreasing Mann-Kendall Trend
- Tetrachloroethene cPCL Exceedance Boundary
- Dashed Where Inferred
- Parcel

Figure 4-1a.
Mann-Kendall Trend Map - Tetrachloroethene
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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NOTES:
1. The boundaries of properties covered by VCP Numbers 221, 1408, and 1870 may be found in the Phased Conditional Certificates of Completion from 2003, 2006, and 2007, respectively.
2. AMP wells (MW-108 through MW-112) and APOE well (MW-113) were changed to POE wells, and POE well MW-180 was changed as "other monitor well", per TCEQ comment letter dated January 24, 2022.
3. There is no trend due to concentrations being stable or having non-detect results for other wells on this figure, based on Mann-Kendall analysis of concentration data from 2015 to 2021.
4. No circle around a well indicates that the Mann-Kendall analysis did not show a trend for that well.

AMP = attenuation monitoring point
APOE = alternate point of exposure
HCFCD= Harris County Flood Control Ditch
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation
VCP = voluntary cleanup program

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend

- APOE Well
- AMP Well
- POE Well
- Plugged and Abandoned Well (2021)
- Other Monitoring Well
- Former Facility Boundary
- PMZ Boundary
- HCFCD
- Gaining Portion of Stream
- TxDoT Dewatering System
- Increasing Mann-Kendall Trend
- Decreasing Mann-Kendall Trend
- Trichloroethene cPCL Exceedance Boundary
- Dashed Where Inferred
- Parcel

Figure 4-1b.
Mann-Kendall Trend Map - Trichloroethene
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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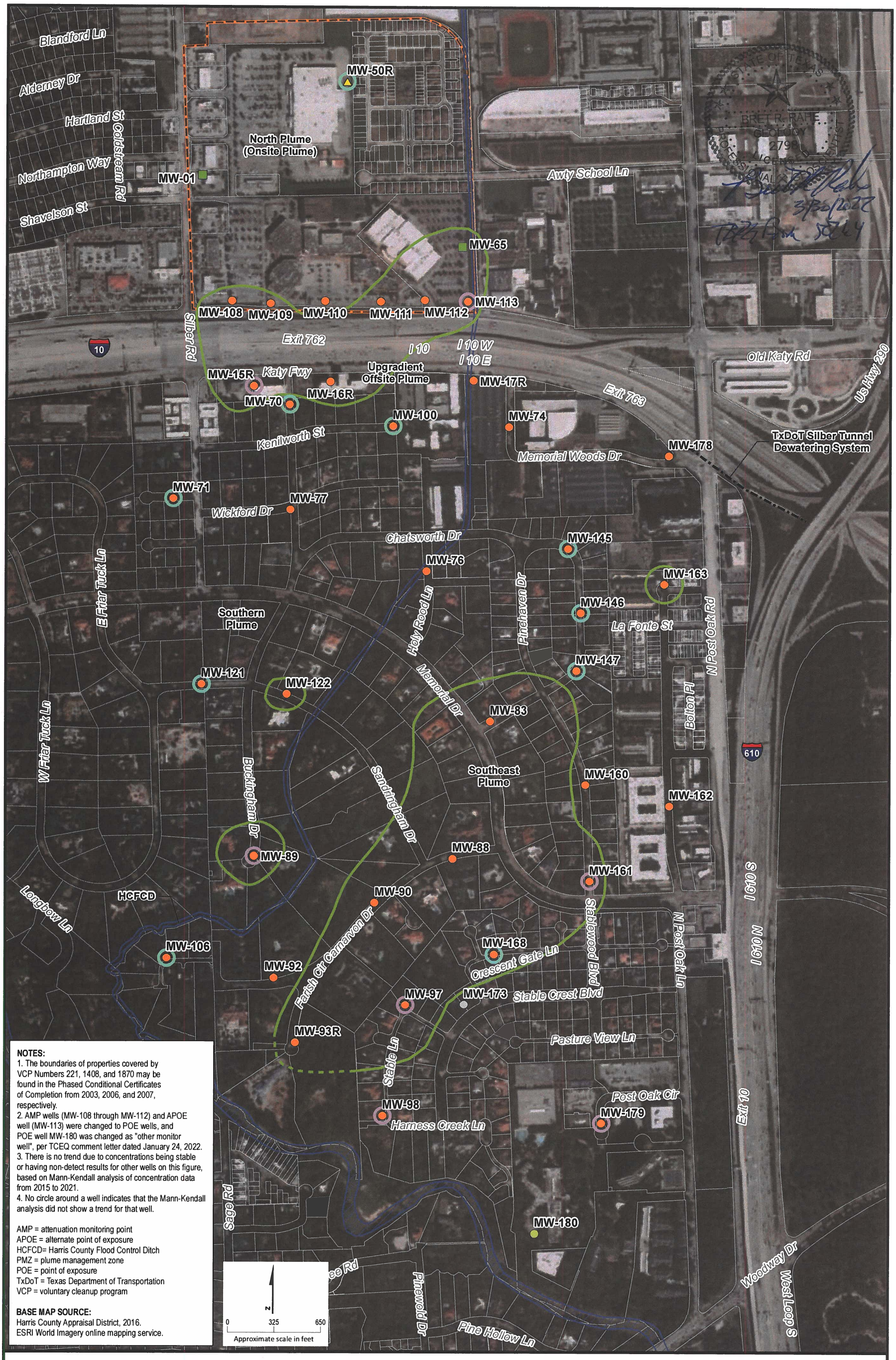

NOTES:
1. The boundaries of properties covered by VCP Numbers 221, 1408, and 1870 may be found in the Phased Conditional Certificates of Completion from 2003, 2006, and 2007, respectively.
2. AMP wells (MW-108 through MW-112) and APOE well (MW-113) were changed to POE wells, and POE well MW-180 was changed as "other monitor well", per TCEQ comment letter dated January 24, 2022.
3. There is no trend due to concentrations being stable or having non-detect results for other wells on this figure, based on Mann-Kendall analysis of concentration data from 2015 to 2021.
4. No circle around a well indicates that the Mann-Kendall analysis did not show a trend for that well.

AMP = attenuation monitoring point
APOE = alternate point of exposure
HCFCD= Harris County Flood Control Ditch
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation
VCP = voluntary cleanup program

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend
- APOE Well
- AMP Well
- POE Well
- Plugged and Abandoned Well (2021)
- Other Monitoring Well
- Former Facility Boundary
- PMZ Boundary
- HCFCD
- Gaining Portion of Stream
- TxDoT Dewatering System
- Increasing Mann-Kendall Trend
- Decreasing Mann-Kendall Trend
- 1,1-Dichloroethene cPCL Exceedance Boundary
- Dashed Where Inferred
- Parcel

Figure 4-1c.
Mann-Kendall Trend Map - 1,1-Dichloroethene
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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ch2m:

NOTES:
1. The boundaries of properties covered by VCP Numbers 221, 1408, and 1870 may be found in the Phased Conditional Certificates of Completion from 2003, 2006, and 2007, respectively.
2. AMP wells (MW-108 through MW-112) and APOE well (MW-113) were changed to POE wells, and POE well MW-180 was changed as "other monitor well", per TCEQ comment letter dated January 24, 2022.
3. There is no trend due to concentrations being stable or having non-detect results for other wells on this figure, based on Mann-Kendall analysis of concentration data from 2015 to 2021.
4. No circle around a well indicates that the Mann-Kendall analysis did not show a trend for that well.

AMP = attenuation monitoring point
APOE = alternate point of exposure
HCFCD= Harris County Flood Control Ditch
PMZ = plume management zone
POE = point of exposure
TxDoT = Texas Department of Transportation
VCP = voluntary cleanup program

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

Legend

- APOE Well
- AMP Well
- POE Well
- Plugged and Abandoned Well (2021)
- Other Monitoring Well
- Former Facility Boundary
- PMZ Boundary
- HCFCD
- Gaining Portion of Stream
- Vinyl Chloride cPCL Exceedance Boundary
- TxDoT Dewatering System
- Parcel
- Increasing Mann-Kendall Trend
- Decreasing Mann-Kendall Trend

N

0 325 650

Approximate scale in feet

Figure 4-1d.
Mann-Kendall Trend Map - Vinyl Chloride
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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ch2m:

NOTES:

1. Historical concentration data of adjacent abandoned wells were also used to define plume boundary.
2. The PCLE zone presented on this map was generalized from and interpolated between monitoring well locations. Information on actual subsurface conditions exists only at the specified locations. Chemical concentrations at other locations may differ from those interpreted on this map.
3. The boundaries of properties covered by VCP Numbers 221, 1408, and 1870 may be found in the Phased Conditional Certificates of Completion from 2003, 2006, and 2007, respectively.
4. AMP wells (MW-108 through MW-112) and APOE well (MW-113) were changed to POE wells, and POE well MW-180 was changed as "other monitor well", per TCEQ comment letter dated January 24, 2022.

BASE MAP SOURCE:
Harris County Appraisal District, 2016.
ESRI World Imagery online mapping service.

ACRONYMS:
AMP = attenuation monitoring point
APOE = alternate point of exposure
HCFCD = Harris County Flood Control Ditch
PCLE = protective concentration level exceedance
PMZ = plume management zone
POE = point of exposure
TCEQ = Texas Commission on Environmental Quality
TxDoT = Texas Department of Transportation
VCP = voluntary cleanup program

Legend

- APOE Well
- AMP Well
- POE Well
- Surface Water Sample Locations
- Other Monitor Well
- Proposed AMP Well
- Proposed POE Well
- Proposed Soil Boring
- Proposed Contingent Soil Boring
- HCFCD
- Gaining Portion of Stream
- Former Facility Boundary
- TxDoT Dewatering System
- Parcel
- PCLE Zone 2021
- (Dashed Where Inferred)
- PMZ Boundary

N

0 300 600

Approximate scale in feet

Figure 4-2.
Planned Monitor Wells and Boring Locations
2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, TX

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Appendix A
Checklist for RAER Completeness

Appendix A. Checklist for RAER Completeness

2021 Response Action Effectiveness Report
Former Cameron Iron Works Facility, Houston, Texas

RAER Components	Required (Y or N)	Provided in Report (Y or N)	Report Section	Notes
Cover Page	Y	Y	Cover Letter and Title Page	
Executive Summary and Chronology	Y	Y	Section 1	See 2018 Response Action Plan Addendum (Executive Summary) and Table 1-1 (Chronology)
Checklist for Report Completeness	Y	Y	Appendix A	
Worksheet 1.0 *Response Action Objectives*	Y	N	NA	Provided in the 2003 Response Action Plan, 2009 Response Action Plan Addendum, and 2018 Response Action Plan Addendum.
Attachment 1A *Maps and Cross Sections*	Y	Y	Section 2	See Figures 1-1 to 2-9
Affected Property Map	Y	Y	Section 2	See Figure 2-8 and 2-9
COC Concentration Maps	Y	Y	Section 2	See Figures 2-4 to 2-7
Parameters Map	Y	Y	Section 2	See Table 2-3 (Geochemical parameter distribution map is provided in 2003 Response Action Plan)
Groundwater Gradient Map	Y	Y	Section 2	See Figure 2-2
Cross Sections	Y	Y	Section 2	See Figures 2-3a and 2-3b
Attachment 1B *Graphs*	Y	Y	Section 2	See Appendix D
Attachment 1C *Response Action Diagrams*	Y	N	NA	Provided in the 2003 Response Action Plan, 2009 Response Action Plan Addendum, and 2018 Response Action Plan Addendum
Worksheet 2.0 *Plume Management Zone*	Y	N	Section 2	Provided in the 2003 Response Action Plan
Attachment 2A *Map of Plume Management Zone*	Y	Y	Section 2	Provided in the 2003 Response Action Plan and 2018 Response Action Plan Addendum; Figure 2-1
Worksheet 3.0 *Technical Impracticability*	Y	N	NA	Provided in 2003 Response Action Plan and 2009 Response Action Plan Addendum
Attachment 3A *Map of Technical Impracticability*	Y	N	NA	Provided in 2003 Response Action Plan and 2009 Response Action Plan Addendum
Worksheet 4.0 *Institutional Controls*	Y	N	NA	Provided in the 2003 Response Action Plan
Worksheet 5.0 *Performance Measures and Problems*	Y	N	NA	Provided in the 2003 Response Action Plan
Worksheet 6.0 *Operation and Maintenance*	Y	Y	Section 3	Provided in the Class V Aquifer Remediation Injection Well Report (October 1, 2020 to September 30, 2021) and the City of Houston 2020 Semiannual System Discharge Reports (submitted on July 15, 2021 and January 13, 2022)
Worksheet 7.0 *Statistical Methodologies*	Y	N	NA	Provided in the 2003 Response Action Plan
Appendix 1 *References*	Y	Y	Section 8	
Appendix 2 *ESA and Compensatory Restoration*	Y	N	NA	Provided in the 2003 Response Action Plan
Appendix 3 *Institutional Controls and Landowner Concurrence*	Y	N	NA	Provided in the 2003 Response Action Plan
Appendix 4 COC *Data Tables*	Y	Y	Section 2	See Tables 2-4 through 2-6
Parameters Data Table	Y	Y	Section 2	See Table 2-3
Groundwater Measurements Table	Y	Y	Section 2	See Table 2-2
Boring Logs and Monitor Well Completions	Y	N	NA	No monitoring wells or soil borings were installed in 2021
Appendix 5 *Sampling Procedures*	Y	Y	Section 2.3	
Appendix 6 *Laboratory Data Packages and Data Usability Summaries*	Y	Y	Appendix C	
Appendix 7 *Statistical Methodology*	Y	N	NA	Provided in the 2003 Response Action Plan
Appendix 8 *Waste Disposition*	Y	Y	Section 5	

Notes:
COC = chemical of concern
ESA = ecological services assessment
N = no
NA = not applicable
RAER = Response Action Effectiveness Report
Y = yes

Appendix B
Summary of Residential Letter Notifications, February–March 2022

Texas Risk Reduction Program
Affidavit of §350.55 Notifications

STATE OF TEXAS

COUNTY OF HARRIS

This affidavit is to provide information concerning notifications required pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350. The notifications required by 30 TAC §350.55 have been sent to the property owners at the addresses provided in the attached table. The notifications were sent by CH2M HILL Engineers on behalf of Cameron International Corporation (a Schlumberger Holdings Company).

Executed this 25 day of March, 2022.

[OWNER or RESPONDER]

By: John J. Knott

Name: John J. Knott

Title: CH2M Senior Project Manager

STATE OF TEXAS

Jefferson COUNTY

BEFORE ME, on this the 25 day of 3. 2022, personally appeared [*name*] John Knott, [*title*] Sr. Project Manager, of CH2M HILL Engineers, on behalf of Cameron International Corporation (a Schlumberger Holdings Company), known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 25 day of 3, 2022

Misty L. King – Notary

Notary Public in and for the State of Texas,

County of: Jefferson

My Commission Expires: 2.26.2023

MISTY L KING
Notary Public, State of Texas
Comm. Expires 02-26-2023
Notary ID# 12598176-7

APPENDIX B

Table is attached.

Appendix B. Summary of Residential Letter Notifications, February–March 2022

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Property Address or Location	Property Owner Name
551 PINEHAVEN DR	AUGENTHALER, W THOMAS
8820 MEMORIAL DR	AXELRAD, DEBBIE BROWNSTEIN
8711 CRESCENT GATE LN	AZZAM MANAGEMENT TRUST
8802 MEMORIAL DR	BAZBAZ, JOHN
8818 STABLE CREST BLVD	BENTON, FRED F III & MONICA
431 PINEHAVEN DR	BLACK ROCK LAND COMPANY, LLC
8726 STABLE CREST BLVD	BLEYZER, LEV & IRENE A
3 WINSTON WOODS DR (MW-106)	BOONE, CHRISTOPHER L. & MEDORA T.
603 PINEHAVEN DR	BOZEMAN, JAMES D & JUDY C
8723 CRESCENT GATE LN	BURYAKOVSKY, LARRY
8710 MEMORIAL DR	CHOWWANG, MINGYI & YINGCHAI
MULTIPLE WELLS LOCATED IN STREETS (MW-70, MW-71, MW-74, MW-76, MW-77, MW-83, MW-88, MW-89, MW-90, MW-93R, MW-100, MW-121, MW-122, MW-145, MW-146, MW-147, MW-160, MW-161, MW-162, & MW-163)	CITY OF HOUSTON
8746 CHATSWORTH DR	COGITATE, INC
8814 STABLE CREST BLVD	CONE, MICHAEL S & DRU R
8727 CRESCENT GATE LN	CURRENT OWNER
8822 STABLE CREST BLVD	DAVIS, CARL A & LOIS
8846 STABLE LN	DAVIS, JOE R
502 PINEHAVEN DR	DHIR, PRAJAY & ANITA
306 SADDLEBRANCH CT	EASTVELD, DON & SOHEILA
303 LODGE HOLLOW CT	EBUH, VINCENT O & EUNICE O
7401 KATY FWY (MW-17R & MW-178)	FIRST BAPTIST CHURCH
8722 STABLE CREST BLVD	FREEDMAN, CRAIG
306 GABLE LODGE CT	FRIDLEY, DALE & CAROLYN
602 PINEHAVEN DR	FROST, HALLOWAY H
306 LODGE HOLLOW CT	GEE, HARRY & ANTJE
8834 STABLE LN	GIBBS, RANDALL L & GAIL
8840 MEMORIAL DR	GILANI, SALMAN S
8715 CRESCENT GATE LN	GRAY, ROBERT F JR & GAIL S
541 PINEHAVEN DR	GREEN, CARL E JR
8719 STABLE CREST BLVD	GREENBERG, JOSEPH E
607 PINEHAVEN DR	GROPPE, ERNEST HENRY III & ALLISON
302 GABLE LODGE CT	GROSS, DAVID A & PRISCILA L
8731 CRESCENT GATE LN	GWM GROUP, LLC
8815 STABLE CREST BLVD	HAAS, FRED E
302 SADDLEBRANCH CT	HACKMAN, DODD L & ELENA I
8811 STABLE CREST BLVD	HANNOVER ESTATES, LTD
8842 STABLE LN	HENDRY, MICHELLE A S
8718 STABLE CREST BLVD	HERRIN, ROBERT T III & TRACY J

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2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Property Address or Location	Property Owner Name
7600 KATY FWY (MW-65, MW-108, MW-109, MW-110, MW-111, MW-112, & MW-113)	HCL MARQE LLC
111 N POST OAK LN (MW-179)	HOUSTONIAN CAMPUS LTD
8729 MEMORIAL DR	JOSEPH, ABRAHAM M & REGINA
520 PINEHAVEN DR	KADES, MATTHEW D & LILIYA A
7613 KATY FWY (MW-15R)	KATY FWY REALTY, LTD
8714 STABLE CREST BLVD	KEARNS, RICHARD J & MICHELE H
8720 MEMORIAL DR	KHAN, SARDAR A & SHERRY
8730 MEMORIAL DR	KIM, SUGENE
8843 STABLE LN	KOH, STEPHEN
119 CARNARVON DR	KRAMER, STEPHEN J
8830 STABLE LN	LADJEVARDIAN, MASOUD & SIMA
8847 STABLE LN	LEIBMAN, BRYAN & ELEONORA
8723 STABLE CREST BLVD	LESTER, BOBBY J JR & TERESA D
330 PINEHAVEN DR	LEY, DAVID W
303 SADDLEBRANCH CT	LLI & PRESTIGE BUILDERS VENTURES, LLC
8727 STABLE CREST BLVD	LODGE, JOHN W IV & ALICE GUTERMUTH
311 SADDLEBRANCH CT	LOYA, ENRIQUE JAVIER
521 PINEHAVEN DR	MAYES, DERYLE A
540 PINEHAVEN DR	MCMILLAN, C R & TIFFANY
8831 STABLE LN	MCNAIR, ROBERT CARY JR
307 GABLE LODGE CT	MENGER, SHERRY L
8835 STABLE LN	MIPS INVESTMENTS, LLC
311 LODGE HOLLOW CT	MISCHER, MARY A
302 LODGE HOLLOW CT	MORGAN, SHIRLEY F
321 PINEHAVEN DR	NEATHERY, LEE
8735 MEMORIAL DR	NGUYEN, DUNG THI
310 LODGE HOLLOW CT	OLIVER, ATHRYN K
320 PINEHAVEN DR	PALAVAN, JIM A & GENEVA M
1102 SILBER RD (MW-01)	PARTOU LLC
331 PINEHAVEN DR	PARVIZIAN, MARYAM S
531 PINEHAVEN DR	POSEJPAL, RANDALL S
8660 MEMORIAL DR	QADEER, ASAF R & TAHSEEN
307 LODGE HOLLOW CT	ROSEN, ALAN
8807 STABLE CREST BLVD	SCHLIEF, CANDACE R & GERALD W
8803 STABLE CREST BLVD	SHAFFER, MATTHEW D & ELLEN H
550 PINEHAVEN DR	SHEIKH, ZAFAR I & WANDA F
MULTIPLE WELLS LOCATED IN STREETS (MW-97, MW-98, & MW-168)	STABLEWOOD PROPERTY OWNERS ASSOC
311 PINEHAVEN DR	STONE, NEIL C
611 PINEHAVEN DR	TABIBI, WASAE & FEROZAN
303 GABLE LODGE CT	TAGHDISI, ALI R & ANOOSHEA S
407 PINEHAVEN DR	TALISMAN, JILL L

Appendix B. Summary of Residential Letter Notifications, February–March 2022

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Property Address or Location	Property Owner Name
8830 MEMORIAL DR	VAN PELT, WILLIAM H III & MAUREEN E
8719 CRESCENT GATE LN	VEGA, ADAN G & GLADYS H
1118 SILBER RD (MW-50R)	WAL MART
503 PINEHAVEN DR	WATERLAND, ARMANDO S
421 PINEHAVEN DR	WEIL, STEPHEN I
530 PINEHAVEN DR	WISNIEWSKI, LAURENCE
310 SADDLEBRANCH CT	ZAKHEM, SALIM

Appendix C
Data Usability Summary and Groundwater Analytical Laboratory Reports

Data Usability Summary

APPENDIX C

Data Usability Summary

Annual Sampling Event
2021 Response Action Effectiveness Report
Voluntary Cleanup Program No. 221
Former Cameron Iron Works Facility
1000 Silber Road, Houston, Texas

A CH2M HILL Engineers, Inc. project chemist reviewed 10 data packages from Eurofins Xenco Stafford of Stafford, Texas, for the analysis of groundwater and surface water samples collected December 14 to 15 and December 20, 2021, at the Former Cameron Silber Road Facility in Houston, Texas (site).

Data were reviewed for conformance to the requirements of the Texas Commission on Environmental Quality (TCEQ) guidance document, *Review and Reporting of COC Concentration Data Under TRRP* (RG-366/Texas Risk Reduction Program [TRRP]-13) and adherence to project objectives.

CH2M HILL Engineers, Inc. asserts that, at the time the laboratory data were generated for the project, the laboratory was accredited by the National Environmental Laboratory Accreditation Conference under the Texas Laboratory Accreditation Program for the matrixes, analytes, and methods of analysis requested on the chain-of-custody documentation. A copy of the laboratory's National Environmental Laboratory Accreditation Program certificates (applicable to the period during which the laboratory generated the data in this report) is included with this data usability summary (DUS).

Intended Use of Data: The laboratory data included in this report provide information on concentrations of the chemicals of concern (COCs) in the groundwater and surface water at the site to support the preparation of the Response Action Effectiveness Report for 2021.

The following analysis was performed:

- SW-846 5030/8260C—Volatile Organic Compounds (VOCs) by Gas Chromatography/Mass Spectrometry (GC/MS)

Data were reviewed and validated as described in *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13). The results of the review and validation are discussed in this DUS. The following laboratory submittals were examined:

- Reportable data
- Laboratory review checklists (LRCs) and associated exception reports (ERs)
- Field notes with respect to field instrument calibrations, filtering procedures, sampling procedures, and preservation procedures before shipping the samples to the laboratory

The results of supporting quality control (QC) analyses were summarized in the LRCs, ERs, and case narratives.

The LRCs, associated ERs, and reportable data that were reviewed are included with this DUS.

Introduction

Thirty-eight groundwater samples and four surface water samples were analyzed for VOCs. Field QC samples analyzed included five field duplicates, three trip blanks, and one equipment rinsate blank/ambient blank. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

Table 1. Cross-referenced Field Sample Identifications and Laboratory Identifications
Data Usability Summary
Former Cameron Iron Works Facility, Houston, Texas

Field Identification	Laboratory Identification	Matrix	Date Collected
MW-70-12142021	860-17359-1	Water	12/14/2021
MW-71-12142021	860-17359-2	Water	12/14/2021
MW-76-12142021	860-17359-3	Water	12/14/2021
MW-77-12142021	860-17359-4	Water	12/14/2021
MW-83-12142021	860-17359-5	Water	12/14/2021
MW-88-12142021	860-17359-6	Water	12/14/2021
MW-89-12142021	860-17359-7	Water	12/14/2021
MW-90-12142021	860-17359-8	Water	12/14/2021
MW-92-12142021	860-17359-9	Water	12/14/2021
MW-93R-12152021	860-17359-10	Water	12/15/2021
MW-100-12142021	860-17359-11	Water	12/14/2021
MW-121-12142021	860-17359-12	Water	12/14/2021
MW-122-12142021	860-17359-13	Water	12/14/2021
MW-145-12142021	860-17359-14	Water	12/14/2021
MW-147-12142021	860-17359-15	Water	12/14/2021
MW-161-12142021	860-17359-16	Water	12/14/2021
FD-03-12142021	860-17359-17	Water	12/14/2021
FD-04-12142021	860-17359-18	Water	12/14/2021
EB-01-12152021	860-17359-19	Water	12/15/2021
TB-01-12142021	860-17359-20	Water	12/14/2021
TB-02-12152021	860-17359-21	Water	12/15/2021
MW-15R-12142021	860-17362-1	Water	12/14/2021
MW-17R-12142021	860-17363-1	Water	12/14/2021
MW-178-12142021	860-17363-2	Water	12/14/2021
MW-74-12142021	860-17363-3	Water	12/14/2021
MW-106-12142021	860-17364-1	Water	12/14/2021
MW-50R-12142021	860-17365-1	Water	12/14/2021
FD-01-12142021	860-17365-2	Water	12/14/2021
MW-97-12142021	860-17366-1	Water	12/14/2021
MW-98-12142021	860-17366-2	Water	12/14/2021

Table 1. Cross-referenced Field Sample Identifications and Laboratory Identifications
Data Usability Summary
Former Cameron Iron Works Facility, Houston, Texas

Field Identification	Laboratory Identification	Matrix	Date Collected
MW-168-12142021	860-17366-3	Water	12/14/2021
MW-01-121421	860-17370-1	Water	12/14/2021
MW-65-121421	860-17370-2	Water	12/14/2021
MW-108-121421	860-17370-3	Water	12/14/2021
MW-109-121421	860-17370-4	Water	12/14/2021
MW-110-121421	860-17370-5	Water	12/14/2021
MW-111-121521	860-17370-6	Water	12/14/2021
MW-112-121421	860-17370-7	Water	12/14/2021
MW-113-121421	860-17370-8	Water	12/14/2021
FD-02-121421	860-17370-9	Water	12/14/2021
MW-179-12152021	860-17357-1	Water	12/15/2021
SWD-15-12152021	860-17358-1	Water	12/15/2021
SWD-18-12152021	860-17358-2	Water	12/15/2021
SWD-20-12152021	860-17358-3	Water	12/15/2021
FD-01-12152021	860-17358-4	Water	12/15/2021
SWD-17-12152021	860-17358-5	Water	12/15/2021
TB-01-12202021	860-17586-1	Water	12/20/2021
MW-146-12202021	860-17586-2	Water	12/20/2021
MW-160-12202021	860-17586-3	Water	12/20/2021
MW-162-12202021	860-17586-4	Water	12/20/2021
MW-163-12202021	860-17586-5	Water	12/20/2021

Project Measurement Quality Objectives

Organic Analytes:

- Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) recoveries and matrix spike (MS)/ matrix spike duplicate (MSD) recoveries within 60 to 140 percent or laboratory control limits if more restrictive.
- LCS/LCSD relative percent differences (RPDs) and MS/MSD RPDs less than or equal to 20 percent or laboratory control limits if more restrictive.
- Sample and field duplicate RPD less than or equal to 30 percent or plus or minus 2 times the method quantitation limit (MQL) if concentrations are less than 5 times MQL.
- Completeness greater than or equal to 95 percent.

Data Review and Validation Results

Analytical Results

Nondetected results are reported as less than the sample detection limit (SDL) as defined by the TRRP rule. Table 2 lists data qualified during the data validation process.

Table 2. Qualified Analytical Data
Data Usability Summary
Former Cameron Iron Works Facility, Houston, Texas

Field Identification	Analytical Method	Analyte	Result	Units	Qualification	Reason for Qualification
MW-93R-12152021	SW8260C	Tetrachloroethene	0.11	mg/L	JH	Analyte recovered high in MS/MSD.
SWD-17-12152021	SW8260C	Vinyl Chloride	0.000234 U	mg/L	UJ	Analyte recovered low in MS/MSD. MS/MSD RPD outside control limits.
SWD-17-12152021	SW8260C	cis-1,2-Dichloroethene	0.000174 U	mg/L	UJ	Analyte recovered low in MS/MSD. MS/MSD RPD outside control limits.
SWD-17-12152021	SW8260C	1,2-Dichloroethane	0.000285 U	mg/L	UJ	Analyte recovered low in MS/MSD. MS/MSD RPD outside control limits.
SWD-17-12152021	SW8260C	1,1-Dichloroethene	0.00591	mg/L	JL	Analyte recovered low in MS/MSD. MS/MSD RPD outside control limits.
SWD-17-12152021	SW8260C	Trichloroethene	0.000424 U	mg/L	UJ	Analyte recovered low in MS/MSD. MS/MSD RPD outside control limits.
SWD-17-12152021	SW8260C	1,1-Dichloroethane	0.000244 U	mg/L	UJ	Analyte recovered low in MS/MSD. MS/MSD RPD outside control limits.
SWD-17-12152021	SW8260C	Tetrachloroethene	0.0005 U	mg/L	UJ	Analyte recovered low in MS/MSD. MS/MSD RPD outside control limits.
MW-74-12142021	SW8260C	Vinyl Chloride	0.0182	mg/L	J	MS/MSD RPD outside control limits.
MW-74-12142021	SW8260C	cis-1,2-Dichloroethene	0.0416	mg/L	J	MS/MSD RPD outside control limits.
FD-01-12142021	SW8260C	1,1-Dichloroethane	0.00929	mg/L	J	Field duplicate RPD > 30%
MW-50R-12142021	SW8260C	1,1-Dichloroethane	0.00622	mg/L	J	Field duplicate RPD > 30%

Notes:
mg/L = milligram per liter
JH = Estimated data; the reported sample concentration is approximated due to exceedance of one or more QC requirements; bias in result likely to be high.
U = The analyte was analyzed for but was not detected above the reported SDL.
UJ = The analyte was analyzed for but was not detected above the reported SDL; SDL is an estimate and may be inaccurate or imprecise due to exceedance of one or more QC requirements.
J = Estimated data; the reported sample concentration is approximated due to exceedance of one or more QC requirements.
JL = Estimated data; the reported sample concentration is approximated due to exceedance of one or more QC requirements; bias in result likely to be low.

Preservation and Holding Times

Samples were evaluated for agreement with the chain-of-custody documentation. All samples were received in the appropriate containers and in good condition with proper completion of the chain-of-custody documentation. Sample receipt temperatures were within the acceptance criteria of 4 ± 2 degrees Celsius. Samples were preserved as specified in SW-846 Tables 2-40(A) and 2-40(B).

Samples were prepared and analyzed within holding times specified in SW-846 Tables 2-40(A) and 2-40(B).

Calibrations and Tunes

According to the LRCs and case narratives, initial calibrations and continuing calibration verification met SW-846 method requirements. The LRCs also document satisfactory instrument performance calibrations (GC/MS tunes) for the GC/MS analysis (VOCs).

Blanks

No target analytes were detected in any laboratory blanks, trip blanks, or equipment blanks.

Internal Standard Recoveries and Surrogate Recoveries

Surrogate recoveries were within acceptance criteria. According to the LRCs and case narratives, internal standard areas were within method SW-846 acceptance criteria.

Laboratory Control Samples

LCSs and LCSDs were spiked with all target analytes of interest for the analytical methods. LCS and LCSD recoveries and RPDs were within acceptance criteria.

Matrix Spike and Matrix Spike Duplicates

MS/MSDs were spiked with target analytes of interest for the analytical methods.

Tetrachloroethene was recovered at greater than the upper control limit in the MS/MSD performed on MW-93R-12152021; therefore, the tetrachloroethene detection in the sample was qualified as estimated and potentially biased high (JH). All analytes were recovered at less than the lower control limit in the MS/MSD performed on sample SWD-17-12152021 and exhibited RPDs outside criteria; therefore, associated detections in the sample were qualified as estimated and potentially biased low (JL), and associated nondetect results were qualified as not detected at an estimated detection limit (UJ). The MS/MSD performed on MW-74-12142021 exhibited RPDs outside criteria for vinyl chloride and cis-1,2-dichloroethene; therefore, the results for these analytes in the sample were qualified as estimated (J). Other MS/MSD recoveries and RPDs were within acceptance criteria.

Field Precision

Table 3 summarizes field duplicate precision calculations. Field duplicate precision was not calculated for results where both the normal and field duplicate results were reported as not detected (U). Based on the RPDs between the concentrations detected and the proximity of the concentrations to the MQL, overall field duplicate precision was within project acceptance criteria with only the 1,1-dichloroethane

results in MW-50R-12142021 and its field duplicate FD-01-12142021 being qualified as estimated (J) due to field duplicate imprecision.

Field Procedures

Samples were collected following standard operating procedures detailed in the project sampling instructions.

Table 3. Field Precision
Data Usability Summary
Former Cameron Iron Works Facility, Houston, Texas

Field Identification	Analyte	Sample Result	Duplicate Result	MQL	RPD[a]	Qualified
MW-50R-12142021 / FD-01-12142021	1,1-Dichloroethane	0.00622	0.00929	0.001	40%	J
MW-113-121421 / FD-02-121421	1,1-Dichloroethane	0.00973	0.0108	0.001	10%	A
MW-113-121421 / FD-02-121421	1,1-Dichloroethene	0.0175	0.0197	0.001	12%	A
MW-113-121421 / FD-02-121421	cis-1,2-Dichloroethene	0.00288	0.00328	0.001	13%	A
MW-113-121421 / FD-02-121421	Tetrachloroethene	0.0121	0.0129	0.001	6.4%	A
MW-113-121421 / FD-02-121421	Trichloroethene	0.00728	0.00769	0.005	5.5%	A
MW-113-121421 / FD-02-121421	Vinyl Chloride	0.000751 J	0.000863 J	0.002	14%	A
MW-83-12142021 / FD-03-12142021	1,1-Dichloroethane	0.00815	0.00811	0.001	0.5%	A
MW-83-12142021 / FD-03-12142021	1,1-Dichloroethene	0.0339	0.034	0.001	0.3%	A
MW-83-12142021 / FD-03-12142021	1,2-Dichloroethane	0.00174	0.00176	0.001	1.1%	A
MW-83-12142021 / FD-03-12142021	cis-1,2-Dichloroethene	0.0115	0.0113	0.001	1.8%	A
MW-83-12142021 / FD-03-12142021	Tetrachloroethene	0.0409	0.0505	0.001	21%	A
MW-83-12142021 / FD-03-12142021	Trichloroethene	0.00701	0.00708	0.005	1.0%	A
MW-83-12142021 / FD-03-12142021	Vinyl Chloride	0.00222	0.00226	0.002	1.8%	A
MW-89-12142021 / FD-04-12142021	1,1-Dichloroethane	0.00335	0.00456	0.001	31%	A
MW-89-12142021 / FD-04-12142021	1,1-Dichloroethene	0.0892	0.112	0.001	23%	A
MW-89-12142021 / FD-04-12142021	1,2-Dichloroethane	0.00134	0.00182	0.001	30%	A
MW-89-12142021 / FD-04-12142021	cis-1,2-Dichloroethene	0.000901 J	0.00116	0.001	25%	A

Table 3. Field Precision
Data Usability Summary
Former Cameron Iron Works Facility, Houston, Texas

Field Identification	Analyte	Sample Result	Duplicate Result	MQL	RPD[a]	Qualified
MW-89-12142021 / FD-04-12142021	Tetrachloroethene	0.000568 J	0.000771 J	0.001	30%	A
MW-89-12142021 / FD-04-12142021	Trichloroethene	0.00477 J	0.00592	0.005	22%	A
MW-89-12142021 / FD-04-12142021	Vinyl Chloride	0.00746	0.0091	0.002	20%	A

Notes:
[a] RPD = ((SR - DR)*200)/(SR + DR)
A = Acceptable Data
J (in Sample Result or Duplicate Result column) = Result > SDL < MQL
J (in Qualified column) = Results qualified as estimated due to field duplicate imprecision
SR = Sample result
DR = Duplicate result
MQL = method quantitation limit
RPD = relative percent difference
SDL = sample detection limit

Summary

Overall, the quality of the analytical data was found to be within the QC limits established by the project data quality objectives, analytical methods, and the review criteria presented in *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13).

The following components were found to be within project acceptance criteria:

- Sample receipt conditions
- Sample preservation
- Holding time
- Initial calibrations
- Continuing calibration verification
- Instrument performance calibrations
- Laboratory blanks, trip blanks and equipment blanks
- Internal standard recoveries
- Surrogate recoveries
- LCS/LCSD recoveries and RPDs

QC issues encountered included recoveries and/or RPDs outside acceptance criteria in three MS/MSDs and imprecision between the detections of 1,1-dichloroethane in sample MW-50R-12142021 and its field duplicate as described above and listed in Table 2.

No results were rejected, giving the data set a completeness value of 100 percent. All analytical results may be used to support project decisions.

Attachment
National Environmental Laboratory Accreditation Program Certificates

Texas Commission on Environmental Quality

NELAP-Recognized Laboratory Accreditation is hereby awarded to

Eurofins Xenco, LLC - Houston

4147 Greenbriar Drive
Stafford, TX 77477-3907

in accordance with Texas Water Code Chapter 5, Subchapter R, Title 30 Texas Administrative Code Chapter 25, and the National Environmental Laboratory Accreditation Program.

The laboratory's scope of accreditation includes the fields of accreditation that accompany this certificate. Continued accreditation depends upon successful ongoing participation in the program. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current location(s) and accreditation status for particular methods and analyses (www.tceq.texas.gov/goto/lab). Accreditation does not imply that a product, process, system or person is approved by the Texas Commission on Environmental Quality.

Certificate Number: T104704215-21-43
Effective Date: 7/7/2021
Expiration Date: 6/30/2022

Executive Director Texas Commission on Environmental Quality

Groundwater Analytical Laboratory Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17357-1
Client Project/Site: STC Silber Rd, TX

For:
Jacobs Engineering Group, Inc.
12750 Merit Drive
Suite 1100
Dallas, Texas 75251

Attn: John Knott

Bethany McDaniel

Authorized for release by:
12/23/2021 11:36:21 AM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17357-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

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

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Prep Method: **SW5030B** Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Benzene	0.000214	0.00100	0.000250	0.000370	mg/L
Bromobenzene	0.000300	0.00100	0.000250	0.000370	mg/L
Bromochloromethane	0.000209	0.00100	0.000500	0.000440	mg/L
Bromodichloromethane	0.000231	0.00100	0.000250	0.000460	mg/L
Bromoform	0.000630	0.00500	0.00100	0.00124	mg/L
Methyl bromide	0.00105	0.00500	0.000500	0.000570	mg/L
2-Butanone	0.00575	0.0500	0.00500	0.00575	mg/L
n-Butylbenzene	0.000286	0.00100	0.00200	0.00176	mg/L
Sec-Butylbenzene	0.000199	0.00100	0.000250	0.000230	mg/L
tert-Butylbenzene	0.000195	0.00100	0.000250	0.000210	mg/L
Carbon Tetrachloride	0.000423	0.00500	0.000250	0.000270	mg/L
Chlorobenzene	0.000159	0.00100	0.000250	0.000280	mg/L
Chloroethane	0.000433	0.0100	0.000500	0.000630	mg/L
Chloroform	0.000259	0.00100	0.000250	0.000600	mg/L
Methyl Chloride	0.000318	0.0100	0.000250	0.000450	mg/L
2-Chlorotoluene	0.000214	0.00100	0.000250	0.000210	mg/L
4-Chlorotoluene	0.000183	0.00100	0.000250	0.000260	mg/L
p-Cymene (p-Isopropyl	0.000233	0.00100	0.000250	0.000150	mg/L
Dibromochloromethane	0.000739	0.00500	0.000250	0.000440	mg/L
1,2-Dibromo-3-Chloropı	0.000319	0.00100	0.00100	0.000800	mg/L
1,2-Dibromoethane	0.000337	0.00500	0.000500	0.000450	mg/L
Methylene Bromide	0.000130	0.00100	0.000500	0.000460	mg/L
1,2-Dichlorobenzene	0.000236	0.00100	0.000250	0.000360	mg/L
1,3-Dichlorobenzene	0.000197	0.00100	0.000250	0.000370	mg/L
1,4-Dichlorobenzene	0.000199	0.00100	0.000250	0.000430	mg/L
Dichlorodifluoromethan	0.000316	0.00100	0.000250	0.000310	mg/L
1,1-Dichloroethane	0.000244	0.00100	0.000250	0.000300	mg/L
1,2-Dichloroethane	0.000285	0.00100	0.000250	0.000260	mg/L
1,1-Dichloroethene	0.000216	0.00100	0.000250	0.000280	mg/L
cis-1,2-Dichloroethylene	0.000174	0.00100	0.000250	0.000240	mg/L
trans-1,2-dichloroethyle	0.000256	0.00100	0.000250	0.000200	mg/L
1,2-Dichloropropane	0.000396	0.00500	0.000250	0.000270	mg/L
1,3-Dichloropropane	0.000439	0.00500	0.000250	0.000240	mg/L
2,2-Dichloropropane	0.000360	0.00500	0.000250	0.000170	mg/L
1,1-Dichloropropene	0.000481	0.00500	0.000250	0.000290	mg/L
cis-1,3-Dichloropropene	0.000690	0.00500	0.000500	0.000390	mg/L
trans-1,3-dichloroproper	0.000752	0.00500	0.000500	0.000420	mg/L
Ethylbenzene	0.000146	0.00100	0.000250	0.000260	mg/L
Hexachlorobutadiene	0.00200	0.00500	0.00200	0.00197	mg/L
Isopropylbenzene	0.000161	0.00100	0.000250	0.000240	mg/L
Methylene Chloride	0.00191	0.00500	0.00200	0.00206	mg/L
MTBE	0.000571	0.00500	0.000500	0.000750	mg/L
Naphthalene	0.00200	0.0100	0.00200	0.00145	mg/L
n-Propylbenzene	0.000179	0.00100	0.000250	0.000280	mg/L
Styrene	0.000162	0.00100	0.000250	0.000290	mg/L
1,1,1,2-Tetrachloroethar	0.000327	0.00100	0.000500	0.000540	mg/L
1,1,2,2-Tetrachloroethar	0.000284	0.00100	0.000500	0.000460	mg/L
Tetrachloroethylene	0.000500	0.00100	0.000500	0.000500	mg/L
Toluene	0.000500	0.00100	0.000500	0.000480	mg/L
1,2,3-Trichlorobenzene	0.00200	0.00500	0.00200	0.00174	mg/L
1,2,4-Trichlorobenzene	0.00200	0.00500	0.00200	0.00189	mg/L

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
1,1,1-Trichloroethane	0.000504	0.00500	0.000250	0.000200	mg/L
1,1,2-Trichloroethane	0.000228	0.00100	0.000500	0.000460	mg/L
Trichloroethylene	0.000424	0.00500	0.000250	0.000210	mg/L
Trichlorofluoromethane	0.000245	0.00100	0.000250	0.000360	mg/L
1,2,3-Trichloropropane	0.000283	0.00100	0.000250	0.000270	mg/L
1,2,4-Trimethylbenzene	0.000252	0.00100	0.000250	0.000280	mg/L
1,3,5-Trimethylbenzene	0.000279	0.00100	0.000250	0.000210	mg/L
o-Xylene	0.000192	0.00100	0.000500	0.000430	mg/L
m,p-Xylenes	0.000330	0.0100	0.00100	0.000900	mg/L
Vinyl Chloride	0.000234	0.00200	0.000250	0.000240	mg/L

Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

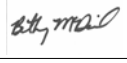
This data package is for Job No. 860-17357-1 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ☑ R1- Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. prepatation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified coumpounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☑ R10 - Other problems or anomalies.
- ☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on __/__/__. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Bethany McDaniel		Senior Project Manager	12/23/2021

Laboratory Data Package Cover Page - Page 2 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17357-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample detection limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?			✓		
		Were % moisture (or solids) reported for all soil and sediment samples?			✓		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			✓		
		If required for the project, are TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	✓				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	✓				

Laboratory Data Package Cover Page - Page 3 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17357-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	✓				
		Were percent RSDs or correlation coefficient criteria met?	✓				
		Was the number of standards recommended in the method used for all analytes?	✓				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
		Are ICAL data available for all instruments used?	✓				
		Has the initial calibration curve been verified using an appropriate second source standard?	✓				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	✓				
		Were percent differences for each analyte within the method-required QC limits?	✓				
		Was the ICAL curve verified for each analyte?	✓				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			✓		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	✓				
		Were ion abundance data within the method-required QC limits?	✓				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	✓				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
		Were data associated with manual integrations flagged on the raw data?	✓				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✓		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period;
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Cover Page - Page 4 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17357-1
Reviewer Name:	

ER#[1]	Description
1	The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-35166 were outside control limits. The associated laboratory control sample (LCS) recovery was within acceptance limits.

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Job ID: 860-17357-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-17357-1

Receipt
The sample was received on 12/15/2021 12:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17357-1

Client Sample ID: MW-179-12152021

Lab Sample ID: 860-17357-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.00433		0.00100	0.000216	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17357-1

Client Sample ID: MW-179-12152021
Date Collected: 12/15/21 08:25
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17357-1
Matrix: Water

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 21:56	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 21:56	1
1,1-Dichloroethene	**0.00433**		0.00100	0.000216	mg/L			12/21/21 21:56	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 21:56	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 21:56	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 21:56	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*75 - 131*		*12/21/21 21:56*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/21/21 21:56*	*1*
4-Bromofluorobenzene (Surr)	*108*		*74 - 124*		*12/21/21 21:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*		*12/21/21 21:56*	*1*

Unadjusted Detection Limits

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17357-1

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

Analyte	MQL	MDL	Units
1,1-Dichloroethane	0.00100	0.000244	mg/L
1,1-Dichloroethene	0.00100	0.000216	mg/L
1,2-Dichloroethane	0.00100	0.000285	mg/L
cis-1,2-Dichloroethene	0.00100	0.000174	mg/L
Tetrachloroethene	0.00100	0.000500	mg/L
Trichloroethene	0.00500	0.000424	mg/L
Vinyl chloride	0.00200	0.000234	mg/L

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17357-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(75-131)	(80-117)	(74-124)	(63-144)
860-17357-1	MW-179-12152021	110	102	108	105
860-17358-A-5 MSD	Matrix Spike Duplicate	112	103	105	101
860-17358-B-5 MS	Matrix Spike	109	101	109	105
LCS 860-35166/3	Lab Control Sample	110	99	104	102
LCSD 860-35166/4	Lab Control Sample Dup	107	102	102	103
MB 860-35166/9	Method Blank	110	100	109	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 860-35166/9
Matrix: Water
Analysis Batch: 35166

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 21:37	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 21:37	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 21:37	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 21:37	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 21:37	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 21:37	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*75 - 131*		*12/21/21 21:37*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/21/21 21:37*	*1*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*12/21/21 21:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*12/21/21 21:37*	*1*

Lab Sample ID: LCS 860-35166/3
Matrix: Water
Analysis Batch: 35166

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.0500	0.05513		mg/L		110	72 - 125
1,2-Dichloroethane	0.0500	0.05486		mg/L		110	68 - 127
1,1-Dichloroethene	0.0500	0.05012		mg/L		100	59 - 172
cis-1,2-Dichloroethene	0.0500	0.05003		mg/L		100	75 - 125
Tetrachloroethene	0.0500	0.05277		mg/L		106	71 - 125
Trichloroethene	0.0500	0.05101		mg/L		102	62 - 137
Vinyl chloride	0.0500	0.05621		mg/L		112	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*110*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*104*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.0500	0.05226		mg/L		105	72 - 125	5	25
1,2-Dichloroethane	0.0500	0.05346		mg/L		107	68 - 127	3	25
1,1-Dichloroethene	0.0500	0.04787		mg/L		96	59 - 172	5	25
cis-1,2-Dichloroethene	0.0500	0.04803		mg/L		96	75 - 125	4	25
Tetrachloroethene	0.0500	0.05154		mg/L		103	71 - 125	2	25
Trichloroethene	0.0500	0.04976		mg/L		100	62 - 137	2	25
Vinyl chloride	0.0500	0.05208		mg/L		104	60 - 140	8	25

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

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*107*		*75 - 131*
Toluene-d8 (Surr)	*102*		*80 - 117*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*

Lab Sample ID: 860-17358-A-5 MSD
Matrix: Water
Analysis Batch: 35166

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.000244	U	0.0500	0.01187	N1 N2	mg/L		24	72 - 125	94	25
1,2-Dichloroethane	0.000285	U	0.0500	0.009099	N1 N2	mg/L		18	68 - 127	109	25
1,1-Dichloroethene	0.00591		0.0500	0.02307	N1 N2	mg/L		34	59 - 172	54	25
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.01063	N1 N2	mg/L		21	75 - 125	93	25
Tetrachloroethene	0.000500	U	0.0500	0.01124	N1 N2	mg/L		22	71 - 125	93	25
Trichloroethene	0.000424	U	0.0500	0.01122	N1 N2	mg/L		22	62 - 137	92	25
Vinyl chloride	0.000234	U	0.0500	0.01610	N1 N2	mg/L		32	60 - 140	67	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*112*		*75 - 131*
Toluene-d8 (Surr)	*103*		*80 - 117*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*

Lab Sample ID: 860-17358-B-5 MS
Matrix: Water
Analysis Batch: 35166

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000244	U	0.0500	0.03291	N1	mg/L		66	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.03103	N1	mg/L		62	68 - 127
1,1-Dichloroethene	0.00591		0.0500	0.03999		mg/L		68	59 - 172
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.02907	N1	mg/L		58	75 - 125
Tetrachloroethene	0.000500	U	0.0500	0.03089	N1	mg/L		62	71 - 125
Trichloroethene	0.000424	U	0.0500	0.03038	N1	mg/L		61	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.03238		mg/L		65	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*109*		*75 - 131*
Toluene-d8 (Surr)	*101*		*80 - 117*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17357-1

GC/MS VOA

Analysis Batch: 35166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17357-1	MW-179-12152021	Total/NA	Water	8260C	
MB 860-35166/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35166/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35166/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17358-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
860-17358-B-5 MS	Matrix Spike	Total/NA	Water	8260C	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17357-1

Client Sample ID: MW-179-12152021

Date Collected: 12/15/21 08:25
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17357-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/21/21 21:56	T1S	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Job ID: 860-17357-1
Project/Site: STC Silber Rd, TX

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	21-038-0	08-04-22
Florida	NELAP	E871002	06-30-22
Louisiana	NELAP	03054	06-30-22
Oklahoma	State	1306	08-31-22
Texas	NELAP	T104704215-21-44	06-30-22
Texas	TCEQ Water Supply	T104704215	06-30-22

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17357-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF

Protocol References:

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17357-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17357-1	MW-179-12152021	Water	12/15/21 08:25	12/15/21 12:17

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: DR	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 860-6507-2299.1
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin:	Page: Page ~~1 of 6~~ 1 of 1
Company: Jacobs Engineering Group, Inc.	PWSID:			Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:			
City: Houston	TAT Requested (days): STD TAT			
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No			
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02			
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02			
Project Name: STC Silber Rd TX GW	Project #: 86002024			
Site:	SSOW#:			

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	Z	other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B (MOD) VOCs Custom List (7)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
MW-179-12152021	12/15/21	0925	G	Water			X	3	
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

860-17357 Chain of Custody

Temp: 2.2 IR ID.HOU-223
C/F: +0.0
Corrected Temp: 2.2

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: DR | Time: | Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by: DR	12/15/21 1410 1247		Received by: YCRS	12/15/21 1217	EX
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:

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17357-1

Login Number: 17357
List Number: 1
Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

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	
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	

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ANALYTICAL REPORT

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17358-1
Client Project/Site: STC Silber Rd, TX

For:
Jacobs Engineering Group, Inc.
12750 Merit Drive
Suite 1100
Dallas, Texas 75251

Attn: John Knott

Bethany McDaniel

Authorized for release by:
12/23/2021 12:02:25 PM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17358-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

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

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Prep Method: **SW5030B** Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Benzene	0.000214	0.00100	0.000250	0.000370	mg/L
Bromobenzene	0.000300	0.00100	0.000250	0.000370	mg/L
Bromochloromethane	0.000209	0.00100	0.000500	0.000440	mg/L
Bromodichloromethane	0.000231	0.00100	0.000250	0.000460	mg/L
Bromoform	0.000630	0.00500	0.00100	0.00124	mg/L
Methyl bromide	0.00105	0.00500	0.000500	0.000570	mg/L
2-Butanone	0.00575	0.0500	0.00500	0.00575	mg/L
n-Butylbenzene	0.000286	0.00100	0.00200	0.00176	mg/L
Sec-Butylbenzene	0.000199	0.00100	0.000250	0.000230	mg/L
tert-Butylbenzene	0.000195	0.00100	0.000250	0.000210	mg/L
Carbon Tetrachloride	0.000423	0.00500	0.000250	0.000270	mg/L
Chlorobenzene	0.000159	0.00100	0.000250	0.000280	mg/L
Chloroethane	0.000433	0.0100	0.000500	0.000630	mg/L
Chloroform	0.000259	0.00100	0.000250	0.000600	mg/L
Methyl Chloride	0.000318	0.0100	0.000250	0.000450	mg/L
2-Chlorotoluene	0.000214	0.00100	0.000250	0.000210	mg/L
4-Chlorotoluene	0.000183	0.00100	0.000250	0.000260	mg/L
p-Cymene (p-Isopropyl	0.000233	0.00100	0.000250	0.000150	mg/L
Dibromochloromethane	0.000739	0.00500	0.000250	0.000440	mg/L
1,2-Dibromo-3-Chloropı	0.000319	0.00100	0.00100	0.000800	mg/L
1,2-Dibromoethane	0.000337	0.00500	0.000500	0.000450	mg/L
Methylene Bromide	0.000130	0.00100	0.000500	0.000460	mg/L
1,2-Dichlorobenzene	0.000236	0.00100	0.000250	0.000360	mg/L
1,3-Dichlorobenzene	0.000197	0.00100	0.000250	0.000370	mg/L
1,4-Dichlorobenzene	0.000199	0.00100	0.000250	0.000430	mg/L
Dichlorodifluoromethan	0.000316	0.00100	0.000250	0.000310	mg/L
1,1-Dichloroethane	0.000244	0.00100	0.000250	0.000300	mg/L
1,2-Dichloroethane	0.000285	0.00100	0.000250	0.000260	mg/L
1,1-Dichloroethene	0.000216	0.00100	0.000250	0.000280	mg/L
cis-1,2-Dichloroethylene	0.000174	0.00100	0.000250	0.000240	mg/L
trans-1,2-dichloroethyle	0.000256	0.00100	0.000250	0.000200	mg/L
1,2-Dichloropropane	0.000396	0.00500	0.000250	0.000270	mg/L
1,3-Dichloropropane	0.000439	0.00500	0.000250	0.000240	mg/L
2,2-Dichloropropane	0.000360	0.00500	0.000250	0.000170	mg/L
1,1-Dichloropropene	0.000481	0.00500	0.000250	0.000290	mg/L
cis-1,3-Dichloropropene	0.000690	0.00500	0.000500	0.000390	mg/L
trans-1,3-dichloroproper	0.000752	0.00500	0.000500	0.000420	mg/L
Ethylbenzene	0.000146	0.00100	0.000250	0.000260	mg/L
Hexachlorobutadiene	0.00200	0.00500	0.00200	0.00197	mg/L
Isopropylbenzene	0.000161	0.00100	0.000250	0.000240	mg/L
Methylene Chloride	0.00191	0.00500	0.00200	0.00206	mg/L
MTBE	0.000571	0.00500	0.000500	0.000750	mg/L
Naphthalene	0.00200	0.0100	0.00200	0.00145	mg/L
n-Propylbenzene	0.000179	0.00100	0.000250	0.000280	mg/L
Styrene	0.000162	0.00100	0.000250	0.000290	mg/L
1,1,1,2-Tetrachloroethar	0.000327	0.00100	0.000500	0.000540	mg/L
1,1,2,2-Tetrachloroethar	0.000284	0.00100	0.000500	0.000460	mg/L
Tetrachloroethylene	0.000500	0.00100	0.000500	0.000500	mg/L
Toluene	0.000500	0.00100	0.000500	0.000480	mg/L
1,2,3-Trichlorobenzene	0.00200	0.00500	0.00200	0.00174	mg/L
1,2,4-Trichlorobenzene	0.00200	0.00500	0.00200	0.00189	mg/L

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
1,1,1-Trichloroethane	0.000504	0.00500	0.000250	0.000200	mg/L
1,1,2-Trichloroethane	0.000228	0.00100	0.000500	0.000460	mg/L
Trichloroethylene	0.000424	0.00500	0.000250	0.000210	mg/L
Trichlorofluoromethane	0.000245	0.00100	0.000250	0.000360	mg/L
1,2,3-Trichloropropane	0.000283	0.00100	0.000250	0.000270	mg/L
1,2,4-Trimethylbenzene	0.000252	0.00100	0.000250	0.000280	mg/L
1,3,5-Trimethylbenzene	0.000279	0.00100	0.000250	0.000210	mg/L
o-Xylene	0.000192	0.00100	0.000500	0.000430	mg/L
m,p-Xylenes	0.000330	0.0100	0.00100	0.000900	mg/L
Vinyl Chloride	0.000234	0.00200	0.000250	0.000240	mg/L

Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

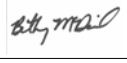
This data package is for Job No. 860-17358-1 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ☑ R1- Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. prepatation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified coumpounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☑ R10 - Other problems or anomalies.
- ☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on __/__/__. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Bethany McDaniel		Senior Project Manager	12/23/2021

Laboratory Data Package Cover Page - Page 2 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17358-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample detection limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?			✓		
		Were % moisture (or solids) reported for all soil and sediment samples?			✓		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			✓		
		If required for the project, are TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	✓				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	✓				

Laboratory Data Package Cover Page - Page 3 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17358-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	✓				
		Were percent RSDs or correlation coefficient criteria met?	✓				
		Was the number of standards recommended in the method used for all analytes?	✓				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
		Are ICAL data available for all instruments used?	✓				
		Has the initial calibration curve been verified using an appropriate second source standard?	✓				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	✓				
		Were percent differences for each analyte within the method-required QC limits?	✓				
		Was the ICAL curve verified for each analyte?	✓				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			✓		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	✓				
		Were ion abundance data within the method-required QC limits?	✓				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	✓				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
		Were data associated with manual integrations flagged on the raw data?	✓				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✓		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period;
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Cover Page - Page 4 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17358-1
Reviewer Name:	

ER#[1]	Description
1	The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-35166 were outside control limits. The associated laboratory control sample (LCS) recovery was within acceptance limits.

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Job ID: 860-17358-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-17358-1

Receipt
The samples were received on 12/15/2021 12:17 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17358-1

Client Sample ID: SWD-15-12152021 — Lab Sample ID: 860-17358-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.0125		0.00100	0.000216	mg/L	1		8260C	Total/NA

Client Sample ID: SWD-18-12152021 — Lab Sample ID: 860-17358-2

No Detections.

Client Sample ID: SWD-20-12152021 — Lab Sample ID: 860-17358-3

No Detections.

Client Sample ID: FD-01-12152021 — Lab Sample ID: 860-17358-4

No Detections.

Client Sample ID: SWD-17-12152021 — Lab Sample ID: 860-17358-5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.00591		0.00100	0.000216	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SWD-15-12152021

Lab Sample ID: 860-17358-1

Date Collected: 12/15/21 09:50

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 22:34	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 22:34	1
1,1-Dichloroethene	**0.0125**		0.00100	0.000216	mg/L			12/21/21 22:34	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 22:34	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 22:34	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 22:34	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*75 - 131*		*12/21/21 22:34*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*12/21/21 22:34*	*1*
4-Bromofluorobenzene (Surr)	*106*		*74 - 124*		*12/21/21 22:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*12/21/21 22:34*	*1*

Client Sample ID: SWD-18-12152021

Lab Sample ID: 860-17358-2

Date Collected: 12/15/21 09:20

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 22:53	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 22:53	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 22:53	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 22:53	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 22:53	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 22:53	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*75 - 131*		*12/21/21 22:53*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/21/21 22:53*	*1*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*		*12/21/21 22:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*		*12/21/21 22:53*	*1*

Client Sample ID: SWD-20-12152021

Lab Sample ID: 860-17358-3

Date Collected: 12/15/21 09:10

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 23:12	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 23:12	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 23:12	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 23:12	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 23:12	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 23:12	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*75 - 131*		*12/21/21 23:12*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/21/21 23:12*	*1*

Client Sample ID: SWD-20-12152021

Lab Sample ID: 860-17358-3
Date Collected: 12/15/21 09:10
Matrix: Water
Date Received: 12/15/21 12:17

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*12/21/21 23:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*12/21/21 23:12*	*1*

Client Sample ID: FD-01-12152021

Lab Sample ID: 860-17358-4
Date Collected: 12/15/21 00:00
Matrix: Water
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 23:31	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 23:31	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 23:31	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 23:31	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 23:31	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 23:31	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*75 - 131*		*12/21/21 23:31*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/21/21 23:31*	*1*
4-Bromofluorobenzene (Surr)	*108*		*74 - 124*		*12/21/21 23:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*		*12/21/21 23:31*	*1*

Client Sample ID: SWD-17-12152021

Lab Sample ID: 860-17358-5
Date Collected: 12/15/21 09:30
Matrix: Water
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 22:15	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 22:15	1
1,1-Dichloroethene	**0.00591**		0.00100	0.000216	mg/L			12/21/21 22:15	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 22:15	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 22:15	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 22:15	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*75 - 131*		*12/21/21 22:15*	*1*
Toluene-d8 (Surr)	*106*		*80 - 117*		*12/21/21 22:15*	*1*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*12/21/21 22:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*		*12/21/21 22:15*	*1*

Unadjusted Detection Limits

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17358-1

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

Analyte	MQL	MDL	Units
1,1-Dichloroethane	0.00100	0.000244	mg/L
1,1-Dichloroethene	0.00100	0.000216	mg/L
1,2-Dichloroethane	0.00100	0.000285	mg/L
cis-1,2-Dichloroethene	0.00100	0.000174	mg/L
Tetrachloroethene	0.00100	0.000500	mg/L
Trichloroethene	0.00500	0.000424	mg/L
Vinyl chloride	0.00200	0.000234	mg/L

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17358-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(75-131)	(80-117)	(74-124)	(63-144)
860-17358-1	SWD-15-12152021	110	103	106	103
860-17358-2	SWD-18-12152021	110	102	105	102
860-17358-3	SWD-20-12152021	107	100	109	103
860-17358-4	FD-01-12152021	105	101	108	101
860-17358-5	SWD-17-12152021	108	106	109	99
860-17358-5 MS	SWD-17-12152021	109	101	109	105
860-17358-5 MSD	SWD-17-12152021	112	103	105	101
LCS 860-35166/3	Lab Control Sample	110	99	104	102
LCSD 860-35166/4	Lab Control Sample Dup	107	102	102	103
MB 860-35166/9	Method Blank	110	100	109	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 860-35166/9
Matrix: Water
Analysis Batch: 35166

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 21:37	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 21:37	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 21:37	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 21:37	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 21:37	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 21:37	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*75 - 131*		*12/21/21 21:37*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/21/21 21:37*	*1*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*12/21/21 21:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*12/21/21 21:37*	*1*

Lab Sample ID: LCS 860-35166/3
Matrix: Water
Analysis Batch: 35166

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05513		mg/L		110	72 - 125		
1,2-Dichloroethane			0.0500	0.05486		mg/L		110	68 - 127		
1,1-Dichloroethene			0.0500	0.05012		mg/L		100	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.05003		mg/L		100	75 - 125		
Tetrachloroethene			0.0500	0.05277		mg/L		106	71 - 125		
Trichloroethene			0.0500	0.05101		mg/L		102	62 - 137		
Vinyl chloride			0.0500	0.05621		mg/L		112	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*110*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*104*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.05226		mg/L		105	72 - 125	5	25
1,2-Dichloroethane			0.0500	0.05346		mg/L		107	68 - 127	3	25
1,1-Dichloroethene			0.0500	0.04787		mg/L		96	59 - 172	5	25
cis-1,2-Dichloroethene			0.0500	0.04803		mg/L		96	75 - 125	4	25
Tetrachloroethene			0.0500	0.05154		mg/L		103	71 - 125	2	25
Trichloroethene			0.0500	0.04976		mg/L		100	62 - 137	2	25
Vinyl chloride			0.0500	0.05208		mg/L		104	60 - 140	8	25

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

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*107*		*75 - 131*
Toluene-d8 (Surr)	*102*		*80 - 117*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*

Lab Sample ID: 860-17358-5 MS
Matrix: Water
Analysis Batch: 35166

Client Sample ID: SWD-17-12152021
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000244	U	0.0500	0.03291	N1	mg/L		66	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.03103	N1	mg/L		62	68 - 127
1,1-Dichloroethene	0.00591		0.0500	0.03999		mg/L		68	59 - 172
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.02907	N1	mg/L		58	75 - 125
Tetrachloroethene	0.000500	U	0.0500	0.03089	N1	mg/L		62	71 - 125
Trichloroethene	0.000424	U	0.0500	0.03038	N1	mg/L		61	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.03238		mg/L		65	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*109*		*75 - 131*
Toluene-d8 (Surr)	*101*		*80 - 117*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*

Lab Sample ID: 860-17358-5 MSD
Matrix: Water
Analysis Batch: 35166

Client Sample ID: SWD-17-12152021
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.000244	U	0.0500	0.01187	N1 N2	mg/L		24	72 - 125	94	25
1,2-Dichloroethane	0.000285	U	0.0500	0.009099	N1 N2	mg/L		18	68 - 127	109	25
1,1-Dichloroethene	0.00591		0.0500	0.02307	N1 N2	mg/L		34	59 - 172	54	25
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.01063	N1 N2	mg/L		21	75 - 125	93	25
Tetrachloroethene	0.000500	U	0.0500	0.01124	N1 N2	mg/L		22	71 - 125	93	25
Trichloroethene	0.000424	U	0.0500	0.01122	N1 N2	mg/L		22	62 - 137	92	25
Vinyl chloride	0.000234	U	0.0500	0.01610	N1 N2	mg/L		32	60 - 140	67	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*112*		*75 - 131*
Toluene-d8 (Surr)	*103*		*80 - 117*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17358-1

GC/MS VOA

Analysis Batch: 35166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17358-1	SWD-15-12152021	Total/NA	Water	8260C	
860-17358-2	SWD-18-12152021	Total/NA	Water	8260C	
860-17358-3	SWD-20-12152021	Total/NA	Water	8260C	
860-17358-4	FD-01-12152021	Total/NA	Water	8260C	
860-17358-5	SWD-17-12152021	Total/NA	Water	8260C	
MB 860-35166/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35166/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35166/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17358-5 MS	SWD-17-12152021	Total/NA	Water	8260C	
860-17358-5 MSD	SWD-17-12152021	Total/NA	Water	8260C	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17358-1

Client Sample ID: SWD-15-12152021
Lab Sample ID: 860-17358-1
Date Collected: 12/15/21 09:50
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/21/21 22:34	T1S	XEN STF

Client Sample ID: SWD-18-12152021
Lab Sample ID: 860-17358-2
Date Collected: 12/15/21 09:20
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/21/21 22:53	T1S	XEN STF

Client Sample ID: SWD-20-12152021
Lab Sample ID: 860-17358-3
Date Collected: 12/15/21 09:10
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/21/21 23:12	T1S	XEN STF

Client Sample ID: FD-01-12152021
Lab Sample ID: 860-17358-4
Date Collected: 12/15/21 00:00
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/21/21 23:31	T1S	XEN STF

Client Sample ID: SWD-17-12152021
Lab Sample ID: 860-17358-5
Date Collected: 12/15/21 09:30
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/21/21 22:15	T1S	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Job ID: 860-17358-1
Project/Site: STC Silber Rd, TX

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	21-038-0	08-04-22
Florida	NELAP	E871002	06-30-22
Louisiana	NELAP	03054	06-30-22
Oklahoma	State	1306	08-31-22
Texas	NELAP	T104704215-21-44	06-30-22
Texas	TCEQ Water Supply	T104704215	06-30-22

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17358-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF

Protocol References:

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17358-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17358-1	SWD-15-12152021	Water	12/15/21 09:50	12/15/21 12:17
860-17358-2	SWD-18-12152021	Water	12/15/21 09:20	12/15/21 12:17
860-17358-3	SWD-20-12152021	Water	12/15/21 09:10	12/15/21 12:17
860-17358-4	FD-01-12152021	Water	12/15/21 00:00	12/15/21 12:17
860-17358-5	SWD-17-12152021	Water	12/15/21 09:30	12/15/21 12:17

Eurofins Xenco, Stafford

4145 Greenbriar Dr
Stafford TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: D—R (signature)	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 860-6507-2299.5
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin:	Page: Page ~~5 of 6~~ 1 of 1
Company: Jacobs Engineering Group, Inc.	PWSID:	Analysis Requested		Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:			
City: Houston	TAT Requested (days): STD TAT			
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No			
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02			
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02			
Project Name: STC Silber Rd, TX GW	Project #: 86002024			
Site:	SSOW#:			

860-17358 Chain of Custody

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
Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B (MOD) VOCs Custom List (7)	Total Number of containers	Special Instructions/Note:
				Preservation Code:	X	X	A	X	
~~SWD-12~~				Water					DR 12/15/21
~~SWD-14~~				Water					
SWD-15-12152021	12/15/21	0950	G	Water			X	3	
SWD-18-12152021	12/15/21	0920	G	Water			X	3	
SWD-20-12152021	12/15/21	0910	G	Water			X	3	
FD-01-12152021	12/15/21	NG	G	Water			X	3	
SWD-17-12152021	12/15/21	0930	G	Water		X	X	9	
				Water					
				Water					
				Water					
				Water					

Temp: 2.2 IR ID: HOU-223
C/F: +0.0
Corrected Temp: 2.2

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ________ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date: DR	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D—R (signature)	12/15/21 ~~1110~~ 1217	CH2M	(signature)	12/15/21 1217	FX
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:

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17358-1

Login Number: 17358
List Number: 1
Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

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	
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	

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ANALYTICAL REPORT

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17359-1
Client Project/Site: STC Silber Rd, TX

For:
Jacobs Engineering Group, Inc.
12750 Merit Drive
Suite 1100
Dallas, Texas 75251

Attn: John Knott

Bethany McDaniel

Authorized for release by:
12/21/2021 2:31:49 PM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17359-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result is greater then the UQL and the concentration is an estimated value.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

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

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Prep Method: **SW5030B** Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Benzene	0.000214	0.00100	0.000250	0.000370	mg/L
Bromobenzene	0.000300	0.00100	0.000250	0.000370	mg/L
Bromochloromethane	0.000209	0.00100	0.000500	0.000440	mg/L
Bromodichloromethane	0.000231	0.00100	0.000250	0.000460	mg/L
Bromoform	0.000630	0.00500	0.00100	0.00124	mg/L
Methyl bromide	0.00105	0.00500	0.000500	0.000570	mg/L
2-Butanone	0.00575	0.0500	0.00500	0.00575	mg/L
n-Butylbenzene	0.000286	0.00100	0.00200	0.00176	mg/L
Sec-Butylbenzene	0.000199	0.00100	0.000250	0.000230	mg/L
tert-Butylbenzene	0.000195	0.00100	0.000250	0.000210	mg/L
Carbon Tetrachloride	0.000423	0.00500	0.000250	0.000270	mg/L
Chlorobenzene	0.000159	0.00100	0.000250	0.000280	mg/L
Chloroethane	0.000433	0.0100	0.000500	0.000630	mg/L
Chloroform	0.000259	0.00100	0.000250	0.000600	mg/L
Methyl Chloride	0.000318	0.0100	0.000250	0.000450	mg/L
2-Chlorotoluene	0.000214	0.00100	0.000250	0.000210	mg/L
4-Chlorotoluene	0.000183	0.00100	0.000250	0.000260	mg/L
p-Cymene (p-Isopropyl	0.000233	0.00100	0.000250	0.000150	mg/L
Dibromochloromethane	0.000739	0.00500	0.000250	0.000440	mg/L
1,2-Dibromo-3-Chloropı	0.000319	0.00100	0.00100	0.000800	mg/L
1,2-Dibromoethane	0.000337	0.00500	0.000500	0.000450	mg/L
Methylene Bromide	0.000130	0.00100	0.000500	0.000460	mg/L
1,2-Dichlorobenzene	0.000236	0.00100	0.000250	0.000360	mg/L
1,3-Dichlorobenzene	0.000197	0.00100	0.000250	0.000370	mg/L
1,4-Dichlorobenzene	0.000199	0.00100	0.000250	0.000430	mg/L
Dichlorodifluoromethan	0.000316	0.00100	0.000250	0.000310	mg/L
1,1-Dichloroethane	0.000244	0.00100	0.000250	0.000300	mg/L
1,2-Dichloroethane	0.000285	0.00100	0.000250	0.000260	mg/L
1,1-Dichloroethene	0.000216	0.00100	0.000250	0.000280	mg/L
cis-1,2-Dichloroethylene	0.000174	0.00100	0.000250	0.000240	mg/L
trans-1,2-dichloroethyle	0.000256	0.00100	0.000250	0.000200	mg/L
1,2-Dichloropropane	0.000396	0.00500	0.000250	0.000270	mg/L
1,3-Dichloropropane	0.000439	0.00500	0.000250	0.000240	mg/L
2,2-Dichloropropane	0.000360	0.00500	0.000250	0.000170	mg/L
1,1-Dichloropropene	0.000481	0.00500	0.000250	0.000290	mg/L
cis-1,3-Dichloropropene	0.000690	0.00500	0.000500	0.000390	mg/L
trans-1,3-dichloroproper	0.000752	0.00500	0.000500	0.000420	mg/L
Ethylbenzene	0.000146	0.00100	0.000250	0.000260	mg/L
Hexachlorobutadiene	0.00200	0.00500	0.00200	0.00197	mg/L
Isopropylbenzene	0.000161	0.00100	0.000250	0.000240	mg/L
Methylene Chloride	0.00191	0.00500	0.00200	0.00206	mg/L
MTBE	0.000571	0.00500	0.000500	0.000750	mg/L
Naphthalene	0.00200	0.0100	0.00200	0.00145	mg/L
n-Propylbenzene	0.000179	0.00100	0.000250	0.000280	mg/L
Styrene	0.000162	0.00100	0.000250	0.000290	mg/L
1,1,1,2-Tetrachloroethar	0.000327	0.00100	0.000500	0.000540	mg/L
1,1,2,2-Tetrachloroethar	0.000284	0.00100	0.000500	0.000460	mg/L
Tetrachloroethylene	0.000500	0.00100	0.000500	0.000500	mg/L
Toluene	0.000500	0.00100	0.000500	0.000480	mg/L
1,2,3-Trichlorobenzene	0.00200	0.00500	0.00200	0.00174	mg/L
1,2,4-Trichlorobenzene	0.00200	0.00500	0.00200	0.00189	mg/L

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
1,1,1-Trichloroethane	0.000504	0.00500	0.000250	0.000200	mg/L
1,1,2-Trichloroethane	0.000228	0.00100	0.000500	0.000460	mg/L
Trichloroethylene	0.000424	0.00500	0.000250	0.000210	mg/L
Trichlorofluoromethane	0.000245	0.00100	0.000250	0.000360	mg/L
1,2,3-Trichloropropane	0.000283	0.00100	0.000250	0.000270	mg/L
1,2,4-Trimethylbenzene	0.000252	0.00100	0.000250	0.000280	mg/L
1,3,5-Trimethylbenzene	0.000279	0.00100	0.000250	0.000210	mg/L
o-Xylene	0.000192	0.00100	0.000500	0.000430	mg/L
m,p-Xylenes	0.000330	0.0100	0.00100	0.000900	mg/L
Vinyl Chloride	0.000234	0.00200	0.000250	0.000240	mg/L

Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

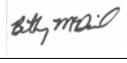
This data package is for Job No. 860-17359-1 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ☑ R1- Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. prepatation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified coumpounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☑ R10 - Other problems or anomalies.
- ☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on __/__/__. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Bethany McDaniel		Senior Project Manager	12/21/2021

Laboratory Data Package Cover Page - Page 2 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/21/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17359-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?		✓			1
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample detection limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?			✓		
		Were % moisture (or solids) reported for all soil and sediment samples?			✓		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			✓		
		If required for the project, are TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?		✓			2
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	✓				

Laboratory Data Package Cover Page - Page 3 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/21/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17359-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	✓				
		Were percent RSDs or correlation coefficient criteria met?	✓				
		Was the number of standards recommended in the method used for all analytes?	✓				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
		Are ICAL data available for all instruments used?	✓				
		Has the initial calibration curve been verified using an appropriate second source standard?	✓				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	✓				
		Were percent differences for each analyte within the method-required QC limits?	✓				
		Was the ICAL curve verified for each analyte?	✓				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			✓		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	✓				
		Were ion abundance data within the method-required QC limits?	✓				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	✓				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
		Were data associated with manual integrations flagged on the raw data?	✓				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✓		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period;
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Cover Page - Page 4 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/21/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17359-1
Reviewer Name:	

ER#[1]	Description
1	Due to the high concentration of Tetrachloroethene, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 860-34991 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.
2	The following samples were diluted to bring the concentration of target analytes within the calibration range: (880-9014-C-3), (880-9014-C-3 MS) and (880-9014-C-3 MSD). Elevated reporting limits (RLs) are provided.

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Job ID: 860-17359-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-17359-1

Receipt
The samples were received on 12/15/2021 12:17 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17359-1

Client Sample ID: MW-70-12142021 — Lab Sample ID: 860-17359-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.000919	J	0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.00145		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00115		0.00100	0.000174	mg/L	1		8260C	Total/NA
Trichloroethene	0.000429	J	0.00500	0.000424	mg/L	1		8260C	Total/NA

Client Sample ID: MW-71-12142021 — Lab Sample ID: 860-17359-2

No Detections.

Client Sample ID: MW-76-12142021 — Lab Sample ID: 860-17359-3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.000577	J	0.00100	0.000500	mg/L	1		8260C	Total/NA

Client Sample ID: MW-77-12142021 — Lab Sample ID: 860-17359-4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00133		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.00518		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00163		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.000878	J	0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00150	J	0.00500	0.000424	mg/L	1		8260C	Total/NA

Client Sample ID: MW-83-12142021 — Lab Sample ID: 860-17359-5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00815		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,2-Dichloroethane	0.00174		0.00100	0.000285	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0339		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.0115		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.0409		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00701		0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.00222		0.00200	0.000234	mg/L	1		8260C	Total/NA

Client Sample ID: MW-88-12142021 — Lab Sample ID: 860-17359-6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00391		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0197		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00186		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.0163		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00331	J	0.00500	0.000424	mg/L	1		8260C	Total/NA

Client Sample ID: MW-89-12142021 — Lab Sample ID: 860-17359-7

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00335		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,2-Dichloroethane	0.00134		0.00100	0.000285	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0892		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.000901	J	0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.000568	J	0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00477	J	0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.00746		0.00200	0.000234	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17359-1

Client Sample ID: MW-90-12142021 — Lab Sample ID: 860-17359-8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0191		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0454		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00134		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.0213		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00293	J	0.00500	0.000424	mg/L	1		8260C	Total/NA

Client Sample ID: MW-92-12142021 — Lab Sample ID: 860-17359-9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.000922	J	0.00100	0.000500	mg/L	1		8260C	Total/NA

Client Sample ID: MW-93R-12152021 — Lab Sample ID: 860-17359-10

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00221		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.00980		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.000885	J	0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.110		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00596		0.00500	0.000424	mg/L	1		8260C	Total/NA

Client Sample ID: MW-100-12142021 — Lab Sample ID: 860-17359-11

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.000211	J	0.00100	0.000174	mg/L	1		8260C	Total/NA

Client Sample ID: MW-121-12142021 — Lab Sample ID: 860-17359-12

No Detections.

Client Sample ID: MW-122-12142021 — Lab Sample ID: 860-17359-13

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00227		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0258		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.000254	J	0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.00122		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00104	J	0.00500	0.000424	mg/L	1		8260C	Total/NA

Client Sample ID: MW-145-12142021 — Lab Sample ID: 860-17359-14

No Detections.

Client Sample ID: MW-147-12142021 — Lab Sample ID: 860-17359-15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.000750	J	0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.00164		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00233		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.00304		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00111	J	0.00500	0.000424	mg/L	1		8260C	Total/NA

Client Sample ID: MW-161-12142021 — Lab Sample ID: 860-17359-16

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0111		0.00100	0.000244	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Stafford

Client Sample ID: MW-161-12142021 (Continued) — Lab Sample ID: 860-17359-16

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.0482		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00137		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.00147		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.000726	J	0.00500	0.000424	mg/L	1		8260C	Total/NA

Client Sample ID: FD-03-12142021 — Lab Sample ID: 860-17359-17

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00811		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,2-Dichloroethane	0.00176		0.00100	0.000285	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0340		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.0113		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.0505		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00708		0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.00226		0.00200	0.000234	mg/L	1		8260C	Total/NA

Client Sample ID: FD-04-12142021 — Lab Sample ID: 860-17359-18

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00456		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,2-Dichloroethane	0.00182		0.00100	0.000285	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.112		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00116		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.000771	J	0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00592		0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.00910		0.00200	0.000234	mg/L	1		8260C	Total/NA

Client Sample ID: EB-01-12152021 — Lab Sample ID: 860-17359-19

No Detections.

Client Sample ID: TB-01-12142021 — Lab Sample ID: 860-17359-20

No Detections.

Client Sample ID: TB-02-12152021 — Lab Sample ID: 860-17359-21

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-70-12142021

Lab Sample ID: 860-17359-1

Date Collected: 12/14/21 11:00

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.000919**	**J**	0.00100	0.000244	mg/L			12/21/21 06:23	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 06:23	1
1,1-Dichloroethene	**0.00145**		0.00100	0.000216	mg/L			12/21/21 06:23	1
cis-1,2-Dichloroethene	**0.00115**		0.00100	0.000174	mg/L			12/21/21 06:23	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 06:23	1
Trichloroethene	**0.000429**	**J**	0.00500	0.000424	mg/L			12/21/21 06:23	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 06:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*75 - 131*		*12/21/21 06:23*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/21/21 06:23*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/21/21 06:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*		*12/21/21 06:23*	*1*

Client Sample ID: MW-71-12142021

Lab Sample ID: 860-17359-2

Date Collected: 12/14/21 11:20

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 06:43	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 06:43	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 06:43	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 06:43	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 06:43	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 06:43	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 06:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*75 - 131*		*12/21/21 06:43*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/21/21 06:43*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/21/21 06:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/21/21 06:43*	*1*

Client Sample ID: MW-76-12142021

Lab Sample ID: 860-17359-3

Date Collected: 12/14/21 13:15

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 07:04	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 07:04	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 07:04	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 07:04	1
Tetrachloroethene	**0.000577**	**J**	0.00100	0.000500	mg/L			12/21/21 07:04	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 07:04	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 07:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*75 - 131*		*12/21/21 07:04*	*1*
Toluene-d8 (Surr)	*98*		*80 - 117*		*12/21/21 07:04*	*1*

Client Sample ID: MW-76-12142021 — Lab Sample ID: 860-17359-3

Date Collected: 12/14/21 13:15 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/21/21 07:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/21/21 07:04*	*1*

Client Sample ID: MW-77-12142021 — Lab Sample ID: 860-17359-4

Date Collected: 12/14/21 07:45 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00133**		0.00100	0.000244	mg/L			12/21/21 07:24	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 07:24	1
1,1-Dichloroethene	**0.00518**		0.00100	0.000216	mg/L			12/21/21 07:24	1
cis-1,2-Dichloroethene	**0.00163**		0.00100	0.000174	mg/L			12/21/21 07:24	1
Tetrachloroethene	**0.000878**	**J**	0.00100	0.000500	mg/L			12/21/21 07:24	1
Trichloroethene	**0.00150**	**J**	0.00500	0.000424	mg/L			12/21/21 07:24	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 07:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*75 - 131*		*12/21/21 07:24*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/21/21 07:24*	*1*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*12/21/21 07:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/21/21 07:24*	*1*

Client Sample ID: MW-83-12142021 — Lab Sample ID: 860-17359-5

Date Collected: 12/14/21 13:00 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00815**		0.00100	0.000244	mg/L			12/21/21 07:45	1
1,2-Dichloroethane	**0.00174**		0.00100	0.000285	mg/L			12/21/21 07:45	1
1,1-Dichloroethene	**0.0339**		0.00100	0.000216	mg/L			12/21/21 07:45	1
cis-1,2-Dichloroethene	**0.0115**		0.00100	0.000174	mg/L			12/21/21 07:45	1
Tetrachloroethene	**0.0409**		0.00100	0.000500	mg/L			12/21/21 07:45	1
Trichloroethene	**0.00701**		0.00500	0.000424	mg/L			12/21/21 07:45	1
Vinyl chloride	**0.00222**		0.00200	0.000234	mg/L			12/21/21 07:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*75 - 131*		*12/21/21 07:45*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/21/21 07:45*	*1*
4-Bromofluorobenzene (Surr)	*103*		*74 - 124*		*12/21/21 07:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 144*		*12/21/21 07:45*	*1*

Client Sample ID: MW-88-12142021 — Lab Sample ID: 860-17359-6

Date Collected: 12/14/21 16:35 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00391**		0.00100	0.000244	mg/L			12/21/21 08:05	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 08:05	1

Client Sample ID: MW-88-12142021

Lab Sample ID: 860-17359-6

Date Collected: 12/14/21 16:35

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.0197		0.00100	0.000216	mg/L			12/21/21 08:05	1
cis-1,2-Dichloroethene	0.00186		0.00100	0.000174	mg/L			12/21/21 08:05	1
Tetrachloroethene	0.0163		0.00100	0.000500	mg/L			12/21/21 08:05	1
Trichloroethene	0.00331	J	0.00500	0.000424	mg/L			12/21/21 08:05	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 08:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*75 - 131*		*12/21/21 08:05*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/21/21 08:05*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/21/21 08:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*12/21/21 08:05*	*1*

Client Sample ID: MW-89-12142021

Lab Sample ID: 860-17359-7

Date Collected: 12/14/21 14:40

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.00335		0.00100	0.000244	mg/L			12/21/21 08:26	1
1,2-Dichloroethane	0.00134		0.00100	0.000285	mg/L			12/21/21 08:26	1
1,1-Dichloroethene	0.0892		0.00100	0.000216	mg/L			12/21/21 08:26	1
cis-1,2-Dichloroethene	0.000901	J	0.00100	0.000174	mg/L			12/21/21 08:26	1
Tetrachloroethene	0.000568	J	0.00100	0.000500	mg/L			12/21/21 08:26	1
Trichloroethene	0.00477	J	0.00500	0.000424	mg/L			12/21/21 08:26	1
Vinyl chloride	0.00746		0.00200	0.000234	mg/L			12/21/21 08:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*75 - 131*		*12/21/21 08:26*	*1*
Toluene-d8 (Surr)	*98*		*80 - 117*		*12/21/21 08:26*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/21/21 08:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/21/21 08:26*	*1*

Client Sample ID: MW-90-12142021

Lab Sample ID: 860-17359-8

Date Collected: 12/14/21 16:20

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.0191		0.00100	0.000244	mg/L			12/21/21 08:46	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 08:46	1
1,1-Dichloroethene	0.0454		0.00100	0.000216	mg/L			12/21/21 08:46	1
cis-1,2-Dichloroethene	0.00134		0.00100	0.000174	mg/L			12/21/21 08:46	1
Tetrachloroethene	0.0213		0.00100	0.000500	mg/L			12/21/21 08:46	1
Trichloroethene	0.00293	J	0.00500	0.000424	mg/L			12/21/21 08:46	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 08:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*75 - 131*		*12/21/21 08:46*	*1*
Toluene-d8 (Surr)	*98*		*80 - 117*		*12/21/21 08:46*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/21/21 08:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 144*		*12/21/21 08:46*	*1*

Client Sample ID: MW-92-12142021

Lab Sample ID: 860-17359-9

Date Collected: 12/14/21 15:05

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 09:07	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 09:07	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 09:07	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 09:07	1
Tetrachloroethene	**0.000922**	**J**	0.00100	0.000500	mg/L			12/21/21 09:07	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 09:07	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 09:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*12/21/21 09:07*	*1*
Toluene-d8 (Surr)	*98*		*80 - 117*		*12/21/21 09:07*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/21/21 09:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/21/21 09:07*	*1*

Client Sample ID: MW-93R-12152021

Lab Sample ID: 860-17359-10

Date Collected: 12/15/21 08:00

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00221**		0.00100	0.000244	mg/L			12/20/21 16:42	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 16:42	1
1,1-Dichloroethene	**0.00980**		0.00100	0.000216	mg/L			12/20/21 16:42	1
cis-1,2-Dichloroethene	**0.000885**	**J**	0.00100	0.000174	mg/L			12/20/21 16:42	1
Tetrachloroethene	**0.110**		0.00100	0.000500	mg/L			12/20/21 16:42	1
Trichloroethene	**0.00596**		0.00500	0.000424	mg/L			12/20/21 16:42	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*12/20/21 16:42*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/20/21 16:42*	*1*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*12/20/21 16:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*12/20/21 16:42*	*1*

Client Sample ID: MW-100-12142021

Lab Sample ID: 860-17359-11

Date Collected: 12/14/21 11:10

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/20/21 19:03	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 19:03	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/20/21 19:03	1
cis-1,2-Dichloroethene	**0.000211**	**J**	0.00100	0.000174	mg/L			12/20/21 19:03	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 19:03	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 19:03	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*75 - 131*		*12/20/21 19:03*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/20/21 19:03*	*1*

Client Sample ID: MW-100-12142021 — Lab Sample ID: 860-17359-11

Date Collected: 12/14/21 11:10 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/20/21 19:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/20/21 19:03*	*1*

Client Sample ID: MW-121-12142021 — Lab Sample ID: 860-17359-12

Date Collected: 12/14/21 14:30 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/20/21 18:42	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 18:42	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/20/21 18:42	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/20/21 18:42	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 18:42	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 18:42	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*75 - 131*		*12/20/21 18:42*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/20/21 18:42*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/20/21 18:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/20/21 18:42*	*1*

Client Sample ID: MW-122-12142021 — Lab Sample ID: 860-17359-13

Date Collected: 12/14/21 14:55 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00227**		0.00100	0.000244	mg/L			12/20/21 18:01	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 18:01	1
1,1-Dichloroethene	**0.0258**		0.00100	0.000216	mg/L			12/20/21 18:01	1
cis-1,2-Dichloroethene	**0.000254**	**J**	0.00100	0.000174	mg/L			12/20/21 18:01	1
Tetrachloroethene	**0.00122**		0.00100	0.000500	mg/L			12/20/21 18:01	1
Trichloroethene	**0.00104**	**J**	0.00500	0.000424	mg/L			12/20/21 18:01	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*12/20/21 18:01*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/20/21 18:01*	*1*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*		*12/20/21 18:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/20/21 18:01*	*1*

Client Sample ID: MW-145-12142021 — Lab Sample ID: 860-17359-14

Date Collected: 12/14/21 11:45 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/20/21 21:29	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 21:29	1

Client Sample ID: MW-145-12142021

Lab Sample ID: 860-17359-14
Date Collected: 12/14/21 11:45
Matrix: Water
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/20/21 21:29	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/20/21 21:29	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 21:29	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 21:29	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*75 - 131*		*12/20/21 21:29*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/20/21 21:29*	*1*
4-Bromofluorobenzene (Surr)	*103*		*74 - 124*		*12/20/21 21:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/20/21 21:29*	*1*

Client Sample ID: MW-147-12142021

Lab Sample ID: 860-17359-15
Date Collected: 12/14/21 11:55
Matrix: Water
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.000750**	**J**	0.00100	0.000244	mg/L			12/20/21 21:50	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 21:50	1
1,1-Dichloroethene	**0.00164**		0.00100	0.000216	mg/L			12/20/21 21:50	1
cis-1,2-Dichloroethene	**0.00233**		0.00100	0.000174	mg/L			12/20/21 21:50	1
Tetrachloroethene	**0.00304**		0.00100	0.000500	mg/L			12/20/21 21:50	1
Trichloroethene	**0.00111**	**J**	0.00500	0.000424	mg/L			12/20/21 21:50	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*75 - 131*		*12/20/21 21:50*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/20/21 21:50*	*1*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*		*12/20/21 21:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*		*12/20/21 21:50*	*1*

Client Sample ID: MW-161-12142021

Lab Sample ID: 860-17359-16
Date Collected: 12/14/21 12:40
Matrix: Water
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.0111**		0.00100	0.000244	mg/L			12/20/21 22:10	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 22:10	1
1,1-Dichloroethene	**0.0482**		0.00100	0.000216	mg/L			12/20/21 22:10	1
cis-1,2-Dichloroethene	**0.00137**		0.00100	0.000174	mg/L			12/20/21 22:10	1
Tetrachloroethene	**0.00147**		0.00100	0.000500	mg/L			12/20/21 22:10	1
Trichloroethene	**0.000726**	**J**	0.00500	0.000424	mg/L			12/20/21 22:10	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*75 - 131*		*12/20/21 22:10*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/20/21 22:10*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/20/21 22:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*		*12/20/21 22:10*	*1*

Client Sample ID: FD-03-12142021 — Lab Sample ID: 860-17359-17

Date Collected: 12/14/21 00:00 **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.00811		0.00100	0.000244	mg/L			12/20/21 22:31	1
1,2-Dichloroethane	0.00176		0.00100	0.000285	mg/L			12/20/21 22:31	1
1,1-Dichloroethene	0.0340		0.00100	0.000216	mg/L			12/20/21 22:31	1
cis-1,2-Dichloroethene	0.0113		0.00100	0.000174	mg/L			12/20/21 22:31	1
Tetrachloroethene	0.0505		0.00100	0.000500	mg/L			12/20/21 22:31	1
Trichloroethene	0.00708		0.00500	0.000424	mg/L			12/20/21 22:31	1
Vinyl chloride	0.00226		0.00200	0.000234	mg/L			12/20/21 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*75 - 131*		*12/20/21 22:31*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/20/21 22:31*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/20/21 22:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*		*12/20/21 22:31*	*1*

Client Sample ID: FD-04-12142021 — Lab Sample ID: 860-17359-18

Date Collected: 12/14/21 00:00 **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.00456		0.00100	0.000244	mg/L			12/20/21 22:51	1
1,2-Dichloroethane	0.00182		0.00100	0.000285	mg/L			12/20/21 22:51	1
1,1-Dichloroethene	0.112		0.00100	0.000216	mg/L			12/20/21 22:51	1
cis-1,2-Dichloroethene	0.00116		0.00100	0.000174	mg/L			12/20/21 22:51	1
Tetrachloroethene	0.000771	J	0.00100	0.000500	mg/L			12/20/21 22:51	1
Trichloroethene	0.00592		0.00500	0.000424	mg/L			12/20/21 22:51	1
Vinyl chloride	0.00910		0.00200	0.000234	mg/L			12/20/21 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*75 - 131*		*12/20/21 22:51*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/20/21 22:51*	*1*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*12/20/21 22:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*12/20/21 22:51*	*1*

Client Sample ID: EB-01-12152021 — Lab Sample ID: 860-17359-19

Date Collected: 12/15/21 10:45 **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/20/21 18:22	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 18:22	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/20/21 18:22	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/20/21 18:22	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 18:22	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 18:22	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*75 - 131*		*12/20/21 18:22*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/20/21 18:22*	*1*

Client Sample ID: EB-01-12152021 — Lab Sample ID: 860-17359-19

Date Collected: 12/15/21 10:45 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*98*		*74 - 124*		*12/20/21 18:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/20/21 18:22*	*1*

Client Sample ID: TB-01-12142021 — Lab Sample ID: 860-17359-20

Date Collected: 12/14/21 07:40 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/20/21 21:09	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 21:09	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/20/21 21:09	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/20/21 21:09	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 21:09	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 21:09	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 21:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*98*		*75 - 131*		*12/20/21 21:09*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/20/21 21:09*	*1*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*12/20/21 21:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*12/20/21 21:09*	*1*

Client Sample ID: TB-02-12152021 — Lab Sample ID: 860-17359-21

Date Collected: 12/15/21 07:10 — **Matrix: Water**
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/20/21 16:22	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 16:22	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/20/21 16:22	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/20/21 16:22	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 16:22	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 16:22	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 16:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*98*		*75 - 131*		*12/20/21 16:22*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/20/21 16:22*	*1*
4-Bromofluorobenzene (Surr)	*103*		*74 - 124*		*12/20/21 16:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/20/21 16:22*	*1*

Unadjusted Detection Limits

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17359-1

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

Analyte	MQL	MDL	Units
1,1-Dichloroethane	0.00100	0.000244	mg/L
1,1-Dichloroethene	0.00100	0.000216	mg/L
1,2-Dichloroethane	0.00100	0.000285	mg/L
cis-1,2-Dichloroethene	0.00100	0.000174	mg/L
Tetrachloroethene	0.00100	0.000500	mg/L
Trichloroethene	0.00500	0.000424	mg/L
Vinyl chloride	0.00200	0.000234	mg/L

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17359-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(75-131)	(80-117)	(74-124)	(63-144)
860-16918-C-4 MS	Matrix Spike	98	97	97	98
860-17359-1	MW-70-12142021	100	99	101	101
860-17359-2	MW-71-12142021	96	99	100	98
860-17359-3	MW-76-12142021	96	98	100	98
860-17359-4	MW-77-12142021	98	99	102	97
860-17359-5	MW-83-12142021	96	101	103	96
860-17359-6	MW-88-12142021	98	99	100	100
860-17359-7	MW-89-12142021	97	98	100	98
860-17359-8	MW-90-12142021	97	98	101	96
860-17359-9	MW-92-12142021	99	98	101	97
860-17359-10	MW-93R-12152021	99	101	102	100
860-17359-10 MS	MW-93R-12152021	98	98	100	98
860-17359-10 MSD	MW-93R-12152021	99	99	98	98
860-17359-11	MW-100-12142021	101	102	100	98
860-17359-12	MW-121-12142021	100	102	101	98
860-17359-13	MW-122-12142021	99	102	99	98
860-17359-14	MW-145-12142021	98	100	103	97
860-17359-15	MW-147-12142021	97	102	105	99
860-17359-16	MW-161-12142021	98	99	100	99
860-17359-17	FD-03-12142021	97	100	101	99
860-17359-18	FD-04-12142021	98	99	102	100
860-17359-19	EB-01-12152021	100	102	98	97
860-17359-20	TB-01-12142021	98	99	102	100
860-17359-21	TB-02-12152021	98	99	103	98
880-9014-C-3 MS	Matrix Spike	97	98	97	93
880-9014-C-3 MSD	Matrix Spike Duplicate	99	99	99	91
LCS 860-34902/3	Lab Control Sample	99	99	99	92
LCS 860-34991/3	Lab Control Sample	99	99	98	98
LCS 860-35034/3	Lab Control Sample	98	99	98	99
LCSD 860-34902/4	Lab Control Sample Dup	98	99	99	93
LCSD 860-34991/4	Lab Control Sample Dup	97	99	101	98
LCSD 860-35034/4	Lab Control Sample Dup	99	100	100	97
MB 860-34902/9	Method Blank	101	102	101	95
MB 860-34991/8	Method Blank	97	100	102	97
MB 860-35034/9	Method Blank	99	99	102	97

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 860-34902/9
Matrix: Water
Analysis Batch: 34902

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/20/21 10:21	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 10:21	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/20/21 10:21	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/20/21 10:21	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 10:21	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 10:21	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 10:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*75 - 131*		*12/20/21 10:21*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/20/21 10:21*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/20/21 10:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*63 - 144*		*12/20/21 10:21*	*1*

Lab Sample ID: LCS 860-34902/3
Matrix: Water
Analysis Batch: 34902

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05400		mg/L		108	72 - 125		
1,2-Dichloroethane			0.0500	0.04910		mg/L		98	68 - 127		
1,1-Dichloroethene			0.0500	0.05207		mg/L		104	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.05424		mg/L		108	75 - 125		
Tetrachloroethene			0.0500	0.05430		mg/L		109	71 - 125		
Trichloroethene			0.0500	0.05499		mg/L		110	62 - 137		
Vinyl chloride			0.0500	0.05662		mg/L		113	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*92*		*63 - 144*

Lab Sample ID: LCSD 860-34902/4
Matrix: Water
Analysis Batch: 34902

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.05229		mg/L		105	72 - 125	3	25
1,2-Dichloroethane			0.0500	0.04872		mg/L		97	68 - 127	1	25
1,1-Dichloroethene			0.0500	0.05036		mg/L		101	59 - 172	3	25
cis-1,2-Dichloroethene			0.0500	0.05262		mg/L		105	75 - 125	3	25
Tetrachloroethene			0.0500	0.05383		mg/L		108	71 - 125	1	25
Trichloroethene			0.0500	0.05329		mg/L		107	62 - 137	3	25
Vinyl chloride			0.0500	0.05375		mg/L		108	60 - 140	5	25

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

Lab Sample ID: LCSD 860-34902/4
Matrix: Water
Analysis Batch: 34902

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	98		75 - 131
Toluene-d8 (Surr)	99		80 - 117
4-Bromofluorobenzene (Surr)	99		74 - 124
1,2-Dichloroethane-d4 (Surr)	93		63 - 144

Lab Sample ID: 880-9014-C-3 MS
Matrix: Water
Analysis Batch: 34902

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.0577		0.250	0.3211		mg/L		105	72 - 125
1,2-Dichloroethane	0.00143	U	0.250	0.2456		mg/L		98	68 - 127
1,1-Dichloroethene	0.0599		0.250	0.3106		mg/L		100	59 - 172
cis-1,2-Dichloroethene	0.158		0.250	0.4049		mg/L		99	75 - 125
Tetrachloroethene	0.0140		0.250	0.3008		mg/L		115	71 - 125
Trichloroethene	0.0734		0.250	0.3520		mg/L		111	62 - 137
Vinyl chloride	0.00117	U	0.250	0.2716		mg/L		109	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	97		75 - 131
Toluene-d8 (Surr)	98		80 - 117
4-Bromofluorobenzene (Surr)	97		74 - 124
1,2-Dichloroethane-d4 (Surr)	93		63 - 144

Lab Sample ID: 880-9014-C-3 MSD
Matrix: Water
Analysis Batch: 34902

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.0577		0.250	0.3348		mg/L		111	72 - 125	4	25
1,2-Dichloroethane	0.00143	U	0.250	0.2499		mg/L		100	68 - 127	2	25
1,1-Dichloroethene	0.0599		0.250	0.3297		mg/L		108	59 - 172	6	25
cis-1,2-Dichloroethene	0.158		0.250	0.4308		mg/L		109	75 - 125	6	25
Tetrachloroethene	0.0140		0.250	0.3113		mg/L		119	71 - 125	3	25
Trichloroethene	0.0734		0.250	0.3679		mg/L		118	62 - 137	4	25
Vinyl chloride	0.00117	U	0.250	0.2964		mg/L		119	60 - 140	9	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	99		75 - 131
Toluene-d8 (Surr)	99		80 - 117
4-Bromofluorobenzene (Surr)	99		74 - 124
1,2-Dichloroethane-d4 (Surr)	91		63 - 144

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

Lab Sample ID: MB 860-34991/8
Matrix: Water
Analysis Batch: 34991

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/20/21 16:01	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 16:01	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/20/21 16:01	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/20/21 16:01	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 16:01	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 16:01	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 16:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*75 - 131*		*12/20/21 16:01*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/20/21 16:01*	*1*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*12/20/21 16:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/20/21 16:01*	*1*

Lab Sample ID: LCS 860-34991/3
Matrix: Water
Analysis Batch: 34991

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05130		mg/L		103	72 - 125		
1,2-Dichloroethane			0.0500	0.04942		mg/L		99	68 - 127		
1,1-Dichloroethene			0.0500	0.05219		mg/L		104	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.05158		mg/L		103	75 - 125		
Tetrachloroethene			0.0500	0.05189		mg/L		104	71 - 125		
Trichloroethene			0.0500	0.05197		mg/L		104	62 - 137		
Vinyl chloride			0.0500	0.05211		mg/L		104	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*98*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*

Lab Sample ID: LCSD 860-34991/4
Matrix: Water
Analysis Batch: 34991

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.04924		mg/L		98	72 - 125	4	25
1,2-Dichloroethane			0.0500	0.04958		mg/L		99	68 - 127	0	25
1,1-Dichloroethene			0.0500	0.04971		mg/L		99	59 - 172	5	25
cis-1,2-Dichloroethene			0.0500	0.04982		mg/L		100	75 - 125	3	25
Tetrachloroethene			0.0500	0.05052		mg/L		101	71 - 125	3	25
Trichloroethene			0.0500	0.05060		mg/L		101	62 - 137	3	25
Vinyl chloride			0.0500	0.04857		mg/L		97	60 - 140	7	25

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

Lab Sample ID: LCSD 860-34991/4
Matrix: Water
Analysis Batch: 34991

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*97*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*

Lab Sample ID: 860-17359-10 MS
Matrix: Water
Analysis Batch: 34991

Client Sample ID: MW-93R-12152021
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.00221		0.0500	0.05323		mg/L		102	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.05047		mg/L		101	68 - 127
1,1-Dichloroethene	0.00980		0.0500	0.06267		mg/L		106	59 - 172
cis-1,2-Dichloroethene	0.000885	J	0.0500	0.05173		mg/L		102	75 - 125
Tetrachloroethene	0.110		0.0500	0.1733	E N1	mg/L		127	71 - 125
Trichloroethene	0.00596		0.0500	0.05804		mg/L		104	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.05229		mg/L		105	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*98*		*75 - 131*
Toluene-d8 (Surr)	*98*		*80 - 117*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*

Lab Sample ID: 860-17359-10 MSD
Matrix: Water
Analysis Batch: 34991

Client Sample ID: MW-93R-12152021
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.00221		0.0500	0.05472		mg/L		105	72 - 125	3	25
1,2-Dichloroethane	0.000285	U	0.0500	0.05160		mg/L		103	68 - 127	2	25
1,1-Dichloroethene	0.00980		0.0500	0.06352		mg/L		107	59 - 172	1	25
cis-1,2-Dichloroethene	0.000885	J	0.0500	0.05350		mg/L		105	75 - 125	3	25
Tetrachloroethene	0.110		0.0500	0.1777	E N1	mg/L		135	71 - 125	2	25
Trichloroethene	0.00596		0.0500	0.06049		mg/L		109	62 - 137	4	25
Vinyl chloride	0.000234	U	0.0500	0.05249		mg/L		105	60 - 140	0	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*99*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*98*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*

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

Lab Sample ID: MB 860-35034/9
Matrix: Water
Analysis Batch: 35034

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 03:18	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 03:18	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 03:18	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 03:18	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 03:18	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 03:18	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 03:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*12/21/21 03:18*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/21/21 03:18*	*1*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*12/21/21 03:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/21/21 03:18*	*1*

Lab Sample ID: LCS 860-35034/3
Matrix: Water
Analysis Batch: 35034

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05035		mg/L		101	72 - 125		
1,2-Dichloroethane			0.0500	0.05061		mg/L		101	68 - 127		
1,1-Dichloroethene			0.0500	0.04863		mg/L		97	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.04952		mg/L		99	75 - 125		
Tetrachloroethene			0.0500	0.05012		mg/L		100	71 - 125		
Trichloroethene			0.0500	0.05128		mg/L		103	62 - 137		
Vinyl chloride			0.0500	0.04963		mg/L		99	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*98*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*

Lab Sample ID: LCSD 860-35034/4
Matrix: Water
Analysis Batch: 35034

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.05174		mg/L		103	72 - 125	3	25
1,2-Dichloroethane			0.0500	0.05090		mg/L		102	68 - 127	1	25
1,1-Dichloroethene			0.0500	0.04945		mg/L		99	59 - 172	2	25
cis-1,2-Dichloroethene			0.0500	0.05066		mg/L		101	75 - 125	2	25
Tetrachloroethene			0.0500	0.05123		mg/L		102	71 - 125	2	25
Trichloroethene			0.0500	0.05186		mg/L		104	62 - 137	1	25
Vinyl chloride			0.0500	0.05073		mg/L		101	60 - 140	2	25

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

Lab Sample ID: LCSD 860-35034/4
Matrix: Water
Analysis Batch: 35034

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*99*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 117*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*

Lab Sample ID: 860-16918-C-4 MS
Matrix: Water
Analysis Batch: 35034

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000244	U	0.0500	0.05097		mg/L		102	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.04984		mg/L		100	68 - 127
1,1-Dichloroethene	0.000216	U	0.0500	0.05158		mg/L		103	59 - 172
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.05020		mg/L		100	75 - 125
Tetrachloroethene	0.000500	U	0.0500	0.05070		mg/L		101	71 - 125
Trichloroethene	0.000424	U	0.0500	0.05167		mg/L		103	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.05141		mg/L		103	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*98*		*75 - 131*
Toluene-d8 (Surr)	*97*		*80 - 117*
4-Bromofluorobenzene (Surr)	*97*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*

GC/MS VOA

Analysis Batch: 34902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17359-11	MW-100-12142021	Total/NA	Water	8260C	
860-17359-12	MW-121-12142021	Total/NA	Water	8260C	
860-17359-13	MW-122-12142021	Total/NA	Water	8260C	
860-17359-19	EB-01-12152021	Total/NA	Water	8260C	
MB 860-34902/9	Method Blank	Total/NA	Water	8260C	
LCS 860-34902/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-34902/4	Lab Control Sample Dup	Total/NA	Water	8260C	
880-9014-C-3 MS	Matrix Spike	Total/NA	Water	8260C	
880-9014-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Analysis Batch: 34991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17359-10	MW-93R-12152021	Total/NA	Water	8260C	
860-17359-14	MW-145-12142021	Total/NA	Water	8260C	
860-17359-15	MW-147-12142021	Total/NA	Water	8260C	
860-17359-16	MW-161-12142021	Total/NA	Water	8260C	
860-17359-17	FD-03-12142021	Total/NA	Water	8260C	
860-17359-18	FD-04-12142021	Total/NA	Water	8260C	
860-17359-20	TB-01-12142021	Total/NA	Water	8260C	
860-17359-21	TB-02-12152021	Total/NA	Water	8260C	
MB 860-34991/8	Method Blank	Total/NA	Water	8260C	
LCS 860-34991/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-34991/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17359-10 MS	MW-93R-12152021	Total/NA	Water	8260C	
860-17359-10 MSD	MW-93R-12152021	Total/NA	Water	8260C	

Analysis Batch: 35034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17359-1	MW-70-12142021	Total/NA	Water	8260C	
860-17359-2	MW-71-12142021	Total/NA	Water	8260C	
860-17359-3	MW-76-12142021	Total/NA	Water	8260C	
860-17359-4	MW-77-12142021	Total/NA	Water	8260C	
860-17359-5	MW-83-12142021	Total/NA	Water	8260C	
860-17359-6	MW-88-12142021	Total/NA	Water	8260C	
860-17359-7	MW-89-12142021	Total/NA	Water	8260C	
860-17359-8	MW-90-12142021	Total/NA	Water	8260C	
860-17359-9	MW-92-12142021	Total/NA	Water	8260C	
MB 860-35034/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35034/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35034/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-16918-C-4 MS	Matrix Spike	Total/NA	Water	8260C	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17359-1

Client Sample ID: MW-70-12142021
Date Collected: 12/14/21 11:00
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17359-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35034	12/21/21 06:23	EM	XEN STF

Client Sample ID: MW-71-12142021
Date Collected: 12/14/21 11:20
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17359-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35034	12/21/21 06:43	EM	XEN STF

Client Sample ID: MW-76-12142021
Date Collected: 12/14/21 13:15
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17359-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35034	12/21/21 07:04	EM	XEN STF

Client Sample ID: MW-77-12142021
Date Collected: 12/14/21 07:45
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17359-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35034	12/21/21 07:24	EM	XEN STF

Client Sample ID: MW-83-12142021
Date Collected: 12/14/21 13:00
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17359-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35034	12/21/21 07:45	EM	XEN STF

Client Sample ID: MW-88-12142021
Date Collected: 12/14/21 16:35
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17359-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35034	12/21/21 08:05	EM	XEN STF

Client Sample ID: MW-89-12142021
Date Collected: 12/14/21 14:40
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17359-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35034	12/21/21 08:26	EM	XEN STF

Client Sample ID: MW-90-12142021
Lab Sample ID: 860-17359-8
Date Collected: 12/14/21 16:20
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35034	12/21/21 08:46	EM	XEN STF

Client Sample ID: MW-92-12142021
Lab Sample ID: 860-17359-9
Date Collected: 12/14/21 15:05
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35034	12/21/21 09:07	EM	XEN STF

Client Sample ID: MW-93R-12152021
Lab Sample ID: 860-17359-10
Date Collected: 12/15/21 08:00
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34991	12/20/21 16:42	EM	XEN STF

Client Sample ID: MW-100-12142021
Lab Sample ID: 860-17359-11
Date Collected: 12/14/21 11:10
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34902	12/20/21 19:03	NA	XEN STF

Client Sample ID: MW-121-12142021
Lab Sample ID: 860-17359-12
Date Collected: 12/14/21 14:30
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34902	12/20/21 18:42	NA	XEN STF

Client Sample ID: MW-122-12142021
Lab Sample ID: 860-17359-13
Date Collected: 12/14/21 14:55
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34902	12/20/21 18:01	NA	XEN STF

Client Sample ID: MW-145-12142021
Lab Sample ID: 860-17359-14
Date Collected: 12/14/21 11:45
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34991	12/20/21 21:29	EM	XEN STF

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17359-1

Client Sample ID: MW-147-12142021
Lab Sample ID: 860-17359-15
Date Collected: 12/14/21 11:55
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34991	12/20/21 21:50	EM	XEN STF

Client Sample ID: MW-161-12142021
Lab Sample ID: 860-17359-16
Date Collected: 12/14/21 12:40
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34991	12/20/21 22:10	EM	XEN STF

Client Sample ID: FD-03-12142021
Lab Sample ID: 860-17359-17
Date Collected: 12/14/21 00:00
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34991	12/20/21 22:31	EM	XEN STF

Client Sample ID: FD-04-12142021
Lab Sample ID: 860-17359-18
Date Collected: 12/14/21 00:00
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34991	12/20/21 22:51	EM	XEN STF

Client Sample ID: EB-01-12152021
Lab Sample ID: 860-17359-19
Date Collected: 12/15/21 10:45
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34902	12/20/21 18:22	NA	XEN STF

Client Sample ID: TB-01-12142021
Lab Sample ID: 860-17359-20
Date Collected: 12/14/21 07:40
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34991	12/20/21 21:09	EM	XEN STF

Client Sample ID: TB-02-12152021
Lab Sample ID: 860-17359-21
Date Collected: 12/15/21 07:10
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	34991	12/20/21 16:22	EM	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Job ID: 860-17359-1
Project/Site: STC Silber Rd, TX

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	21-038-0	08-04-22
Florida	NELAP	E871002	06-30-22
Louisiana	NELAP	03054	06-30-22
Oklahoma	State	1306	08-31-22
Texas	NELAP	T104704215-21-44	06-30-22
Texas	TCEQ Water Supply	T104704215	06-30-22

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17359-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF

Protocol References:

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17359-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17359-1	MW-70-12142021	Water	12/14/21 11:00	12/15/21 12:17
860-17359-2	MW-71-12142021	Water	12/14/21 11:20	12/15/21 12:17
860-17359-3	MW-76-12142021	Water	12/14/21 13:15	12/15/21 12:17
860-17359-4	MW-77-12142021	Water	12/14/21 07:45	12/15/21 12:17
860-17359-5	MW-83-12142021	Water	12/14/21 13:00	12/15/21 12:17
860-17359-6	MW-88-12142021	Water	12/14/21 16:35	12/15/21 12:17
860-17359-7	MW-89-12142021	Water	12/14/21 14:40	12/15/21 12:17
860-17359-8	MW-90-12142021	Water	12/14/21 16:20	12/15/21 12:17
860-17359-9	MW-92-12142021	Water	12/14/21 15:05	12/15/21 12:17
860-17359-10	MW-93R-12152021	Water	12/15/21 08:00	12/15/21 12:17
860-17359-11	MW-100-12142021	Water	12/14/21 11:10	12/15/21 12:17
860-17359-12	MW-121-12142021	Water	12/14/21 14:30	12/15/21 12:17
860-17359-13	MW-122-12142021	Water	12/14/21 14:55	12/15/21 12:17
860-17359-14	MW-145-12142021	Water	12/14/21 11:45	12/15/21 12:17
860-17359-15	MW-147-12142021	Water	12/14/21 11:55	12/15/21 12:17
860-17359-16	MW-161-12142021	Water	12/14/21 12:40	12/15/21 12:17
860-17359-17	FD-03-12142021	Water	12/14/21 00:00	12/15/21 12:17
860-17359-18	FD-04-12142021	Water	12/14/21 00:00	12/15/21 12:17
860-17359-19	EB-01-12152021	Water	12/15/21 10:45	12/15/21 12:17
860-17359-20	TB-01-12142021	Water	12/14/21 07:40	12/15/21 12:17
860-17359-21	TB-02-12152021	Water	12/15/21 07:10	12/15/21 12:17

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

860-17359 Chain of Custody

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Client Information	Sampler: D-R	Lab PM: McDaniel, Bethany A		COC No: 0-6507-2299.2
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin:	Page: Page ~~2 of 6~~ 1 of 3
Company: Jacobs Engineering Group, Inc.	PWSID:	Analysis Requested		Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:			
City: Houston	TAT Requested (days): STD TAT			
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No			
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02			
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02			
Project Name: STC Silber Rd, TX GW	Project #: 86002024			
Site:	SSOW#:			

Temp: 2.2 IR ID HOU-223
C/F +0.0
Corrected Temp: 2.2

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
Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B (MOD) VOCs Custom List (7)	Total Number of containers	Special Instructions/Note:
				Preservation Code:			A		
MW-70-12142021	12/14/21	1100	G	Water			X	3	
MW-71-12142021	12/14/21	1120	G	Water			X	3	
MW-76-12142021	12/14/21	1315	G	Water			X	3	
MW-77-12152021	12/15/21	0745	G	Water			X	3	
MW-83-12142021	12/14/21	1300	G	Water			X	3	
MW-88-12142021	12/14/21	1635	G	Water			X	3	
MW-89-12142021	12/14/21	1440	G	Water			X	3	
MW-90-12142021	12/14/21	1620	G	Water			X	3	
MW-92-12142021 (DR)	12/14/21	1505	G	Water			X	3	
MW-93R ~~12142021~~ 12152021	12/15/21	0800	G	Water		X	X	9	MS/MSD
MW-100-12142021	12/14/21	1110	G	Water			X	3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: D R	Date/Time: 12/15/21 ~~1116~~ 1217	Company: EHRM	Received by: [signature]	Date/Time: 12/15/21 1217	Company: EX
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:

Ver 06/08/2021

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: D-R	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 860-6507-2299.3
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin:	Page: ~~Page 3 of 6~~ 2 of 3
Company: Jacobs Engineering Group, Inc.	PWSID:	Analysis Requested		Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:			
City: Houston	TAT Requested (days): STD TAT			
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No			
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02			
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02			
Project Name: STC Silber Rd, TX GW	Project #: 86002024			
Site:	SSOW#:			

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA
M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - (MOD) VOCs Custom List (7)	Total Number of containers	Special Instructions/Note:
				Preservation Code:	X	X	A	X	
MW-121-12142021	12/14/21	1430	G	Water			X	3	
MW-122-12142021	12/14/21	1455	G	Water			X	3	
MW-145-12142021	12/14/21	1145	G	Water			X	2	only 2 VOAs
MW-147-12142021	12/14/21	1155	G	Water			X	3	
MW-161-12142021	12/14/21	1240	G	Water			X	3	
~~MW-162~~				Water					DR 12/15/21
~~MW-163~~				Water					DR 12/15/21
FD-03-12142021	12/14/21	NG	G	Water			X	3	
FD-04-12142021	12/14/21	NG	G	Water			X	3	
EB-01-12152021	12/15/21	1045	G	Water			X	3	
TB-01-12142021	12/14/21	0740		Water			X	2	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D-R	12/15/21 1110	CHW	[signature]	12/15/21 1217	FX
Relinquished by:	Date/Time: 1217	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:

Ver: 06/08/2021

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: McDaniel Bethany A	Carrier Tracking No(s):	COC No: 860-6507-2299.4
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin:	Page: ~~Page 4 of 8~~ 3 of 3
Company: Jacobs Engineering Group, Inc.	PWSID:			Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:			
City: Houston	TAT Requested (days): STD TAT			
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No			
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02			
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02			
Project Name: STC Silber Rd TX GW	Project #: 86002024			
Site:	SSOW#:			

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	Z	other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B (MOD) VOCs - Custom List (7)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
TB-02-12152021	12/15/21	0710		Water			X	2	
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested. I II III, IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	12/15/21 ~~1110~~ 1217	CHZM		12/15/21 1217	TX
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:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17359-1

Login Number: 17359
List Number: 1
Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

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	
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	

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ANALYTICAL REPORT

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17362-1
Client Project/Site: STC Silber Rd, TX

For:
Jacobs Engineering Group, Inc.
12750 Merit Drive
Suite 1100
Dallas, Texas 75251

Attn: John Knott

Bethany McDaniel

Authorized for release by:
12/23/2021 2:24:28 PM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17362-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

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

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Prep Method: **SW5030B** Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Benzene	0.000214	0.00100	0.000250	0.000370	mg/L
Bromobenzene	0.000300	0.00100	0.000250	0.000370	mg/L
Bromochloromethane	0.000209	0.00100	0.000500	0.000440	mg/L
Bromodichloromethane	0.000231	0.00100	0.000250	0.000460	mg/L
Bromoform	0.000630	0.00500	0.00100	0.00124	mg/L
Methyl bromide	0.00105	0.00500	0.000500	0.000570	mg/L
2-Butanone	0.00575	0.0500	0.00500	0.00575	mg/L
n-Butylbenzene	0.000286	0.00100	0.00200	0.00176	mg/L
Sec-Butylbenzene	0.000199	0.00100	0.000250	0.000230	mg/L
tert-Butylbenzene	0.000195	0.00100	0.000250	0.000210	mg/L
Carbon Tetrachloride	0.000423	0.00500	0.000250	0.000270	mg/L
Chlorobenzene	0.000159	0.00100	0.000250	0.000280	mg/L
Chloroethane	0.000433	0.0100	0.000500	0.000630	mg/L
Chloroform	0.000259	0.00100	0.000250	0.000600	mg/L
Methyl Chloride	0.000318	0.0100	0.000250	0.000450	mg/L
2-Chlorotoluene	0.000214	0.00100	0.000250	0.000210	mg/L
4-Chlorotoluene	0.000183	0.00100	0.000250	0.000260	mg/L
p-Cymene (p-Isopropyl	0.000233	0.00100	0.000250	0.000150	mg/L
Dibromochloromethane	0.000739	0.00500	0.000250	0.000440	mg/L
1,2-Dibromo-3-Chloropı	0.000319	0.00100	0.00100	0.000800	mg/L
1,2-Dibromoethane	0.000337	0.00500	0.000500	0.000450	mg/L
Methylene Bromide	0.000130	0.00100	0.000500	0.000460	mg/L
1,2-Dichlorobenzene	0.000236	0.00100	0.000250	0.000360	mg/L
1,3-Dichlorobenzene	0.000197	0.00100	0.000250	0.000370	mg/L
1,4-Dichlorobenzene	0.000199	0.00100	0.000250	0.000430	mg/L
Dichlorodifluoromethan	0.000316	0.00100	0.000250	0.000310	mg/L
1,1-Dichloroethane	0.000244	0.00100	0.000250	0.000300	mg/L
1,2-Dichloroethane	0.000285	0.00100	0.000250	0.000260	mg/L
1,1-Dichloroethene	0.000216	0.00100	0.000250	0.000280	mg/L
cis-1,2-Dichloroethylene	0.000174	0.00100	0.000250	0.000240	mg/L
trans-1,2-dichloroethyle	0.000256	0.00100	0.000250	0.000200	mg/L
1,2-Dichloropropane	0.000396	0.00500	0.000250	0.000270	mg/L
1,3-Dichloropropane	0.000439	0.00500	0.000250	0.000240	mg/L
2,2-Dichloropropane	0.000360	0.00500	0.000250	0.000170	mg/L
1,1-Dichloropropene	0.000481	0.00500	0.000250	0.000290	mg/L
cis-1,3-Dichloropropene	0.000690	0.00500	0.000500	0.000390	mg/L
trans-1,3-dichloroproper	0.000752	0.00500	0.000500	0.000420	mg/L
Ethylbenzene	0.000146	0.00100	0.000250	0.000260	mg/L
Hexachlorobutadiene	0.00200	0.00500	0.00200	0.00197	mg/L
Isopropylbenzene	0.000161	0.00100	0.000250	0.000240	mg/L
Methylene Chloride	0.00191	0.00500	0.00200	0.00206	mg/L
MTBE	0.000571	0.00500	0.000500	0.000750	mg/L
Naphthalene	0.00200	0.0100	0.00200	0.00145	mg/L
n-Propylbenzene	0.000179	0.00100	0.000250	0.000280	mg/L
Styrene	0.000162	0.00100	0.000250	0.000290	mg/L
1,1,1,2-Tetrachloroethar	0.000327	0.00100	0.000500	0.000540	mg/L
1,1,2,2-Tetrachloroethar	0.000284	0.00100	0.000500	0.000460	mg/L
Tetrachloroethylene	0.000500	0.00100	0.000500	0.000500	mg/L
Toluene	0.000500	0.00100	0.000500	0.000480	mg/L
1,2,3-Trichlorobenzene	0.00200	0.00500	0.00200	0.00174	mg/L
1,2,4-Trichlorobenzene	0.00200	0.00500	0.00200	0.00189	mg/L

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
1,1,1-Trichloroethane	0.000504	0.00500	0.000250	0.000200	mg/L
1,1,2-Trichloroethane	0.000228	0.00100	0.000500	0.000460	mg/L
Trichloroethylene	0.000424	0.00500	0.000250	0.000210	mg/L
Trichlorofluoromethane	0.000245	0.00100	0.000250	0.000360	mg/L
1,2,3-Trichloropropane	0.000283	0.00100	0.000250	0.000270	mg/L
1,2,4-Trimethylbenzene	0.000252	0.00100	0.000250	0.000280	mg/L
1,3,5-Trimethylbenzene	0.000279	0.00100	0.000250	0.000210	mg/L
o-Xylene	0.000192	0.00100	0.000500	0.000430	mg/L
m,p-Xylenes	0.000330	0.0100	0.00100	0.000900	mg/L
Vinyl Chloride	0.000234	0.00200	0.000250	0.000240	mg/L

Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

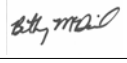
This data package is for Job No. 860-17362-1 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ☑ R1- Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. prepatation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified coumpounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☑ R10 - Other problems or anomalies.
- ☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on __/__/__. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Bethany McDaniel		Senior Project Manager	12/23/2021

Laboratory Data Package Cover Page - Page 2 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17362-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample detection limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?			✓		
		Were % moisture (or solids) reported for all soil and sediment samples?			✓		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			✓		
		If required for the project, are TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	✓				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	✓				

Laboratory Data Package Cover Page - Page 3 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17362-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	✓				
		Were percent RSDs or correlation coefficient criteria met?	✓				
		Was the number of standards recommended in the method used for all analytes?	✓				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
		Are ICAL data available for all instruments used?	✓				
		Has the initial calibration curve been verified using an appropriate second source standard?	✓				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	✓				
		Were percent differences for each analyte within the method-required QC limits?	✓				
		Was the ICAL curve verified for each analyte?	✓				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			✓		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	✓				
		Were ion abundance data within the method-required QC limits?	✓				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	✓				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
		Were data associated with manual integrations flagged on the raw data?	✓				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✓		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period;
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Cover Page - Page 4 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17362-1
Reviewer Name:	

ER#[1]	Description
1	The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-35166 were outside control limits. The associated laboratory control sample (LCS) recovery was within acceptance limits.

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Job ID: 860-17362-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-17362-1

Receipt
The sample was received on 12/15/2021 12:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17362-1

Client Sample ID: MW-15R-12142021 — Lab Sample ID: 860-17362-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00303		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0403		0.00100	0.000216	mg/L	1		8260C	Total/NA
Vinyl chloride	0.00205		0.00200	0.000234	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17362-1

Client Sample ID: MW-15R-12142021
Date Collected: 12/14/21 09:35
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17362-1
Matrix: Water

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00303**		0.00100	0.000244	mg/L			12/22/21 01:25	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/22/21 01:25	1
1,1-Dichloroethene	**0.0403**		0.00100	0.000216	mg/L			12/22/21 01:25	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/22/21 01:25	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/22/21 01:25	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/22/21 01:25	1
Vinyl chloride	**0.00205**		0.00200	0.000234	mg/L			12/22/21 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*75 - 131*		*12/22/21 01:25*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/22/21 01:25*	*1*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*12/22/21 01:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 144*		*12/22/21 01:25*	*1*

Unadjusted Detection Limits

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17362-1

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

Analyte	MQL	MDL	Units
1,1-Dichloroethane	0.00100	0.000244	mg/L
1,1-Dichloroethene	0.00100	0.000216	mg/L
1,2-Dichloroethane	0.00100	0.000285	mg/L
cis-1,2-Dichloroethene	0.00100	0.000174	mg/L
Tetrachloroethene	0.00100	0.000500	mg/L
Trichloroethene	0.00500	0.000424	mg/L
Vinyl chloride	0.00200	0.000234	mg/L

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17362-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(75-131)	(80-117)	(74-124)	(63-144)
860-17358-A-5 MSD	Matrix Spike Duplicate	112	103	105	101
860-17358-B-5 MS	Matrix Spike	109	101	109	105
860-17362-1	MW-15R-12142021	108	102	102	104
LCS 860-35166/3	Lab Control Sample	110	99	104	102
LCSD 860-35166/4	Lab Control Sample Dup	107	102	102	103
MB 860-35166/9	Method Blank	110	100	109	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 860-35166/9
Matrix: Water
Analysis Batch: 35166

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 21:37	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 21:37	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 21:37	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 21:37	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 21:37	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 21:37	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*75 - 131*		*12/21/21 21:37*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/21/21 21:37*	*1*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*12/21/21 21:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*12/21/21 21:37*	*1*

Lab Sample ID: LCS 860-35166/3
Matrix: Water
Analysis Batch: 35166

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05513		mg/L		110	72 - 125		
1,2-Dichloroethane			0.0500	0.05486		mg/L		110	68 - 127		
1,1-Dichloroethene			0.0500	0.05012		mg/L		100	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.05003		mg/L		100	75 - 125		
Tetrachloroethene			0.0500	0.05277		mg/L		106	71 - 125		
Trichloroethene			0.0500	0.05101		mg/L		102	62 - 137		
Vinyl chloride			0.0500	0.05621		mg/L		112	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*110*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*104*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.05226		mg/L		105	72 - 125	5	25
1,2-Dichloroethane			0.0500	0.05346		mg/L		107	68 - 127	3	25
1,1-Dichloroethene			0.0500	0.04787		mg/L		96	59 - 172	5	25
cis-1,2-Dichloroethene			0.0500	0.04803		mg/L		96	75 - 125	4	25
Tetrachloroethene			0.0500	0.05154		mg/L		103	71 - 125	2	25
Trichloroethene			0.0500	0.04976		mg/L		100	62 - 137	2	25
Vinyl chloride			0.0500	0.05208		mg/L		104	60 - 140	8	25

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

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*107*		*75 - 131*
Toluene-d8 (Surr)	*102*		*80 - 117*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*

Lab Sample ID: 860-17358-A-5 MSD
Matrix: Water
Analysis Batch: 35166

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.000244	U	0.0500	0.01187	N1 N2	mg/L		24	72 - 125	94	25
1,2-Dichloroethane	0.000285	U	0.0500	0.009099	N1 N2	mg/L		18	68 - 127	109	25
1,1-Dichloroethene	0.00591		0.0500	0.02307	N1 N2	mg/L		34	59 - 172	54	25
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.01063	N1 N2	mg/L		21	75 - 125	93	25
Tetrachloroethene	0.000500	U	0.0500	0.01124	N1 N2	mg/L		22	71 - 125	93	25
Trichloroethene	0.000424	U	0.0500	0.01122	N1 N2	mg/L		22	62 - 137	92	25
Vinyl chloride	0.000234	U	0.0500	0.01610	N1 N2	mg/L		32	60 - 140	67	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*112*		*75 - 131*
Toluene-d8 (Surr)	*103*		*80 - 117*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*

Lab Sample ID: 860-17358-B-5 MS
Matrix: Water
Analysis Batch: 35166

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000244	U	0.0500	0.03291	N1	mg/L		66	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.03103	N1	mg/L		62	68 - 127
1,1-Dichloroethene	0.00591		0.0500	0.03999		mg/L		68	59 - 172
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.02907	N1	mg/L		58	75 - 125
Tetrachloroethene	0.000500	U	0.0500	0.03089	N1	mg/L		62	71 - 125
Trichloroethene	0.000424	U	0.0500	0.03038	N1	mg/L		61	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.03238		mg/L		65	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*109*		*75 - 131*
Toluene-d8 (Surr)	*101*		*80 - 117*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17362-1

GC/MS VOA

Analysis Batch: 35166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17362-1	MW-15R-12142021	Total/NA	Water	8260C	
MB 860-35166/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35166/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35166/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17358-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
860-17358-B-5 MS	Matrix Spike	Total/NA	Water	8260C	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17362-1

Client Sample ID: MW-15R-12142021
Date Collected: 12/14/21 09:35
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17362-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/22/21 01:25	T1S	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Job ID: 860-17362-1
Project/Site: STC Silber Rd, TX

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	21-038-0	08-04-22
Florida	NELAP	E871002	06-30-22
Louisiana	NELAP	03054	06-30-22
Oklahoma	State	1306	08-31-22
Texas	NELAP	T104704215-21-44	06-30-22
Texas	TCEQ Water Supply	T104704215	06-30-22

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17362-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF

Protocol References:

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17362-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17362-1	MW-15R-12142021	Water	12/14/21 09:35	12/15/21 12:17

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information

Client Contact: John Ynfante
Sampler: DJC
Lab PM: McDaniel, Bethany A
Carrier Tracking No(s):
COC No: 860-6507-2299.1
Phone:
E-Mail: Bethany.McDaniel@Eurofinset.com
State of Origin:
Page: Page 1 of 1
Company: Jacobs Engineering Group, Inc.
PWSID:
Job #:
Address: 14701 St. Mary's Lane Suite 300
Due Date Requested:
City: Houston
TAT Requested (days): STD TAT
State, Zip: TX, 77079
Compliance Project: Δ Yes Δ No
Phone:
PO #: D3542628.C.CS.TPE.SIL.22-05-02
Email: John.Ynfante@jacobs.com
WO #: D3542628.C.CS.TPE.SIL.22-05-02
Project Name: STC Silber Rd TX GW
Project #: 86002024
Site:
SSOW#:

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA
M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B (MOD) VOCs Custom List (7)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	X	
MW-ISR-12142021	12/14/21	0935	G	Water			X	3	
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

860-17362 Chain of Custody

Temp: 2.2 IR ID HOU-223
C/F +0.0
Corrected Temp: 2.2

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months

Deliverable Requested: I II III, IV Other (specify)
Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: DJC Time: Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
David R	12/15/21 1217	CH2M	[signature]	12/15/21 1217	EX

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.
Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17362-1

Login Number: 17362
List Number: 1
Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

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	
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	

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ANALYTICAL REPORT

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17363-1
Client Project/Site: STC Silber Rd, TX

For:
Jacobs Engineering Group, Inc.
12750 Merit Drive
Suite 1100
Dallas, Texas 75251

Attn: John Knott

Bethany McDaniel

Authorized for release by:
12/23/2021 2:22:18 PM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17363-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result is greater then the UQL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

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

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Prep Method: **SW5030B** Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Benzene	0.000214	0.00100	0.000250	0.000370	mg/L
Bromobenzene	0.000300	0.00100	0.000250	0.000370	mg/L
Bromochloromethane	0.000209	0.00100	0.000500	0.000440	mg/L
Bromodichloromethane	0.000231	0.00100	0.000250	0.000460	mg/L
Bromoform	0.000630	0.00500	0.00100	0.00124	mg/L
Methyl bromide	0.00105	0.00500	0.000500	0.000570	mg/L
2-Butanone	0.00575	0.0500	0.00500	0.00575	mg/L
n-Butylbenzene	0.000286	0.00100	0.00200	0.00176	mg/L
Sec-Butylbenzene	0.000199	0.00100	0.000250	0.000230	mg/L
tert-Butylbenzene	0.000195	0.00100	0.000250	0.000210	mg/L
Carbon Tetrachloride	0.000423	0.00500	0.000250	0.000270	mg/L
Chlorobenzene	0.000159	0.00100	0.000250	0.000280	mg/L
Chloroethane	0.000433	0.0100	0.000500	0.000630	mg/L
Chloroform	0.000259	0.00100	0.000250	0.000600	mg/L
Methyl Chloride	0.000318	0.0100	0.000250	0.000450	mg/L
2-Chlorotoluene	0.000214	0.00100	0.000250	0.000210	mg/L
4-Chlorotoluene	0.000183	0.00100	0.000250	0.000260	mg/L
p-Cymene (p-Isopropyl	0.000233	0.00100	0.000250	0.000150	mg/L
Dibromochloromethane	0.000739	0.00500	0.000250	0.000440	mg/L
1,2-Dibromo-3-Chloropı	0.000319	0.00100	0.00100	0.000800	mg/L
1,2-Dibromoethane	0.000337	0.00500	0.000500	0.000450	mg/L
Methylene Bromide	0.000130	0.00100	0.000500	0.000460	mg/L
1,2-Dichlorobenzene	0.000236	0.00100	0.000250	0.000360	mg/L
1,3-Dichlorobenzene	0.000197	0.00100	0.000250	0.000370	mg/L
1,4-Dichlorobenzene	0.000199	0.00100	0.000250	0.000430	mg/L
Dichlorodifluoromethan	0.000316	0.00100	0.000250	0.000310	mg/L
1,1-Dichloroethane	0.000244	0.00100	0.000250	0.000300	mg/L
1,2-Dichloroethane	0.000285	0.00100	0.000250	0.000260	mg/L
1,1-Dichloroethene	0.000216	0.00100	0.000250	0.000280	mg/L
cis-1,2-Dichloroethylene	0.000174	0.00100	0.000250	0.000240	mg/L
trans-1,2-dichloroethyle	0.000256	0.00100	0.000250	0.000200	mg/L
1,2-Dichloropropane	0.000396	0.00500	0.000250	0.000270	mg/L
1,3-Dichloropropane	0.000439	0.00500	0.000250	0.000240	mg/L
2,2-Dichloropropane	0.000360	0.00500	0.000250	0.000170	mg/L
1,1-Dichloropropene	0.000481	0.00500	0.000250	0.000290	mg/L
cis-1,3-Dichloropropene	0.000690	0.00500	0.000500	0.000390	mg/L
trans-1,3-dichloroproper	0.000752	0.00500	0.000500	0.000420	mg/L
Ethylbenzene	0.000146	0.00100	0.000250	0.000260	mg/L
Hexachlorobutadiene	0.00200	0.00500	0.00200	0.00197	mg/L
Isopropylbenzene	0.000161	0.00100	0.000250	0.000240	mg/L
Methylene Chloride	0.00191	0.00500	0.00200	0.00206	mg/L
MTBE	0.000571	0.00500	0.000500	0.000750	mg/L
Naphthalene	0.00200	0.0100	0.00200	0.00145	mg/L
n-Propylbenzene	0.000179	0.00100	0.000250	0.000280	mg/L
Styrene	0.000162	0.00100	0.000250	0.000290	mg/L
1,1,1,2-Tetrachloroethar	0.000327	0.00100	0.000500	0.000540	mg/L
1,1,2,2-Tetrachloroethar	0.000284	0.00100	0.000500	0.000460	mg/L
Tetrachloroethylene	0.000500	0.00100	0.000500	0.000500	mg/L
Toluene	0.000500	0.00100	0.000500	0.000480	mg/L
1,2,3-Trichlorobenzene	0.00200	0.00500	0.00200	0.00174	mg/L
1,2,4-Trichlorobenzene	0.00200	0.00500	0.00200	0.00189	mg/L

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
1,1,1-Trichloroethane	0.000504	0.00500	0.000250	0.000200	mg/L
1,1,2-Trichloroethane	0.000228	0.00100	0.000500	0.000460	mg/L
Trichloroethylene	0.000424	0.00500	0.000250	0.000210	mg/L
Trichlorofluoromethane	0.000245	0.00100	0.000250	0.000360	mg/L
1,2,3-Trichloropropane	0.000283	0.00100	0.000250	0.000270	mg/L
1,2,4-Trimethylbenzene	0.000252	0.00100	0.000250	0.000280	mg/L
1,3,5-Trimethylbenzene	0.000279	0.00100	0.000250	0.000210	mg/L
o-Xylene	0.000192	0.00100	0.000500	0.000430	mg/L
m,p-Xylenes	0.000330	0.0100	0.00100	0.000900	mg/L
Vinyl Chloride	0.000234	0.00200	0.000250	0.000240	mg/L

Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

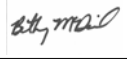
This data package is for Job No. 860-17363-1 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ☑ R1- Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. prepatation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified coumpounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☑ R10 - Other problems or anomalies.
- ☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on __/__/__. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Bethany McDaniel		Senior Project Manager	12/23/2021

Laboratory Data Package Cover Page - Page 2 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17363-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample detection limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?			✓		
		Were % moisture (or solids) reported for all soil and sediment samples?			✓		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			✓		
		If required for the project, are TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	✓				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	✓				

Laboratory Data Package Cover Page - Page 3 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17363-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	✓				
		Were percent RSDs or correlation coefficient criteria met?	✓				
		Was the number of standards recommended in the method used for all analytes?	✓				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
		Are ICAL data available for all instruments used?	✓				
		Has the initial calibration curve been verified using an appropriate second source standard?	✓				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	✓				
		Were percent differences for each analyte within the method-required QC limits?	✓				
		Was the ICAL curve verified for each analyte?	✓				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			✓		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	✓				
		Were ion abundance data within the method-required QC limits?	✓				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	✓				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
		Were data associated with manual integrations flagged on the raw data?	✓				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✓		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period;
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Cover Page - Page 4 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17363-1
Reviewer Name:	

ER#[1]	Description
1	The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-35064 were outside control limits. Sample matrix interference is suspected. The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-35166 were outside control limits. The associated laboratory control sample (LCS) recovery was within acceptance limits.

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Job ID: 860-17363-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-17363-1

Receipt
The samples were received on 12/15/2021 12:17 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17363-1

Client Sample ID: MW-17R-12142021 — Lab Sample ID: 860-17363-1

No Detections.

Client Sample ID: MW-178-12142021 — Lab Sample ID: 860-17363-2

No Detections.

Client Sample ID: MW-74-12142021 — Lab Sample ID: 860-17363-3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.00338		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.0416		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.00172		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00880		0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.0182		0.00200	0.000234	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-17R-12142021

Lab Sample ID: 860-17363-1

Date Collected: 12/14/21 10:00

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 23:50	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 23:50	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 23:50	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 23:50	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 23:50	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 23:50	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*75 - 131*		*12/21/21 23:50*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*12/21/21 23:50*	*1*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*		*12/21/21 23:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 144*		*12/21/21 23:50*	*1*

Client Sample ID: MW-178-12142021

Lab Sample ID: 860-17363-2

Date Collected: 12/14/21 10:35

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/22/21 00:09	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/22/21 00:09	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/22/21 00:09	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/22/21 00:09	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/22/21 00:09	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/22/21 00:09	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/22/21 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*75 - 131*		*12/22/21 00:09*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/22/21 00:09*	*1*
4-Bromofluorobenzene (Surr)	*103*		*74 - 124*		*12/22/21 00:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*63 - 144*		*12/22/21 00:09*	*1*

Client Sample ID: MW-74-12142021

Lab Sample ID: 860-17363-3

Date Collected: 12/14/21 10:15

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 11:29	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 11:29	1
1,1-Dichloroethene	**0.00338**		0.00100	0.000216	mg/L			12/21/21 11:29	1
cis-1,2-Dichloroethene	**0.0416**		0.00100	0.000174	mg/L			12/21/21 11:29	1
Tetrachloroethene	**0.00172**		0.00100	0.000500	mg/L			12/21/21 11:29	1
Trichloroethene	**0.00880**		0.00500	0.000424	mg/L			12/21/21 11:29	1
Vinyl chloride	**0.0182**		0.00200	0.000234	mg/L			12/21/21 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*75 - 131*		*12/21/21 11:29*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/21/21 11:29*	*1*

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17363-1

Client Sample ID: MW-74-12142021
Date Collected: 12/14/21 10:15
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17363-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		74 - 124		12/21/21 11:29	1
1,2-Dichloroethane-d4 (Surr)	103		63 - 144		12/21/21 11:29	1

Unadjusted Detection Limits

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17363-1

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

Analyte	MQL	MDL	Units
1,1-Dichloroethane	0.00100	0.000244	mg/L
1,1-Dichloroethene	0.00100	0.000216	mg/L
1,2-Dichloroethane	0.00100	0.000285	mg/L
cis-1,2-Dichloroethene	0.00100	0.000174	mg/L
Tetrachloroethene	0.00100	0.000500	mg/L
Trichloroethene	0.00500	0.000424	mg/L
Vinyl chloride	0.00200	0.000234	mg/L

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17363-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(75-131)	(80-117)	(74-124)	(63-144)
860-17358-A-5 MSD	Matrix Spike Duplicate	112	103	105	101
860-17358-B-5 MS	Matrix Spike	109	101	109	105
860-17363-1	MW-17R-12142021	109	103	105	104
860-17363-2	MW-178-12142021	114	102	103	108
860-17363-3	MW-74-12142021	111	102	106	103
860-17363-3 MS	MW-74-12142021	108	99	103	105
860-17363-3 MSD	MW-74-12142021	110	99	110	105
LCS 860-35064/3	Lab Control Sample	105	98	104	106
LCS 860-35166/3	Lab Control Sample	110	99	104	102
LCSD 860-35064/4	Lab Control Sample Dup	112	102	103	105
LCSD 860-35166/4	Lab Control Sample Dup	107	102	102	103
MB 860-35064/9	Method Blank	110	103	109	104
MB 860-35166/9	Method Blank	110	100	109	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 860-35064/9
Matrix: Water
Analysis Batch: 35064

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 11:10	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 11:10	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 11:10	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 11:10	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 11:10	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 11:10	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*75 - 131*		*12/21/21 11:10*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*12/21/21 11:10*	*1*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*12/21/21 11:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 144*		*12/21/21 11:10*	*1*

Lab Sample ID: LCS 860-35064/3
Matrix: Water
Analysis Batch: 35064

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05818		mg/L		116	72 - 125		
1,2-Dichloroethane			0.0500	0.05774		mg/L		115	68 - 127		
1,1-Dichloroethene			0.0500	0.05507		mg/L		110	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.05336		mg/L		107	75 - 125		
Tetrachloroethene			0.0500	0.05404		mg/L		108	71 - 125		
Trichloroethene			0.0500	0.05542		mg/L		111	62 - 137		
Vinyl chloride			0.0500	0.05737		mg/L		115	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*75 - 131*
Toluene-d8 (Surr)	*98*		*80 - 117*
4-Bromofluorobenzene (Surr)	*104*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*106*		*63 - 144*

Lab Sample ID: LCSD 860-35064/4
Matrix: Water
Analysis Batch: 35064

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.05844		mg/L		117	72 - 125	0	25
1,2-Dichloroethane			0.0500	0.05678		mg/L		114	68 - 127	2	25
1,1-Dichloroethene			0.0500	0.05370		mg/L		107	59 - 172	3	25
cis-1,2-Dichloroethene			0.0500	0.05189		mg/L		104	75 - 125	3	25
Tetrachloroethene			0.0500	0.05550		mg/L		111	71 - 125	3	25
Trichloroethene			0.0500	0.05087		mg/L		102	62 - 137	9	25
Vinyl chloride			0.0500	0.05444		mg/L		109	60 - 140	5	25

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

Lab Sample ID: LCSD 860-35064/4
Matrix: Water
Analysis Batch: 35064

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*112*		*75 - 131*
Toluene-d8 (Surr)	*102*		*80 - 117*
4-Bromofluorobenzene (Surr)	*103*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*

Lab Sample ID: 860-17363-3 MS
Matrix: Water
Analysis Batch: 35064

Client Sample ID: MW-74-12142021
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000244	U	0.0500	0.07030	N1	mg/L		141	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.06197		mg/L		124	68 - 127
1,1-Dichloroethene	0.00338		0.0500	0.06571		mg/L		125	59 - 172
cis-1,2-Dichloroethene	0.0416		0.0500	0.1515	E N1	mg/L		220	75 - 125
Tetrachloroethene	0.00172		0.0500	0.06707	N1	mg/L		131	71 - 125
Trichloroethene	0.00880		0.0500	0.06772		mg/L		118	62 - 137
Vinyl chloride	0.0182		0.0500	0.1023	N1	mg/L		168	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*108*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*103*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*

Lab Sample ID: 860-17363-3 MSD
Matrix: Water
Analysis Batch: 35064

Client Sample ID: MW-74-12142021
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.000244	U	0.0500	0.06618	N1	mg/L		132	72 - 125	6	25
1,2-Dichloroethane	0.000285	U	0.0500	0.06074		mg/L		121	68 - 127	2	25
1,1-Dichloroethene	0.00338		0.0500	0.06079		mg/L		115	59 - 172	8	25
cis-1,2-Dichloroethene	0.0416		0.0500	0.09549	N2	mg/L		108	75 - 125	45	25
Tetrachloroethene	0.00172		0.0500	0.06028		mg/L		117	71 - 125	11	25
Trichloroethene	0.00880		0.0500	0.06437		mg/L		111	62 - 137	5	25
Vinyl chloride	0.0182		0.0500	0.07326	N2	mg/L		110	60 - 140	33	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*110*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*110*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*

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

Lab Sample ID: MB 860-35166/9
Matrix: Water
Analysis Batch: 35166

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 21:37	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 21:37	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 21:37	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 21:37	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 21:37	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 21:37	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*75 - 131*		*12/21/21 21:37*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/21/21 21:37*	*1*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*12/21/21 21:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*12/21/21 21:37*	*1*

Lab Sample ID: LCS 860-35166/3
Matrix: Water
Analysis Batch: 35166

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05513		mg/L		110	72 - 125		
1,2-Dichloroethane			0.0500	0.05486		mg/L		110	68 - 127		
1,1-Dichloroethene			0.0500	0.05012		mg/L		100	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.05003		mg/L		100	75 - 125		
Tetrachloroethene			0.0500	0.05277		mg/L		106	71 - 125		
Trichloroethene			0.0500	0.05101		mg/L		102	62 - 137		
Vinyl chloride			0.0500	0.05621		mg/L		112	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*110*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*104*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.05226		mg/L		105	72 - 125	5	25
1,2-Dichloroethane			0.0500	0.05346		mg/L		107	68 - 127	3	25
1,1-Dichloroethene			0.0500	0.04787		mg/L		96	59 - 172	5	25
cis-1,2-Dichloroethene			0.0500	0.04803		mg/L		96	75 - 125	4	25
Tetrachloroethene			0.0500	0.05154		mg/L		103	71 - 125	2	25
Trichloroethene			0.0500	0.04976		mg/L		100	62 - 137	2	25
Vinyl chloride			0.0500	0.05208		mg/L		104	60 - 140	8	25

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

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*107*		*75 - 131*
Toluene-d8 (Surr)	*102*		*80 - 117*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*

Lab Sample ID: 860-17358-A-5 MSD
Matrix: Water
Analysis Batch: 35166

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.000244	U	0.0500	0.01187	N1 N2	mg/L		24	72 - 125	94	25
1,2-Dichloroethane	0.000285	U	0.0500	0.009099	N1 N2	mg/L		18	68 - 127	109	25
1,1-Dichloroethene	0.00591		0.0500	0.02307	N1 N2	mg/L		34	59 - 172	54	25
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.01063	N1 N2	mg/L		21	75 - 125	93	25
Tetrachloroethene	0.000500	U	0.0500	0.01124	N1 N2	mg/L		22	71 - 125	93	25
Trichloroethene	0.000424	U	0.0500	0.01122	N1 N2	mg/L		22	62 - 137	92	25
Vinyl chloride	0.000234	U	0.0500	0.01610	N1 N2	mg/L		32	60 - 140	67	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*112*		*75 - 131*
Toluene-d8 (Surr)	*103*		*80 - 117*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*

Lab Sample ID: 860-17358-B-5 MS
Matrix: Water
Analysis Batch: 35166

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000244	U	0.0500	0.03291	N1	mg/L		66	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.03103	N1	mg/L		62	68 - 127
1,1-Dichloroethene	0.00591		0.0500	0.03999		mg/L		68	59 - 172
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.02907	N1	mg/L		58	75 - 125
Tetrachloroethene	0.000500	U	0.0500	0.03089	N1	mg/L		62	71 - 125
Trichloroethene	0.000424	U	0.0500	0.03038	N1	mg/L		61	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.03238		mg/L		65	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*109*		*75 - 131*
Toluene-d8 (Surr)	*101*		*80 - 117*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17363-1

GC/MS VOA

Analysis Batch: 35064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17363-3	MW-74-12142021	Total/NA	Water	8260C	
MB 860-35064/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35064/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35064/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17363-3 MS	MW-74-12142021	Total/NA	Water	8260C	
860-17363-3 MSD	MW-74-12142021	Total/NA	Water	8260C	

Analysis Batch: 35166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17363-1	MW-17R-12142021	Total/NA	Water	8260C	
860-17363-2	MW-178-12142021	Total/NA	Water	8260C	
MB 860-35166/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35166/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35166/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17358-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
860-17358-B-5 MS	Matrix Spike	Total/NA	Water	8260C	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17363-1

Client Sample ID: MW-17R-12142021

Lab Sample ID: 860-17363-1

Date Collected: 12/14/21 10:00

Matrix: Water

Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/21/21 23:50	T1S	XEN STF

Client Sample ID: MW-178-12142021

Lab Sample ID: 860-17363-2

Date Collected: 12/14/21 10:35

Matrix: Water

Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/22/21 00:09	T1S	XEN STF

Client Sample ID: MW-74-12142021

Lab Sample ID: 860-17363-3

Date Collected: 12/14/21 10:15

Matrix: Water

Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35064	12/21/21 11:29	NA	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Job ID: 860-17363-1
Project/Site: STC Silber Rd, TX

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	21-038-0	08-04-22
Florida	NELAP	E871002	06-30-22
Louisiana	NELAP	03054	06-30-22
Oklahoma	State	1306	08-31-22
Texas	NELAP	T104704215-21-44	06-30-22
Texas	TCEQ Water Supply	T104704215	06-30-22

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17363-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF

Protocol References:

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17363-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17363-1	MW-17R-12142021	Water	12/14/21 10:00	12/15/21 12:17
860-17363-2	MW-178-12142021	Water	12/14/21 10:35	12/15/21 12:17
860-17363-3	MW-74-12142021	Water	12/14/21 10:15	12/15/21 12:17

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: D-R	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 860-6507-2299.2
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin:	Page: Page ~~2 of 6~~ 1 of 1
Company: Jacobs Engineering Group, Inc.	PWSID:			Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:			
City: Houston	TAT Requested (days): STD TAT			
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No			
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02			
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02			
Project Name: STC Silber Rd, TX GW	Project #: 86002024			
Site:	SSOW#:			

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	Z	other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B (MOD) VOCs Custom List (7)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	X	
MW-17R-12142021	12/14/21	1000	G	Water			X	3	
MW-17B-12142021	12/14/21	1035	G	Water			X	3	
MW-74-12142021	12/14/21	1015	G	Water		X	X	9	MS/MSD
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

Temp: 2.2 IR ID HOU-223
C/F +0.0
Corrected Temp: 2.2

860-17363 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	12/15/21 1110	CHZM	YCRS	12/15/21 1217	EX
Relinquished by:	Date/Time: 1217	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:

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17363-1

Login Number: 17363
List Number: 1
Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

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	
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	

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ANALYTICAL REPORT

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17364-1
Client Project/Site: STC Silber Rd, TX

For:
Jacobs Engineering Group, Inc.
12750 Merit Drive
Suite 1100
Dallas, Texas 75251

Attn: John Knott

Bethany McDaniel

Authorized for release by:
12/23/2021 2:14:24 PM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17364-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

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

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Prep Method: **SW5030B** Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Benzene	0.000214	0.00100	0.000250	0.000370	mg/L
Bromobenzene	0.000300	0.00100	0.000250	0.000370	mg/L
Bromochloromethane	0.000209	0.00100	0.000500	0.000440	mg/L
Bromodichloromethane	0.000231	0.00100	0.000250	0.000460	mg/L
Bromoform	0.000630	0.00500	0.00100	0.00124	mg/L
Methyl bromide	0.00105	0.00500	0.000500	0.000570	mg/L
2-Butanone	0.00575	0.0500	0.00500	0.00575	mg/L
n-Butylbenzene	0.000286	0.00100	0.00200	0.00176	mg/L
Sec-Butylbenzene	0.000199	0.00100	0.000250	0.000230	mg/L
tert-Butylbenzene	0.000195	0.00100	0.000250	0.000210	mg/L
Carbon Tetrachloride	0.000423	0.00500	0.000250	0.000270	mg/L
Chlorobenzene	0.000159	0.00100	0.000250	0.000280	mg/L
Chloroethane	0.000433	0.0100	0.000500	0.000630	mg/L
Chloroform	0.000259	0.00100	0.000250	0.000600	mg/L
Methyl Chloride	0.000318	0.0100	0.000250	0.000450	mg/L
2-Chlorotoluene	0.000214	0.00100	0.000250	0.000210	mg/L
4-Chlorotoluene	0.000183	0.00100	0.000250	0.000260	mg/L
p-Cymene (p-Isopropyl	0.000233	0.00100	0.000250	0.000150	mg/L
Dibromochloromethane	0.000739	0.00500	0.000250	0.000440	mg/L
1,2-Dibromo-3-Chloropı	0.000319	0.00100	0.00100	0.000800	mg/L
1,2-Dibromoethane	0.000337	0.00500	0.000500	0.000450	mg/L
Methylene Bromide	0.000130	0.00100	0.000500	0.000460	mg/L
1,2-Dichlorobenzene	0.000236	0.00100	0.000250	0.000360	mg/L
1,3-Dichlorobenzene	0.000197	0.00100	0.000250	0.000370	mg/L
1,4-Dichlorobenzene	0.000199	0.00100	0.000250	0.000430	mg/L
Dichlorodifluoromethan	0.000316	0.00100	0.000250	0.000310	mg/L
1,1-Dichloroethane	0.000244	0.00100	0.000250	0.000300	mg/L
1,2-Dichloroethane	0.000285	0.00100	0.000250	0.000260	mg/L
1,1-Dichloroethene	0.000216	0.00100	0.000250	0.000280	mg/L
cis-1,2-Dichloroethylene	0.000174	0.00100	0.000250	0.000240	mg/L
trans-1,2-dichloroethyle	0.000256	0.00100	0.000250	0.000200	mg/L
1,2-Dichloropropane	0.000396	0.00500	0.000250	0.000270	mg/L
1,3-Dichloropropane	0.000439	0.00500	0.000250	0.000240	mg/L
2,2-Dichloropropane	0.000360	0.00500	0.000250	0.000170	mg/L
1,1-Dichloropropene	0.000481	0.00500	0.000250	0.000290	mg/L
cis-1,3-Dichloropropene	0.000690	0.00500	0.000500	0.000390	mg/L
trans-1,3-dichloroproper	0.000752	0.00500	0.000500	0.000420	mg/L
Ethylbenzene	0.000146	0.00100	0.000250	0.000260	mg/L
Hexachlorobutadiene	0.00200	0.00500	0.00200	0.00197	mg/L
Isopropylbenzene	0.000161	0.00100	0.000250	0.000240	mg/L
Methylene Chloride	0.00191	0.00500	0.00200	0.00206	mg/L
MTBE	0.000571	0.00500	0.000500	0.000750	mg/L
Naphthalene	0.00200	0.0100	0.00200	0.00145	mg/L
n-Propylbenzene	0.000179	0.00100	0.000250	0.000280	mg/L
Styrene	0.000162	0.00100	0.000250	0.000290	mg/L
1,1,1,2-Tetrachloroethar	0.000327	0.00100	0.000500	0.000540	mg/L
1,1,2,2-Tetrachloroethar	0.000284	0.00100	0.000500	0.000460	mg/L
Tetrachloroethylene	0.000500	0.00100	0.000500	0.000500	mg/L
Toluene	0.000500	0.00100	0.000500	0.000480	mg/L
1,2,3-Trichlorobenzene	0.00200	0.00500	0.00200	0.00174	mg/L
1,2,4-Trichlorobenzene	0.00200	0.00500	0.00200	0.00189	mg/L

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
1,1,1-Trichloroethane	0.000504	0.00500	0.000250	0.000200	mg/L
1,1,2-Trichloroethane	0.000228	0.00100	0.000500	0.000460	mg/L
Trichloroethylene	0.000424	0.00500	0.000250	0.000210	mg/L
Trichlorofluoromethane	0.000245	0.00100	0.000250	0.000360	mg/L
1,2,3-Trichloropropane	0.000283	0.00100	0.000250	0.000270	mg/L
1,2,4-Trimethylbenzene	0.000252	0.00100	0.000250	0.000280	mg/L
1,3,5-Trimethylbenzene	0.000279	0.00100	0.000250	0.000210	mg/L
o-Xylene	0.000192	0.00100	0.000500	0.000430	mg/L
m,p-Xylenes	0.000330	0.0100	0.00100	0.000900	mg/L
Vinyl Chloride	0.000234	0.00200	0.000250	0.000240	mg/L

Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

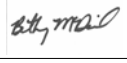
This data package is for Job No. 860-17364-1 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ☑ R1- Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. prepatation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified coumpounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☑ R10 - Other problems or anomalies.
- ☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on __/__/__. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Bethany McDaniel		Senior Project Manager	12/23/2021

Laboratory Data Package Cover Page - Page 2 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17364-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample detection limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?			✓		
		Were % moisture (or solids) reported for all soil and sediment samples?			✓		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			✓		
		If required for the project, are TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	✓				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	✓				

Laboratory Data Package Cover Page - Page 3 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17364-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	✓				
		Were percent RSDs or correlation coefficient criteria met?	✓				
		Was the number of standards recommended in the method used for all analytes?	✓				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
		Are ICAL data available for all instruments used?	✓				
		Has the initial calibration curve been verified using an appropriate second source standard?	✓				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	✓				
		Were percent differences for each analyte within the method-required QC limits?	✓				
		Was the ICAL curve verified for each analyte?	✓				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			✓		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	✓				
		Were ion abundance data within the method-required QC limits?	✓				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	✓				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
		Were data associated with manual integrations flagged on the raw data?	✓				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✓		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period;
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Cover Page - Page 4 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17364-1
Reviewer Name:	

ER#[1]	Description
1	The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-35166 were outside control limits. The associated laboratory control sample (LCS) recovery was within acceptance limits.

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Job ID: 860-17364-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-17364-1

Receipt
The sample was received on 12/15/2021 12:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17364-1

Client Sample ID: MW-106-12142021

Lab Sample ID: 860-17364-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00164		0.00100	0.000244	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00648		0.00100	0.000174	mg/L	1		8260C	Total/NA
Vinyl chloride	0.0118		0.00200	0.000234	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17364-1

Client Sample ID: MW-106-12142021
Date Collected: 12/14/21 15:15
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17364-1
Matrix: Water

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00164**		0.00100	0.000244	mg/L			12/22/21 03:00	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/22/21 03:00	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/22/21 03:00	1
cis-1,2-Dichloroethene	**0.00648**		0.00100	0.000174	mg/L			12/22/21 03:00	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/22/21 03:00	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/22/21 03:00	1
Vinyl chloride	**0.0118**		0.00200	0.000234	mg/L			12/22/21 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*75 - 131*		*12/22/21 03:00*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/22/21 03:00*	*1*
4-Bromofluorobenzene (Surr)	*104*		*74 - 124*		*12/22/21 03:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*12/22/21 03:00*	*1*

Unadjusted Detection Limits

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17364-1

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

Analyte	MQL	MDL	Units
1,1-Dichloroethane	0.00100	0.000244	mg/L
1,1-Dichloroethene	0.00100	0.000216	mg/L
1,2-Dichloroethane	0.00100	0.000285	mg/L
cis-1,2-Dichloroethene	0.00100	0.000174	mg/L
Tetrachloroethene	0.00100	0.000500	mg/L
Trichloroethene	0.00500	0.000424	mg/L
Vinyl chloride	0.00200	0.000234	mg/L

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17364-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(75-131)	(80-117)	(74-124)	(63-144)
860-17358-A-5 MSD	Matrix Spike Duplicate	112	103	105	101
860-17358-B-5 MS	Matrix Spike	109	101	109	105
860-17364-1	MW-106-12142021	112	99	104	100
LCS 860-35166/3	Lab Control Sample	110	99	104	102
LCSD 860-35166/4	Lab Control Sample Dup	107	102	102	103
MB 860-35166/9	Method Blank	110	100	109	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 860-35166/9
Matrix: Water
Analysis Batch: 35166

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 21:37	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 21:37	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 21:37	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 21:37	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 21:37	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 21:37	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*75 - 131*		*12/21/21 21:37*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/21/21 21:37*	*1*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*12/21/21 21:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*12/21/21 21:37*	*1*

Lab Sample ID: LCS 860-35166/3
Matrix: Water
Analysis Batch: 35166

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05513		mg/L		110	72 - 125		
1,2-Dichloroethane			0.0500	0.05486		mg/L		110	68 - 127		
1,1-Dichloroethene			0.0500	0.05012		mg/L		100	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.05003		mg/L		100	75 - 125		
Tetrachloroethene			0.0500	0.05277		mg/L		106	71 - 125		
Trichloroethene			0.0500	0.05101		mg/L		102	62 - 137		
Vinyl chloride			0.0500	0.05621		mg/L		112	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*110*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*104*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.05226		mg/L		105	72 - 125	5	25
1,2-Dichloroethane			0.0500	0.05346		mg/L		107	68 - 127	3	25
1,1-Dichloroethene			0.0500	0.04787		mg/L		96	59 - 172	5	25
cis-1,2-Dichloroethene			0.0500	0.04803		mg/L		96	75 - 125	4	25
Tetrachloroethene			0.0500	0.05154		mg/L		103	71 - 125	2	25
Trichloroethene			0.0500	0.04976		mg/L		100	62 - 137	2	25
Vinyl chloride			0.0500	0.05208		mg/L		104	60 - 140	8	25

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

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*107*		*75 - 131*
Toluene-d8 (Surr)	*102*		*80 - 117*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*

Lab Sample ID: 860-17358-A-5 MSD
Matrix: Water
Analysis Batch: 35166

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.000244	U	0.0500	0.01187	N1 N2	mg/L		24	72 - 125	94	25
1,2-Dichloroethane	0.000285	U	0.0500	0.009099	N1 N2	mg/L		18	68 - 127	109	25
1,1-Dichloroethene	0.00591		0.0500	0.02307	N1 N2	mg/L		34	59 - 172	54	25
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.01063	N1 N2	mg/L		21	75 - 125	93	25
Tetrachloroethene	0.000500	U	0.0500	0.01124	N1 N2	mg/L		22	71 - 125	93	25
Trichloroethene	0.000424	U	0.0500	0.01122	N1 N2	mg/L		22	62 - 137	92	25
Vinyl chloride	0.000234	U	0.0500	0.01610	N1 N2	mg/L		32	60 - 140	67	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*112*		*75 - 131*
Toluene-d8 (Surr)	*103*		*80 - 117*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*

Lab Sample ID: 860-17358-B-5 MS
Matrix: Water
Analysis Batch: 35166

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000244	U	0.0500	0.03291	N1	mg/L		66	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.03103	N1	mg/L		62	68 - 127
1,1-Dichloroethene	0.00591		0.0500	0.03999		mg/L		68	59 - 172
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.02907	N1	mg/L		58	75 - 125
Tetrachloroethene	0.000500	U	0.0500	0.03089	N1	mg/L		62	71 - 125
Trichloroethene	0.000424	U	0.0500	0.03038	N1	mg/L		61	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.03238		mg/L		65	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*109*		*75 - 131*
Toluene-d8 (Surr)	*101*		*80 - 117*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17364-1

GC/MS VOA

Analysis Batch: 35166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17364-1	MW-106-12142021	Total/NA	Water	8260C	
MB 860-35166/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35166/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35166/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17358-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
860-17358-B-5 MS	Matrix Spike	Total/NA	Water	8260C	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17364-1

Client Sample ID: MW-106-12142021

Date Collected: 12/14/21 15:15
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17364-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/22/21 03:00	T1S	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Job ID: 860-17364-1
Project/Site: STC Silber Rd, TX

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	21-038-0	08-04-22
Florida	NELAP	E871002	06-30-22
Louisiana	NELAP	03054	06-30-22
Oklahoma	State	1306	08-31-22
Texas	NELAP	T104704215-21-44	06-30-22
Texas	TCEQ Water Supply	T104704215	06-30-22

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17364-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF

Protocol References:

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17364-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17364-1	MW-106-12142021	Water	12/14/21 15:15	12/15/21 12:17

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin:	Page: Page ~~4 of 8~~ 1 of 1
Company: Jacobs Engineering Group, Inc.	PWSID:			Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:			
City: Houston	TAT Requested (days): STD TAT			
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No			
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02			
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02			
Project Name: STC Silber Rd TX GW	Project #: 86002024			
Site:	SSOW#:			

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	Z	other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - (MOD) VOCs - Custom List (7)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	X	
MW-106-12142021	12/14/21	1515	G	Water			X	3	
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

Temp: 2.2 IR ID HOU-223
C/F: +0.0
Corrected Temp: 2.2

860-17364 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		12/15/21 1110	CHOM		12/15/21 1217	EX
2	Relinquished by:	Date/Time: 1217	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17364-1

Login Number: 17364
List Number: 1
Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

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	
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	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17365-1
Client Project/Site: STC Silber Rd, TX

For:
Jacobs Engineering Group, Inc.
12750 Merit Drive
Suite 1100
Dallas, Texas 75251

Attn: John Knott

Bethany McDaniel

Authorized for release by:
12/23/2021 2:11:49 PM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17365-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

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

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Prep Method: **SW5030B** Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Benzene	0.000214	0.00100	0.000250	0.000370	mg/L
Bromobenzene	0.000300	0.00100	0.000250	0.000370	mg/L
Bromochloromethane	0.000209	0.00100	0.000500	0.000440	mg/L
Bromodichloromethane	0.000231	0.00100	0.000250	0.000460	mg/L
Bromoform	0.000630	0.00500	0.00100	0.00124	mg/L
Methyl bromide	0.00105	0.00500	0.000500	0.000570	mg/L
2-Butanone	0.00575	0.0500	0.00500	0.00575	mg/L
n-Butylbenzene	0.000286	0.00100	0.00200	0.00176	mg/L
Sec-Butylbenzene	0.000199	0.00100	0.000250	0.000230	mg/L
tert-Butylbenzene	0.000195	0.00100	0.000250	0.000210	mg/L
Carbon Tetrachloride	0.000423	0.00500	0.000250	0.000270	mg/L
Chlorobenzene	0.000159	0.00100	0.000250	0.000280	mg/L
Chloroethane	0.000433	0.0100	0.000500	0.000630	mg/L
Chloroform	0.000259	0.00100	0.000250	0.000600	mg/L
Methyl Chloride	0.000318	0.0100	0.000250	0.000450	mg/L
2-Chlorotoluene	0.000214	0.00100	0.000250	0.000210	mg/L
4-Chlorotoluene	0.000183	0.00100	0.000250	0.000260	mg/L
p-Cymene (p-Isopropyl	0.000233	0.00100	0.000250	0.000150	mg/L
Dibromochloromethane	0.000739	0.00500	0.000250	0.000440	mg/L
1,2-Dibromo-3-Chloropı	0.000319	0.00100	0.00100	0.000800	mg/L
1,2-Dibromoethane	0.000337	0.00500	0.000500	0.000450	mg/L
Methylene Bromide	0.000130	0.00100	0.000500	0.000460	mg/L
1,2-Dichlorobenzene	0.000236	0.00100	0.000250	0.000360	mg/L
1,3-Dichlorobenzene	0.000197	0.00100	0.000250	0.000370	mg/L
1,4-Dichlorobenzene	0.000199	0.00100	0.000250	0.000430	mg/L
Dichlorodifluoromethan	0.000316	0.00100	0.000250	0.000310	mg/L
1,1-Dichloroethane	0.000244	0.00100	0.000250	0.000300	mg/L
1,2-Dichloroethane	0.000285	0.00100	0.000250	0.000260	mg/L
1,1-Dichloroethene	0.000216	0.00100	0.000250	0.000280	mg/L
cis-1,2-Dichloroethylene	0.000174	0.00100	0.000250	0.000240	mg/L
trans-1,2-dichloroethyle	0.000256	0.00100	0.000250	0.000200	mg/L
1,2-Dichloropropane	0.000396	0.00500	0.000250	0.000270	mg/L
1,3-Dichloropropane	0.000439	0.00500	0.000250	0.000240	mg/L
2,2-Dichloropropane	0.000360	0.00500	0.000250	0.000170	mg/L
1,1-Dichloropropene	0.000481	0.00500	0.000250	0.000290	mg/L
cis-1,3-Dichloropropene	0.000690	0.00500	0.000500	0.000390	mg/L
trans-1,3-dichloroproper	0.000752	0.00500	0.000500	0.000420	mg/L
Ethylbenzene	0.000146	0.00100	0.000250	0.000260	mg/L
Hexachlorobutadiene	0.00200	0.00500	0.00200	0.00197	mg/L
Isopropylbenzene	0.000161	0.00100	0.000250	0.000240	mg/L
Methylene Chloride	0.00191	0.00500	0.00200	0.00206	mg/L
MTBE	0.000571	0.00500	0.000500	0.000750	mg/L
Naphthalene	0.00200	0.0100	0.00200	0.00145	mg/L
n-Propylbenzene	0.000179	0.00100	0.000250	0.000280	mg/L
Styrene	0.000162	0.00100	0.000250	0.000290	mg/L
1,1,1,2-Tetrachloroethar	0.000327	0.00100	0.000500	0.000540	mg/L
1,1,2,2-Tetrachloroethar	0.000284	0.00100	0.000500	0.000460	mg/L
Tetrachloroethylene	0.000500	0.00100	0.000500	0.000500	mg/L
Toluene	0.000500	0.00100	0.000500	0.000480	mg/L
1,2,3-Trichlorobenzene	0.00200	0.00500	0.00200	0.00174	mg/L
1,2,4-Trichlorobenzene	0.00200	0.00500	0.00200	0.00189	mg/L

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
1,1,1-Trichloroethane	0.000504	0.00500	0.000250	0.000200	mg/L
1,1,2-Trichloroethane	0.000228	0.00100	0.000500	0.000460	mg/L
Trichloroethylene	0.000424	0.00500	0.000250	0.000210	mg/L
Trichlorofluoromethane	0.000245	0.00100	0.000250	0.000360	mg/L
1,2,3-Trichloropropane	0.000283	0.00100	0.000250	0.000270	mg/L
1,2,4-Trimethylbenzene	0.000252	0.00100	0.000250	0.000280	mg/L
1,3,5-Trimethylbenzene	0.000279	0.00100	0.000250	0.000210	mg/L
o-Xylene	0.000192	0.00100	0.000500	0.000430	mg/L
m,p-Xylenes	0.000330	0.0100	0.00100	0.000900	mg/L
Vinyl Chloride	0.000234	0.00200	0.000250	0.000240	mg/L

Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

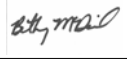
This data package is for Job No. 860-17365-1 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ☑ R1- Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. prepatation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified coumpounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☑ R10 - Other problems or anomalies.
- ☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on __/__/__. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Bethany McDaniel		Senior Project Manager	12/23/2021

Laboratory Data Package Cover Page - Page 2 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17365-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample detection limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?			✓		
		Were % moisture (or solids) reported for all soil and sediment samples?			✓		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			✓		
		If required for the project, are TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	✓				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	✓				

Laboratory Data Package Cover Page - Page 3 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17365-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	✓				
		Were percent RSDs or correlation coefficient criteria met?	✓				
		Was the number of standards recommended in the method used for all analytes?	✓				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
		Are ICAL data available for all instruments used?	✓				
		Has the initial calibration curve been verified using an appropriate second source standard?	✓				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	✓				
		Were percent differences for each analyte within the method-required QC limits?	✓				
		Was the ICAL curve verified for each analyte?	✓				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			✓		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	✓				
		Were ion abundance data within the method-required QC limits?	✓				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	✓				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
		Were data associated with manual integrations flagged on the raw data?	✓				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✓		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period;
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Cover Page - Page 4 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17365-1
Reviewer Name:	

ER#[1]	Description
1	The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-35166 were outside control limits. The associated laboratory control sample (LCS) recovery was within acceptance limits.

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Job ID: 860-17365-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-17365-1

Receipt
The samples were received on 12/15/2021 12:17 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC/MS VOA
Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-35166 were outside control limits. The associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17365-1

Client Sample ID: MW-50R-12142021 — Lab Sample ID: 860-17365-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00622		0.00100	0.000244	mg/L	1		8260C	Total/NA

Client Sample ID: FD-01-12142021 — Lab Sample ID: 860-17365-2

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00929		0.00100	0.000244	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-50R-12142021
Lab Sample ID: 860-17365-1
Date Collected: 12/14/21 07:50
Matrix: Water
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00622**		0.00100	0.000244	mg/L			12/22/21 00:28	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/22/21 00:28	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/22/21 00:28	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/22/21 00:28	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/22/21 00:28	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/22/21 00:28	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/22/21 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*75 - 131*		*12/22/21 00:28*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*12/22/21 00:28*	*1*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*12/22/21 00:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*		*12/22/21 00:28*	*1*

Client Sample ID: FD-01-12142021
Lab Sample ID: 860-17365-2
Date Collected: 12/14/21 00:00
Matrix: Water
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00929**		0.00100	0.000244	mg/L			12/22/21 00:47	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/22/21 00:47	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/22/21 00:47	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/22/21 00:47	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/22/21 00:47	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/22/21 00:47	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/22/21 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*75 - 131*		*12/22/21 00:47*	*1*
Toluene-d8 (Surr)	*104*		*80 - 117*		*12/22/21 00:47*	*1*
4-Bromofluorobenzene (Surr)	*111*		*74 - 124*		*12/22/21 00:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 144*		*12/22/21 00:47*	*1*

Unadjusted Detection Limits

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17365-1

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

Analyte	MQL	MDL	Units
1,1-Dichloroethane	0.00100	0.000244	mg/L
1,1-Dichloroethene	0.00100	0.000216	mg/L
1,2-Dichloroethane	0.00100	0.000285	mg/L
cis-1,2-Dichloroethene	0.00100	0.000174	mg/L
Tetrachloroethene	0.00100	0.000500	mg/L
Trichloroethene	0.00500	0.000424	mg/L
Vinyl chloride	0.00200	0.000234	mg/L

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17365-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(75-131)	(80-117)	(74-124)	(63-144)
860-17358-A-5 MSD	Matrix Spike Duplicate	112	103	105	101
860-17358-B-5 MS	Matrix Spike	109	101	109	105
860-17365-1	MW-50R-12142021	109	103	102	99
860-17365-2	FD-01-12142021	106	104	111	104
LCS 860-35166/3	Lab Control Sample	110	99	104	102
LCSD 860-35166/4	Lab Control Sample Dup	107	102	102	103
MB 860-35166/9	Method Blank	110	100	109	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 860-35166/9
Matrix: Water
Analysis Batch: 35166

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 21:37	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 21:37	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 21:37	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 21:37	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 21:37	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 21:37	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*75 - 131*		*12/21/21 21:37*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/21/21 21:37*	*1*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*12/21/21 21:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*12/21/21 21:37*	*1*

Lab Sample ID: LCS 860-35166/3
Matrix: Water
Analysis Batch: 35166

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05513		mg/L		110	72 - 125		
1,2-Dichloroethane			0.0500	0.05486		mg/L		110	68 - 127		
1,1-Dichloroethene			0.0500	0.05012		mg/L		100	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.05003		mg/L		100	75 - 125		
Tetrachloroethene			0.0500	0.05277		mg/L		106	71 - 125		
Trichloroethene			0.0500	0.05101		mg/L		102	62 - 137		
Vinyl chloride			0.0500	0.05621		mg/L		112	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*110*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*104*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.05226		mg/L		105	72 - 125	5	25
1,2-Dichloroethane			0.0500	0.05346		mg/L		107	68 - 127	3	25
1,1-Dichloroethene			0.0500	0.04787		mg/L		96	59 - 172	5	25
cis-1,2-Dichloroethene			0.0500	0.04803		mg/L		96	75 - 125	4	25
Tetrachloroethene			0.0500	0.05154		mg/L		103	71 - 125	2	25
Trichloroethene			0.0500	0.04976		mg/L		100	62 - 137	2	25
Vinyl chloride			0.0500	0.05208		mg/L		104	60 - 140	8	25

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

Lab Sample ID: LCSD 860-35166/4
Matrix: Water
Analysis Batch: 35166

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*107*		*75 - 131*
Toluene-d8 (Surr)	*102*		*80 - 117*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*

Lab Sample ID: 860-17358-A-5 MSD
Matrix: Water
Analysis Batch: 35166

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.000244	U	0.0500	0.01187	N1 N2	mg/L		24	72 - 125	94	25
1,2-Dichloroethane	0.000285	U	0.0500	0.009099	N1 N2	mg/L		18	68 - 127	109	25
1,1-Dichloroethene	0.00591		0.0500	0.02307	N1 N2	mg/L		34	59 - 172	54	25
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.01063	N1 N2	mg/L		21	75 - 125	93	25
Tetrachloroethene	0.000500	U	0.0500	0.01124	N1 N2	mg/L		22	71 - 125	93	25
Trichloroethene	0.000424	U	0.0500	0.01122	N1 N2	mg/L		22	62 - 137	92	25
Vinyl chloride	0.000234	U	0.0500	0.01610	N1 N2	mg/L		32	60 - 140	67	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*112*		*75 - 131*
Toluene-d8 (Surr)	*103*		*80 - 117*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*

Lab Sample ID: 860-17358-B-5 MS
Matrix: Water
Analysis Batch: 35166

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000244	U	0.0500	0.03291	N1	mg/L		66	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.03103	N1	mg/L		62	68 - 127
1,1-Dichloroethene	0.00591		0.0500	0.03999		mg/L		68	59 - 172
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.02907	N1	mg/L		58	75 - 125
Tetrachloroethene	0.000500	U	0.0500	0.03089	N1	mg/L		62	71 - 125
Trichloroethene	0.000424	U	0.0500	0.03038	N1	mg/L		61	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.03238		mg/L		65	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*109*		*75 - 131*
Toluene-d8 (Surr)	*101*		*80 - 117*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17365-1

GC/MS VOA

Analysis Batch: 35166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17365-1	MW-50R-12142021	Total/NA	Water	8260C	
860-17365-2	FD-01-12142021	Total/NA	Water	8260C	
MB 860-35166/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35166/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35166/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17358-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
860-17358-B-5 MS	Matrix Spike	Total/NA	Water	8260C	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17365-1

Client Sample ID: MW-50R-12142021

Lab Sample ID: 860-17365-1

Date Collected: 12/14/21 07:50
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/22/21 00:28	T1S	XEN STF

Client Sample ID: FD-01-12142021

Lab Sample ID: 860-17365-2

Date Collected: 12/14/21 00:00
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35166	12/22/21 00:47	T1S	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Job ID: 860-17365-1
Project/Site: STC Silber Rd, TX

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	21-038-0	08-04-22
Florida	NELAP	E871002	06-30-22
Louisiana	NELAP	03054	06-30-22
Oklahoma	State	1306	08-31-22
Texas	NELAP	T104704215-21-44	06-30-22
Texas	TCEQ Water Supply	T104704215	06-30-22

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17365-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF

Protocol References:

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17365-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17365-1	MW-50R-12142021	Water	12/14/21 07:50	12/15/21 12:17
860-17365-2	FD-01-12142021	Water	12/14/21 00:00	12/15/21 12:17

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: DR	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 860-6507-2299.3
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin:	Page: Page 3 of 3 1 of 1
Company: Jacobs Engineering Group, Inc.	PWSID:	Analysis Requested		Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:			
City: Houston	TAT Requested (days): STD TAT			
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No			
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02			
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02			
Project Name: STC Silber Rd, TX GW	Project #: 86002024			
Site:	SSOW#:			

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B (MOD) VOCs Custom List (7)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
MW-50R-121421	12/14/21	0750	G	Water			X	3	
FD-01-121421	12/14/21	WG	G	Water			X	3	
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

860-17365 Chain of Custody

Temp: 2 2 IR ID:HOU-223
C/F +0.0
Corrected Temp: 2 2

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date: DR	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 12/15/21 1110	Company CHM	Received by:	Date/Time: 12/15/21 1217	Company EX
Relinquished by:	Date/Time: 1217	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:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17365-1

Login Number: 17365
List Number: 1
Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

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

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17366-1
Client Project/Site: STC Silber Rd, TX

For:
Jacobs Engineering Group, Inc.
12750 Merit Drive
Suite 1100
Dallas, Texas 75251

Attn: John Knott

Bethany McDaniel

Authorized for release by:
12/23/2021 2:08:57 PM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17366-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

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

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Prep Method: **SW5030B** Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Benzene	0.000214	0.00100	0.000250	0.000370	mg/L
Bromobenzene	0.000300	0.00100	0.000250	0.000370	mg/L
Bromochloromethane	0.000209	0.00100	0.000500	0.000440	mg/L
Bromodichloromethane	0.000231	0.00100	0.000250	0.000460	mg/L
Bromoform	0.000630	0.00500	0.00100	0.00124	mg/L
Methyl bromide	0.00105	0.00500	0.000500	0.000570	mg/L
2-Butanone	0.00575	0.0500	0.00500	0.00575	mg/L
n-Butylbenzene	0.000286	0.00100	0.00200	0.00176	mg/L
Sec-Butylbenzene	0.000199	0.00100	0.000250	0.000230	mg/L
tert-Butylbenzene	0.000195	0.00100	0.000250	0.000210	mg/L
Carbon Tetrachloride	0.000423	0.00500	0.000250	0.000270	mg/L
Chlorobenzene	0.000159	0.00100	0.000250	0.000280	mg/L
Chloroethane	0.000433	0.0100	0.000500	0.000630	mg/L
Chloroform	0.000259	0.00100	0.000250	0.000600	mg/L
Methyl Chloride	0.000318	0.0100	0.000250	0.000450	mg/L
2-Chlorotoluene	0.000214	0.00100	0.000250	0.000210	mg/L
4-Chlorotoluene	0.000183	0.00100	0.000250	0.000260	mg/L
p-Cymene (p-Isopropyl	0.000233	0.00100	0.000250	0.000150	mg/L
Dibromochloromethane	0.000739	0.00500	0.000250	0.000440	mg/L
1,2-Dibromo-3-Chloropı	0.000319	0.00100	0.00100	0.000800	mg/L
1,2-Dibromoethane	0.000337	0.00500	0.000500	0.000450	mg/L
Methylene Bromide	0.000130	0.00100	0.000500	0.000460	mg/L
1,2-Dichlorobenzene	0.000236	0.00100	0.000250	0.000360	mg/L
1,3-Dichlorobenzene	0.000197	0.00100	0.000250	0.000370	mg/L
1,4-Dichlorobenzene	0.000199	0.00100	0.000250	0.000430	mg/L
Dichlorodifluoromethan	0.000316	0.00100	0.000250	0.000310	mg/L
1,1-Dichloroethane	0.000244	0.00100	0.000250	0.000300	mg/L
1,2-Dichloroethane	0.000285	0.00100	0.000250	0.000260	mg/L
1,1-Dichloroethene	0.000216	0.00100	0.000250	0.000280	mg/L
cis-1,2-Dichloroethylene	0.000174	0.00100	0.000250	0.000240	mg/L
trans-1,2-dichloroethyle	0.000256	0.00100	0.000250	0.000200	mg/L
1,2-Dichloropropane	0.000396	0.00500	0.000250	0.000270	mg/L
1,3-Dichloropropane	0.000439	0.00500	0.000250	0.000240	mg/L
2,2-Dichloropropane	0.000360	0.00500	0.000250	0.000170	mg/L
1,1-Dichloropropene	0.000481	0.00500	0.000250	0.000290	mg/L
cis-1,3-Dichloropropene	0.000690	0.00500	0.000500	0.000390	mg/L
trans-1,3-dichloroproper	0.000752	0.00500	0.000500	0.000420	mg/L
Ethylbenzene	0.000146	0.00100	0.000250	0.000260	mg/L
Hexachlorobutadiene	0.00200	0.00500	0.00200	0.00197	mg/L
Isopropylbenzene	0.000161	0.00100	0.000250	0.000240	mg/L
Methylene Chloride	0.00191	0.00500	0.00200	0.00206	mg/L
MTBE	0.000571	0.00500	0.000500	0.000750	mg/L
Naphthalene	0.00200	0.0100	0.00200	0.00145	mg/L
n-Propylbenzene	0.000179	0.00100	0.000250	0.000280	mg/L
Styrene	0.000162	0.00100	0.000250	0.000290	mg/L
1,1,1,2-Tetrachloroethar	0.000327	0.00100	0.000500	0.000540	mg/L
1,1,2,2-Tetrachloroethar	0.000284	0.00100	0.000500	0.000460	mg/L
Tetrachloroethylene	0.000500	0.00100	0.000500	0.000500	mg/L
Toluene	0.000500	0.00100	0.000500	0.000480	mg/L
1,2,3-Trichlorobenzene	0.00200	0.00500	0.00200	0.00174	mg/L
1,2,4-Trichlorobenzene	0.00200	0.00500	0.00200	0.00189	mg/L

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
1,1,1-Trichloroethane	0.000504	0.00500	0.000250	0.000200	mg/L
1,1,2-Trichloroethane	0.000228	0.00100	0.000500	0.000460	mg/L
Trichloroethylene	0.000424	0.00500	0.000250	0.000210	mg/L
Trichlorofluoromethane	0.000245	0.00100	0.000250	0.000360	mg/L
1,2,3-Trichloropropane	0.000283	0.00100	0.000250	0.000270	mg/L
1,2,4-Trimethylbenzene	0.000252	0.00100	0.000250	0.000280	mg/L
1,3,5-Trimethylbenzene	0.000279	0.00100	0.000250	0.000210	mg/L
o-Xylene	0.000192	0.00100	0.000500	0.000430	mg/L
m,p-Xylenes	0.000330	0.0100	0.00100	0.000900	mg/L
Vinyl Chloride	0.000234	0.00200	0.000250	0.000240	mg/L

Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

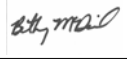
This data package is for Job No. 860-17366-1 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ☑ R1- Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. prepatation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified coumpounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☑ R10 - Other problems or anomalies.
- ☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on __/__/__. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Bethany McDaniel		Senior Project Manager	12/23/2021

Laboratory Data Package Cover Page - Page 2 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17366-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample detection limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?			✓		
		Were % moisture (or solids) reported for all soil and sediment samples?			✓		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			✓		
		If required for the project, are TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?			✓		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	✓				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	✓				

Laboratory Data Package Cover Page - Page 3 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17366-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	✓				
		Were percent RSDs or correlation coefficient criteria met?	✓				
		Was the number of standards recommended in the method used for all analytes?	✓				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
		Are ICAL data available for all instruments used?	✓				
		Has the initial calibration curve been verified using an appropriate second source standard?	✓				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	✓				
		Were percent differences for each analyte within the method-required QC limits?	✓				
		Was the ICAL curve verified for each analyte?	✓				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			✓		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	✓				
		Were ion abundance data within the method-required QC limits?	✓				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	✓				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
		Were data associated with manual integrations flagged on the raw data?	✓				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✓		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period;
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Cover Page - Page 4 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17366-1
Reviewer Name:	

ER#[1]	Description
1	The matrix spike (MS) recoveries for analytical batch 860-35063 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Job ID: 860-17366-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-17366-1

Receipt
The samples were received on 12/15/2021 12:17 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17366-1

Client Sample ID: MW-97-12142021 — Lab Sample ID: 860-17366-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00352		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,2-Dichloroethane	0.00107		0.00100	0.000285	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0199		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00523		0.00100	0.000174	mg/L	1		8260C	Total/NA
Trichloroethene	0.0218		0.00500	0.000424	mg/L	1		8260C	Total/NA
Tetrachloroethene - DL	0.261		0.00500	0.00250	mg/L	5		8260C	Total/NA

Client Sample ID: MW-98-12142021 — Lab Sample ID: 860-17366-2

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.00146		0.00100	0.000216	mg/L	1		8260C	Total/NA
Tetrachloroethene - RA	0.00162		0.00100	0.000500	mg/L	1		8260C	Total/NA

Client Sample ID: MW-168-12142021 — Lab Sample ID: 860-17366-3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00282		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,2-Dichloroethane	0.000794	J	0.00100	0.000285	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.00983		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00638		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.0952		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.0138		0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.000252	J	0.00200	0.000234	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-97-12142021

Lab Sample ID: 860-17366-1

Date Collected: 12/14/21 15:45

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00352**		0.00100	0.000244	mg/L			12/21/21 14:33	1
1,2-Dichloroethane	**0.00107**		0.00100	0.000285	mg/L			12/21/21 14:33	1
1,1-Dichloroethene	**0.0199**		0.00100	0.000216	mg/L			12/21/21 14:33	1
cis-1,2-Dichloroethene	**0.00523**		0.00100	0.000174	mg/L			12/21/21 14:33	1
Trichloroethene	**0.0218**		0.00500	0.000424	mg/L			12/21/21 14:33	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*75 - 131*		*12/21/21 14:33*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*12/21/21 14:33*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/21/21 14:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 144*		*12/21/21 14:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.261**		0.00500	0.00250	mg/L			12/22/21 13:05	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*75 - 131*		*12/22/21 13:05*	*5*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/22/21 13:05*	*5*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*12/22/21 13:05*	*5*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*		*12/22/21 13:05*	*5*

Client Sample ID: MW-98-12142021

Lab Sample ID: 860-17366-2

Date Collected: 12/14/21 15:55

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 14:54	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 14:54	1
1,1-Dichloroethene	**0.00146**		0.00100	0.000216	mg/L			12/21/21 14:54	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 14:54	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 14:54	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*75 - 131*		*12/21/21 14:54*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*12/21/21 14:54*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/21/21 14:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/21/21 14:54*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.00162**		0.00100	0.000500	mg/L			12/22/21 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*75 - 131*		*12/22/21 12:27*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/22/21 12:27*	*1*
4-Bromofluorobenzene (Surr)	*107*		*74 - 124*		*12/22/21 12:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/22/21 12:27*	*1*

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17366-1

Client Sample ID: MW-168-12142021
Date Collected: 12/14/21 15:35
Date Received: 12/15/21 12:17

Lab Sample ID: 860-17366-3
Matrix: Water

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.00282		0.00100	0.000244	mg/L			12/21/21 15:35	1
1,2-Dichloroethane	0.000794	J	0.00100	0.000285	mg/L			12/21/21 15:35	1
1,1-Dichloroethene	0.00983		0.00100	0.000216	mg/L			12/21/21 15:35	1
cis-1,2-Dichloroethene	0.00638		0.00100	0.000174	mg/L			12/21/21 15:35	1
Tetrachloroethene	0.0952		0.00100	0.000500	mg/L			12/21/21 15:35	1
Trichloroethene	0.0138		0.00500	0.000424	mg/L			12/21/21 15:35	1
Vinyl chloride	0.000252	J	0.00200	0.000234	mg/L			12/21/21 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*75 - 131*		*12/21/21 15:35*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/21/21 15:35*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/21/21 15:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/21/21 15:35*	*1*

Unadjusted Detection Limits

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17366-1

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

Analyte	MQL	MDL	Units
1,1-Dichloroethane	0.00100	0.000244	mg/L
1,1-Dichloroethene	0.00100	0.000216	mg/L
1,2-Dichloroethane	0.00100	0.000285	mg/L
cis-1,2-Dichloroethene	0.00100	0.000174	mg/L
Tetrachloroethene	0.00100	0.000500	mg/L
Trichloroethene	0.00500	0.000424	mg/L
Vinyl chloride	0.00200	0.000234	mg/L

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17366-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(75-131)	(80-117)	(74-124)	(63-144)
860-17366-1	MW-97-12142021	101	103	101	96
860-17366-1 - DL	MW-97-12142021	109	101	109	101
860-17366-2	MW-98-12142021	102	103	101	98
860-17366-2 - RA	MW-98-12142021	109	101	107	98
860-17366-3	MW-168-12142021	102	101	100	97
860-17367-B-27 MS	Matrix Spike	100	99	97	90
860-17503-D-1 MS	Matrix Spike	109	98	103	102
LCS 860-35063/3	Lab Control Sample	99	98	99	91
LCS 860-35238/3	Lab Control Sample	105	99	106	100
LCSD 860-35063/4	Lab Control Sample Dup	99	100	98	91
LCSD 860-35238/4	Lab Control Sample Dup	106	101	103	99
MB 860-35063/10	Method Blank	100	101	99	94
MB 860-35238/8	Method Blank	108	99	106	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 860-35063/10
Matrix: Water
Analysis Batch: 35063

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 11:28	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 11:28	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 11:28	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 11:28	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 11:28	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 11:28	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*75 - 131*		*12/21/21 11:28*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/21/21 11:28*	*1*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*		*12/21/21 11:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*63 - 144*		*12/21/21 11:28*	*1*

Lab Sample ID: LCS 860-35063/3
Matrix: Water
Analysis Batch: 35063

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.0500	0.05290		mg/L		106	72 - 125
1,2-Dichloroethane	0.0500	0.04612		mg/L		92	68 - 127
1,1-Dichloroethene	0.0500	0.05037		mg/L		101	59 - 172
cis-1,2-Dichloroethene	0.0500	0.05108		mg/L		102	75 - 125
Tetrachloroethene	0.0500	0.05334		mg/L		107	71 - 125
Trichloroethene	0.0500	0.05467		mg/L		109	62 - 137
Vinyl chloride	0.0500	0.05038		mg/L		101	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*75 - 131*
Toluene-d8 (Surr)	*98*		*80 - 117*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*91*		*63 - 144*

Lab Sample ID: LCSD 860-35063/4
Matrix: Water
Analysis Batch: 35063

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.0500	0.05394		mg/L		108	72 - 125	2	25
1,2-Dichloroethane	0.0500	0.04747		mg/L		95	68 - 127	3	25
1,1-Dichloroethene	0.0500	0.05222		mg/L		104	59 - 172	4	25
cis-1,2-Dichloroethene	0.0500	0.05267		mg/L		105	75 - 125	3	25
Tetrachloroethene	0.0500	0.05579		mg/L		112	71 - 125	4	25
Trichloroethene	0.0500	0.05592		mg/L		112	62 - 137	2	25
Vinyl chloride	0.0500	0.05116		mg/L		102	60 - 140	2	25

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

Lab Sample ID: LCSD 860-35063/4
Matrix: Water
Analysis Batch: 35063

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*99*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 117*
4-Bromofluorobenzene (Surr)	*98*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*91*		*63 - 144*

Lab Sample ID: 860-17367-B-27 MS
Matrix: Water
Analysis Batch: 35063

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000244	U	0.0500	0.06174		mg/L		123	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.05290		mg/L		106	68 - 127
1,1-Dichloroethene	0.000216	U	0.0500	0.06434		mg/L		129	59 - 172
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.06099		mg/L		122	75 - 125
Tetrachloroethene	0.000500	U	0.0500	0.06716	N1	mg/L		134	71 - 125
Trichloroethene	0.000424	U	0.0500	0.06580		mg/L		132	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.06070		mg/L		121	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*100*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*97*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 144*

Lab Sample ID: MB 860-35238/8
Matrix: Water
Analysis Batch: 35238

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/22/21 10:14	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/22/21 10:14	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/22/21 10:14	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/22/21 10:14	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/22/21 10:14	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/22/21 10:14	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/22/21 10:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*108*		*75 - 131*		*12/22/21 10:14*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/22/21 10:14*	*1*
4-Bromofluorobenzene (Surr)	*106*		*74 - 124*		*12/22/21 10:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*12/22/21 10:14*	*1*

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

Lab Sample ID: LCS 860-35238/3
Matrix: Water
Analysis Batch: 35238

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05686		mg/L		114	72 - 125		
1,2-Dichloroethane			0.0500	0.05541		mg/L		111	68 - 127		
1,1-Dichloroethene			0.0500	0.05597		mg/L		112	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.05230		mg/L		105	75 - 125		
Tetrachloroethene			0.0500	0.05755		mg/L		115	71 - 125		
Trichloroethene			0.0500	0.05616		mg/L		112	62 - 137		
Vinyl chloride			0.0500	0.05726		mg/L		115	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*106*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*

Lab Sample ID: LCSD 860-35238/4
Matrix: Water
Analysis Batch: 35238

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.05493		mg/L		110	72 - 125	3	25
1,2-Dichloroethane			0.0500	0.05450		mg/L		109	68 - 127	2	25
1,1-Dichloroethene			0.0500	0.05279		mg/L		106	59 - 172	6	25
cis-1,2-Dichloroethene			0.0500	0.04987		mg/L		100	75 - 125	5	25
Tetrachloroethene			0.0500	0.05584		mg/L		112	71 - 125	3	25
Trichloroethene			0.0500	0.05113		mg/L		102	62 - 137	9	25
Vinyl chloride			0.0500	0.04966		mg/L		99	60 - 140	14	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*75 - 131*
Toluene-d8 (Surr)	*101*		*80 - 117*
4-Bromofluorobenzene (Surr)	*103*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*

Lab Sample ID: 860-17503-D-1 MS
Matrix: Water
Analysis Batch: 35238

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane	0.000244	U	0.0500	0.06054		mg/L		121	72 - 125		
1,2-Dichloroethane	0.000285	U	0.0500	0.05742		mg/L		115	68 - 127		
1,1-Dichloroethene	0.000216	U	0.0500	0.05837		mg/L		117	59 - 172		
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.05476		mg/L		110	75 - 125		
Tetrachloroethene	0.000500	U	0.0500	0.05668		mg/L		113	71 - 125		
Trichloroethene	0.000424	U	0.0500	0.05766		mg/L		115	62 - 137		
Vinyl chloride	0.000234	U	0.0500	0.05699		mg/L		114	60 - 140		

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

Lab Sample ID: 860-17503-D-1 MS
Matrix: Water
Analysis Batch: 35238

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*109*		*75 - 131*
Toluene-d8 (Surr)	*98*		*80 - 117*
4-Bromofluorobenzene (Surr)	*103*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17366-1

GC/MS VOA

Analysis Batch: 35063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17366-1	MW-97-12142021	Total/NA	Water	8260C	
860-17366-2	MW-98-12142021	Total/NA	Water	8260C	
860-17366-3	MW-168-12142021	Total/NA	Water	8260C	
MB 860-35063/10	Method Blank	Total/NA	Water	8260C	
LCS 860-35063/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35063/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17367-B-27 MS	Matrix Spike	Total/NA	Water	8260C	

Analysis Batch: 35238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17366-1 - DL	MW-97-12142021	Total/NA	Water	8260C	
860-17366-2 - RA	MW-98-12142021	Total/NA	Water	8260C	
MB 860-35238/8	Method Blank	Total/NA	Water	8260C	
LCS 860-35238/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35238/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17503-D-1 MS	Matrix Spike	Total/NA	Water	8260C	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17366-1

Client Sample ID: MW-97-12142021

Lab Sample ID: 860-17366-1

Date Collected: 12/14/21 15:45

Matrix: Water

Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35063	12/21/21 14:33	NA	XEN STF
Total/NA	Analysis	8260C	DL	5	5 mL	5 mL	35238	12/22/21 13:05	NA	XEN STF

Client Sample ID: MW-98-12142021

Lab Sample ID: 860-17366-2

Date Collected: 12/14/21 15:55

Matrix: Water

Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35063	12/21/21 14:54	NA	XEN STF
Total/NA	Analysis	8260C	RA	1	5 mL	5 mL	35238	12/22/21 12:27	NA	XEN STF

Client Sample ID: MW-168-12142021

Lab Sample ID: 860-17366-3

Date Collected: 12/14/21 15:35

Matrix: Water

Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35063	12/21/21 15:35	NA	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Job ID: 860-17366-1
Project/Site: STC Silber Rd, TX

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	21-038-0	08-04-22
Florida	NELAP	E871002	06-30-22
Louisiana	NELAP	03054	06-30-22
Oklahoma	State	1306	08-31-22
Texas	NELAP	T104704215-21-44	06-30-22
Texas	TCEQ Water Supply	T104704215	06-30-22

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17366-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF

Protocol References:

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17366-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17366-1	MW-97-12142021	Water	12/14/21 15:45	12/15/21 12:17
860-17366-2	MW-98-12142021	Water	12/14/21 15:55	12/15/21 12:17
860-17366-3	MW-168-12142021	Water	12/14/21 15:35	12/15/21 12:17

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 860-6507-2299.5
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin:	Page: Page 5 of 5 | 10+1
Company: Jacobs Engineering Group, Inc.	PWSID:	Analysis Requested		Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:			Preservation Codes:
City: Houston	TAT Requested (days): STD TAT			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 Z other (specify) Other
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No			
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02			
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02			
Project Name: STC Silber Rd TX GW	Project #: 86002024			
Site:	SSOW#:			

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)	8260B (MOD) VOCs Custom List (7)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	X	
MW-97-12142021	12/14/21	1545	G	Water			X	3	
MW-98-12142021	12/14/21	1555	G	Water			X	3	
MW-168-12142021	12/14/21	1535	G	Water			X	3	
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

860-17366 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		12/15/21 1410	Lit2m		12/15/21 1217	FX
2	Relinquished by:	Date/Time: 1217	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17366-1

Login Number: 17366
List Number: 1
Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

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	
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	

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ANALYTICAL REPORT

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17370-1
Client Project/Site: STC Silber Rd, TX

For:
Jacobs Engineering Group, Inc.
12750 Merit Drive
Suite 1100
Dallas, Texas 75251

Attn: John Knott

Bethany McDaniel

Authorized for release by:
12/23/2021 2:04:50 PM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17370-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

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

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Prep Method: **SW5030B** Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Benzene	0.000214	0.00100	0.000250	0.000370	mg/L
Bromobenzene	0.000300	0.00100	0.000250	0.000370	mg/L
Bromochloromethane	0.000209	0.00100	0.000500	0.000440	mg/L
Bromodichloromethane	0.000231	0.00100	0.000250	0.000460	mg/L
Bromoform	0.000630	0.00500	0.00100	0.00124	mg/L
Methyl bromide	0.00105	0.00500	0.000500	0.000570	mg/L
2-Butanone	0.00575	0.0500	0.00500	0.00575	mg/L
n-Butylbenzene	0.000286	0.00100	0.00200	0.00176	mg/L
Sec-Butylbenzene	0.000199	0.00100	0.000250	0.000230	mg/L
tert-Butylbenzene	0.000195	0.00100	0.000250	0.000210	mg/L
Carbon Tetrachloride	0.000423	0.00500	0.000250	0.000270	mg/L
Chlorobenzene	0.000159	0.00100	0.000250	0.000280	mg/L
Chloroethane	0.000433	0.0100	0.000500	0.000630	mg/L
Chloroform	0.000259	0.00100	0.000250	0.000600	mg/L
Methyl Chloride	0.000318	0.0100	0.000250	0.000450	mg/L
2-Chlorotoluene	0.000214	0.00100	0.000250	0.000210	mg/L
4-Chlorotoluene	0.000183	0.00100	0.000250	0.000260	mg/L
p-Cymene (p-Isopropyl	0.000233	0.00100	0.000250	0.000150	mg/L
Dibromochloromethane	0.000739	0.00500	0.000250	0.000440	mg/L
1,2-Dibromo-3-Chloropı	0.000319	0.00100	0.00100	0.000800	mg/L
1,2-Dibromoethane	0.000337	0.00500	0.000500	0.000450	mg/L
Methylene Bromide	0.000130	0.00100	0.000500	0.000460	mg/L
1,2-Dichlorobenzene	0.000236	0.00100	0.000250	0.000360	mg/L
1,3-Dichlorobenzene	0.000197	0.00100	0.000250	0.000370	mg/L
1,4-Dichlorobenzene	0.000199	0.00100	0.000250	0.000430	mg/L
Dichlorodifluoromethan	0.000316	0.00100	0.000250	0.000310	mg/L
1,1-Dichloroethane	0.000244	0.00100	0.000250	0.000300	mg/L
1,2-Dichloroethane	0.000285	0.00100	0.000250	0.000260	mg/L
1,1-Dichloroethene	0.000216	0.00100	0.000250	0.000280	mg/L
cis-1,2-Dichloroethylene	0.000174	0.00100	0.000250	0.000240	mg/L
trans-1,2-dichloroethyle	0.000256	0.00100	0.000250	0.000200	mg/L
1,2-Dichloropropane	0.000396	0.00500	0.000250	0.000270	mg/L
1,3-Dichloropropane	0.000439	0.00500	0.000250	0.000240	mg/L
2,2-Dichloropropane	0.000360	0.00500	0.000250	0.000170	mg/L
1,1-Dichloropropene	0.000481	0.00500	0.000250	0.000290	mg/L
cis-1,3-Dichloropropene	0.000690	0.00500	0.000500	0.000390	mg/L
trans-1,3-dichloroproper	0.000752	0.00500	0.000500	0.000420	mg/L
Ethylbenzene	0.000146	0.00100	0.000250	0.000260	mg/L
Hexachlorobutadiene	0.00200	0.00500	0.00200	0.00197	mg/L
Isopropylbenzene	0.000161	0.00100	0.000250	0.000240	mg/L
Methylene Chloride	0.00191	0.00500	0.00200	0.00206	mg/L
MTBE	0.000571	0.00500	0.000500	0.000750	mg/L
Naphthalene	0.00200	0.0100	0.00200	0.00145	mg/L
n-Propylbenzene	0.000179	0.00100	0.000250	0.000280	mg/L
Styrene	0.000162	0.00100	0.000250	0.000290	mg/L
1,1,1,2-Tetrachloroethar	0.000327	0.00100	0.000500	0.000540	mg/L
1,1,2,2-Tetrachloroethar	0.000284	0.00100	0.000500	0.000460	mg/L
Tetrachloroethylene	0.000500	0.00100	0.000500	0.000500	mg/L
Toluene	0.000500	0.00100	0.000500	0.000480	mg/L
1,2,3-Trichlorobenzene	0.00200	0.00500	0.00200	0.00174	mg/L
1,2,4-Trichlorobenzene	0.00200	0.00500	0.00200	0.00189	mg/L

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
1,1,1-Trichloroethane	0.000504	0.00500	0.000250	0.000200	mg/L
1,1,2-Trichloroethane	0.000228	0.00100	0.000500	0.000460	mg/L
Trichloroethylene	0.000424	0.00500	0.000250	0.000210	mg/L
Trichlorofluoromethane	0.000245	0.00100	0.000250	0.000360	mg/L
1,2,3-Trichloropropane	0.000283	0.00100	0.000250	0.000270	mg/L
1,2,4-Trimethylbenzene	0.000252	0.00100	0.000250	0.000280	mg/L
1,3,5-Trimethylbenzene	0.000279	0.00100	0.000250	0.000210	mg/L
o-Xylene	0.000192	0.00100	0.000500	0.000430	mg/L
m,p-Xylenes	0.000330	0.0100	0.00100	0.000900	mg/L
Vinyl Chloride	0.000234	0.00200	0.000250	0.000240	mg/L

Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

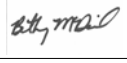
This data package is for Job No. 860-17370-1 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ☑ R1- Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. prepatation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified coumpounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☑ R10 - Other problems or anomalies.
- ☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on __/__/__. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Bethany McDaniel		Senior Project Manager	12/23/2021

Laboratory Data Package Cover Page - Page 2 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17370-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample detection limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?			✓		
		Were % moisture (or solids) reported for all soil and sediment samples?			✓		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			✓		
		If required for the project, are TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?			✓		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	✓				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	✓				

Laboratory Data Package Cover Page - Page 3 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17370-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	✓				
		Were percent RSDs or correlation coefficient criteria met?	✓				
		Was the number of standards recommended in the method used for all analytes?	✓				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
		Are ICAL data available for all instruments used?	✓				
		Has the initial calibration curve been verified using an appropriate second source standard?	✓				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	✓				
		Were percent differences for each analyte within the method-required QC limits?	✓				
		Was the ICAL curve verified for each analyte?	✓				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			✓		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	✓				
		Were ion abundance data within the method-required QC limits?	✓				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	✓				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
		Were data associated with manual integrations flagged on the raw data?	✓				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✓		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period;
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Cover Page - Page 4 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/23/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17370-1
Reviewer Name:	

ER#[1]	Description
1	The matrix spike (MS) recoveries for analytical batch 860-35063 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Job ID: 860-17370-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-17370-1

Receipt
The samples were received on 12/15/2021 12:17 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17370-1

Client Sample ID: MW-01-121421 — Lab Sample ID: 860-17370-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.000584	J	0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.00164		0.00100	0.000216	mg/L	1		8260C	Total/NA

Client Sample ID: MW-65-121421 — Lab Sample ID: 860-17370-2

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00592		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.00906		0.00100	0.000216	mg/L	1		8260C	Total/NA

Client Sample ID: MW-108-121421 — Lab Sample ID: 860-17370-3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.0552		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00711		0.00100	0.000174	mg/L	1		8260C	Total/NA
Trichloroethene	0.0172		0.00500	0.000424	mg/L	1		8260C	Total/NA

Client Sample ID: MW-109-121421 — Lab Sample ID: 860-17370-4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0815		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0346		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.0397		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.0190		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00497	J	0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.0163		0.00200	0.000234	mg/L	1		8260C	Total/NA

Client Sample ID: MW-110-121421 — Lab Sample ID: 860-17370-5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00277		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.00311		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00142		0.00100	0.000174	mg/L	1		8260C	Total/NA
Vinyl chloride	0.000372	J	0.00200	0.000234	mg/L	1		8260C	Total/NA

Client Sample ID: MW-111-121521 — Lab Sample ID: 860-17370-6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.799		0.0100	0.00244	mg/L	10		8260C	Total/NA
1,2-Dichloroethane	0.00360		0.00100	0.000285	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.547		0.0100	0.00216	mg/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	0.00466		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.0196		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00719		0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.0941		0.00200	0.000234	mg/L	1		8260C	Total/NA

Client Sample ID: MW-112-121421 — Lab Sample ID: 860-17370-7

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0225		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,2-Dichloroethane	0.00282		0.00100	0.000285	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0291		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.000379	J	0.00100	0.000174	mg/L	1		8260C	Total/NA
Vinyl chloride	0.00511		0.00200	0.000234	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Stafford

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17370-1

Client Sample ID: MW-113-121421

Lab Sample ID: 860-17370-8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00973		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0175		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00288		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.0121		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00728		0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.000751	J	0.00200	0.000234	mg/L	1		8260C	Total/NA

Client Sample ID: FD-02-121421

Lab Sample ID: 860-17370-9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0108		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0197		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00328		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.0129		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00769		0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.000863	J	0.00200	0.000234	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-01-121421

Lab Sample ID: 860-17370-1

Date Collected: 12/14/21 08:05

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.000584**	**J**	0.00100	0.000244	mg/L			12/20/21 23:50	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 23:50	1
1,1-Dichloroethene	**0.00164**		0.00100	0.000216	mg/L			12/20/21 23:50	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/20/21 23:50	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 23:50	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 23:50	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*12/20/21 23:50*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/20/21 23:50*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/20/21 23:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 144*		*12/20/21 23:50*	*1*

Client Sample ID: MW-65-121421

Lab Sample ID: 860-17370-2

Date Collected: 12/14/21 09:20

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00592**		0.00100	0.000244	mg/L			12/21/21 03:07	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 03:07	1
1,1-Dichloroethene	**0.00906**		0.00100	0.000216	mg/L			12/21/21 03:07	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 03:07	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 03:07	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 03:07	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*12/21/21 03:07*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*12/21/21 03:07*	*1*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*		*12/21/21 03:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*		*12/21/21 03:07*	*1*

Client Sample ID: MW-108-121421

Lab Sample ID: 860-17370-3

Date Collected: 12/14/21 08:15

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 03:26	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 03:26	1
1,1-Dichloroethene	**0.0552**		0.00100	0.000216	mg/L			12/21/21 03:26	1
cis-1,2-Dichloroethene	**0.00711**		0.00100	0.000174	mg/L			12/21/21 03:26	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 03:26	1
Trichloroethene	**0.0172**		0.00500	0.000424	mg/L			12/21/21 03:26	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*12/21/21 03:26*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/21/21 03:26*	*1*

Client Sample ID: MW-108-121421

Lab Sample ID: 860-17370-3
Matrix: Water
Date Collected: 12/14/21 08:15
Date Received: 12/15/21 12:17

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*		*12/21/21 03:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/21/21 03:26*	*1*

Client Sample ID: MW-109-121421

Lab Sample ID: 860-17370-4
Matrix: Water
Date Collected: 12/14/21 08:30
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.0815**		0.00100	0.000244	mg/L			12/21/21 13:52	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 13:52	1
1,1-Dichloroethene	**0.0346**		0.00100	0.000216	mg/L			12/21/21 13:52	1
cis-1,2-Dichloroethene	**0.0397**		0.00100	0.000174	mg/L			12/21/21 13:52	1
Tetrachloroethene	**0.0190**		0.00100	0.000500	mg/L			12/21/21 13:52	1
Trichloroethene	**0.00497**	**J**	0.00500	0.000424	mg/L			12/21/21 13:52	1
Vinyl chloride	**0.0163**		0.00200	0.000234	mg/L			12/21/21 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*101*		*75 - 131*		*12/21/21 13:52*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/21/21 13:52*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/21/21 13:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*		*12/21/21 13:52*	*1*

Client Sample ID: MW-110-121421

Lab Sample ID: 860-17370-5
Matrix: Water
Date Collected: 12/14/21 08:40
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00277**		0.00100	0.000244	mg/L			12/21/21 00:10	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 00:10	1
1,1-Dichloroethene	**0.00311**		0.00100	0.000216	mg/L			12/21/21 00:10	1
cis-1,2-Dichloroethene	**0.00142**		0.00100	0.000174	mg/L			12/21/21 00:10	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 00:10	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 00:10	1
Vinyl chloride	**0.000372**	**J**	0.00200	0.000234	mg/L			12/21/21 00:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*102*		*75 - 131*		*12/21/21 00:10*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/21/21 00:10*	*1*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*		*12/21/21 00:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/21/21 00:10*	*1*

Client Sample ID: MW-111-121521

Lab Sample ID: 860-17370-6
Matrix: Water
Date Collected: 12/15/21 07:30
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.799**		0.0100	0.00244	mg/L			12/21/21 14:12	10
1,2-Dichloroethane	**0.00360**		0.00100	0.000285	mg/L			12/21/21 00:31	1

Client Sample ID: MW-111-121521

Lab Sample ID: 860-17370-6
Date Collected: 12/15/21 07:30
Matrix: Water
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**0.547**		0.0100	0.00216	mg/L			12/21/21 14:12	10
cis-1,2-Dichloroethene	**0.00466**		0.00100	0.000174	mg/L			12/21/21 00:31	1
Tetrachloroethene	**0.0196**		0.00100	0.000500	mg/L			12/21/21 00:31	1
Trichloroethene	**0.00719**		0.00500	0.000424	mg/L			12/21/21 00:31	1
Vinyl chloride	**0.0941**		0.00200	0.000234	mg/L			12/21/21 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*12/21/21 00:31*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 131*		*12/21/21 14:12*	*10*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/21/21 00:31*	*1*
Toluene-d8 (Surr)	*99*		*80 - 117*		*12/21/21 14:12*	*10*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*		*12/21/21 00:31*	*1*
4-Bromofluorobenzene (Surr)	*97*		*74 - 124*		*12/21/21 14:12*	*10*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 144*		*12/21/21 00:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*63 - 144*		*12/21/21 14:12*	*10*

Client Sample ID: MW-112-121421

Lab Sample ID: 860-17370-7
Date Collected: 12/14/21 08:50
Matrix: Water
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.0225**		0.00100	0.000244	mg/L			12/21/21 00:51	1
1,2-Dichloroethane	**0.00282**		0.00100	0.000285	mg/L			12/21/21 00:51	1
1,1-Dichloroethene	**0.0291**		0.00100	0.000216	mg/L			12/21/21 00:51	1
cis-1,2-Dichloroethene	**0.000379**	**J**	0.00100	0.000174	mg/L			12/21/21 00:51	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 00:51	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 00:51	1
Vinyl chloride	**0.00511**		0.00200	0.000234	mg/L			12/21/21 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*75 - 131*		*12/21/21 00:51*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/21/21 00:51*	*1*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*		*12/21/21 00:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/21/21 00:51*	*1*

Client Sample ID: MW-113-121421

Lab Sample ID: 860-17370-8
Date Collected: 12/14/21 09:00
Matrix: Water
Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00973**		0.00100	0.000244	mg/L			12/21/21 01:12	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 01:12	1
1,1-Dichloroethene	**0.0175**		0.00100	0.000216	mg/L			12/21/21 01:12	1
cis-1,2-Dichloroethene	**0.00288**		0.00100	0.000174	mg/L			12/21/21 01:12	1
Tetrachloroethene	**0.0121**		0.00100	0.000500	mg/L			12/21/21 01:12	1
Trichloroethene	**0.00728**		0.00500	0.000424	mg/L			12/21/21 01:12	1
Vinyl chloride	**0.000751**	**J**	0.00200	0.000234	mg/L			12/21/21 01:12	1

Client Sample ID: MW-113-121421

Lab Sample ID: 860-17370-8

Date Collected: 12/14/21 09:00

Matrix: Water

Date Received: 12/15/21 12:17

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*12/21/21 01:12*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*12/21/21 01:12*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/21/21 01:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/21/21 01:12*	*1*

Client Sample ID: FD-02-121421

Lab Sample ID: 860-17370-9

Date Collected: 12/14/21 00:00

Matrix: Water

Date Received: 12/15/21 12:17

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.0108**		0.00100	0.000244	mg/L			12/21/21 01:32	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 01:32	1
1,1-Dichloroethene	**0.0197**		0.00100	0.000216	mg/L			12/21/21 01:32	1
cis-1,2-Dichloroethene	**0.00328**		0.00100	0.000174	mg/L			12/21/21 01:32	1
Tetrachloroethene	**0.0129**		0.00100	0.000500	mg/L			12/21/21 01:32	1
Trichloroethene	**0.00769**		0.00500	0.000424	mg/L			12/21/21 01:32	1
Vinyl chloride	**0.000863**	**J**	0.00200	0.000234	mg/L			12/21/21 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*75 - 131*		*12/21/21 01:32*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/21/21 01:32*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/21/21 01:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/21/21 01:32*	*1*

Unadjusted Detection Limits

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17370-1

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

Analyte	MQL	MDL	Units
1,1-Dichloroethane	0.00100	0.000244	mg/L
1,1-Dichloroethene	0.00100	0.000216	mg/L
1,2-Dichloroethane	0.00100	0.000285	mg/L
cis-1,2-Dichloroethene	0.00100	0.000174	mg/L
Tetrachloroethene	0.00100	0.000500	mg/L
Trichloroethene	0.00500	0.000424	mg/L
Vinyl chloride	0.00200	0.000234	mg/L

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17370-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(75-131)	(80-117)	(74-124)	(63-144)
860-17367-B-27 MS	Matrix Spike	100	99	97	90
860-17370-1	MW-01-121421	99	101	100	96
860-17370-1 MS	MW-01-121421	98	99	97	90
860-17370-2	MW-65-121421	104	103	99	102
860-17370-3	MW-108-121421	104	99	99	98
860-17370-4	MW-109-121421	101	102	101	99
860-17370-5	MW-110-121421	102	101	99	98
860-17370-6	MW-111-121521	99	101	99	96
860-17370-6	MW-111-121521	102	99	97	95
860-17370-7	MW-112-121421	100	102	99	98
860-17370-8	MW-113-121421	99	103	100	97
860-17370-9	FD-02-121421	101	102	100	97
LCS 860-35040/3	Lab Control Sample	98	100	100	90
LCS 860-35041/3	Lab Control Sample	107	100	102	99
LCS 860-35063/3	Lab Control Sample	99	98	99	91
LCSD 860-35040/4	Lab Control Sample Dup	97	99	100	90
LCSD 860-35041/4	Lab Control Sample Dup	108	99	102	102
LCSD 860-35063/4	Lab Control Sample Dup	99	100	98	91
MB 860-35040/9	Method Blank	101	100	100	94
MB 860-35041/9	Method Blank	105	101	108	98
MB 860-35063/10	Method Blank	100	101	99	94

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 860-35040/9
Matrix: Water
Analysis Batch: 35040

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/20/21 23:29	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 23:29	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/20/21 23:29	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/20/21 23:29	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 23:29	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 23:29	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 23:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*75 - 131*		*12/20/21 23:29*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/20/21 23:29*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/20/21 23:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*63 - 144*		*12/20/21 23:29*	*1*

Lab Sample ID: LCS 860-35040/3
Matrix: Water
Analysis Batch: 35040

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.04680		mg/L		94	72 - 125		
1,2-Dichloroethane			0.0500	0.04386		mg/L		88	68 - 127		
1,1-Dichloroethene			0.0500	0.04286		mg/L		86	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.04621		mg/L		92	75 - 125		
Tetrachloroethene			0.0500	0.04629		mg/L		93	71 - 125		
Trichloroethene			0.0500	0.04707		mg/L		94	62 - 137		
Vinyl chloride			0.0500	0.05021		mg/L		100	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 117*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 144*

Lab Sample ID: LCSD 860-35040/4
Matrix: Water
Analysis Batch: 35040

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.04720		mg/L		94	72 - 125	1	25
1,2-Dichloroethane			0.0500	0.04363		mg/L		87	68 - 127	1	25
1,1-Dichloroethene			0.0500	0.04397		mg/L		88	59 - 172	3	25
cis-1,2-Dichloroethene			0.0500	0.04609		mg/L		92	75 - 125	0	25
Tetrachloroethene			0.0500	0.04793		mg/L		96	71 - 125	3	25
Trichloroethene			0.0500	0.04835		mg/L		97	62 - 137	3	25
Vinyl chloride			0.0500	0.04688		mg/L		94	60 - 140	7	25

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

Lab Sample ID: LCSD 860-35040/4
Matrix: Water
Analysis Batch: 35040

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*97*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 144*

Lab Sample ID: 860-17370-1 MS
Matrix: Water
Analysis Batch: 35040

Client Sample ID: MW-01-121421
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000584	J	0.0500	0.05103		mg/L		101	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.04670		mg/L		93	68 - 127
1,1-Dichloroethene	0.00164		0.0500	0.04832		mg/L		93	59 - 172
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.04889		mg/L		98	75 - 125
Tetrachloroethene	0.000500	U	0.0500	0.05152		mg/L		103	71 - 125
Trichloroethene	0.000424	U	0.0500	0.05131		mg/L		103	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.05216		mg/L		104	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*98*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*97*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 144*

Lab Sample ID: MB 860-35041/9
Matrix: Water
Analysis Batch: 35041

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/20/21 21:05	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/20/21 21:05	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/20/21 21:05	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/20/21 21:05	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/20/21 21:05	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/20/21 21:05	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/20/21 21:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*105*		*75 - 131*		*12/20/21 21:05*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/20/21 21:05*	*1*
4-Bromofluorobenzene (Surr)	*108*		*74 - 124*		*12/20/21 21:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/20/21 21:05*	*1*

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

Lab Sample ID: LCS 860-35041/3
Matrix: Water
Analysis Batch: 35041

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05520		mg/L		110	72 - 125		
1,2-Dichloroethane			0.0500	0.05232		mg/L		105	68 - 127		
1,1-Dichloroethene			0.0500	0.05324		mg/L		106	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.05027		mg/L		101	75 - 125		
Tetrachloroethene			0.0500	0.05602		mg/L		112	71 - 125		
Trichloroethene			0.0500	0.05344		mg/L		107	62 - 137		
Vinyl chloride			0.0500	0.05263		mg/L		105	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*107*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 117*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*

Lab Sample ID: LCSD 860-35041/4
Matrix: Water
Analysis Batch: 35041

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.05681		mg/L		114	72 - 125	3	25
1,2-Dichloroethane			0.0500	0.05607		mg/L		112	68 - 127	7	25
1,1-Dichloroethene			0.0500	0.05343		mg/L		107	59 - 172	0	25
cis-1,2-Dichloroethene			0.0500	0.05143		mg/L		103	75 - 125	2	25
Tetrachloroethene			0.0500	0.05583		mg/L		112	71 - 125	0	25
Trichloroethene			0.0500	0.05447		mg/L		109	62 - 137	2	25
Vinyl chloride			0.0500	0.05319		mg/L		106	60 - 140	1	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*108*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*

Lab Sample ID: MB 860-35063/10
Matrix: Water
Analysis Batch: 35063

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/21/21 11:28	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/21/21 11:28	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/21/21 11:28	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/21/21 11:28	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/21/21 11:28	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/21/21 11:28	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/21/21 11:28	1

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

Lab Sample ID: MB 860-35063/10
Matrix: Water
Analysis Batch: 35063

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		75 - 131		12/21/21 11:28	1
Toluene-d8 (Surr)	101		80 - 117		12/21/21 11:28	1
4-Bromofluorobenzene (Surr)	99		74 - 124		12/21/21 11:28	1
1,2-Dichloroethane-d4 (Surr)	94		63 - 144		12/21/21 11:28	1

Lab Sample ID: LCS 860-35063/3
Matrix: Water
Analysis Batch: 35063

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.0500	0.05290		mg/L		106	72 - 125
1,2-Dichloroethane	0.0500	0.04612		mg/L		92	68 - 127
1,1-Dichloroethene	0.0500	0.05037		mg/L		101	59 - 172
cis-1,2-Dichloroethene	0.0500	0.05108		mg/L		102	75 - 125
Tetrachloroethene	0.0500	0.05334		mg/L		107	71 - 125
Trichloroethene	0.0500	0.05467		mg/L		109	62 - 137
Vinyl chloride	0.0500	0.05038		mg/L		101	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	99		75 - 131
Toluene-d8 (Surr)	98		80 - 117
4-Bromofluorobenzene (Surr)	99		74 - 124
1,2-Dichloroethane-d4 (Surr)	91		63 - 144

Lab Sample ID: LCSD 860-35063/4
Matrix: Water
Analysis Batch: 35063

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.0500	0.05394		mg/L		108	72 - 125	2	25
1,2-Dichloroethane	0.0500	0.04747		mg/L		95	68 - 127	3	25
1,1-Dichloroethene	0.0500	0.05222		mg/L		104	59 - 172	4	25
cis-1,2-Dichloroethene	0.0500	0.05267		mg/L		105	75 - 125	3	25
Tetrachloroethene	0.0500	0.05579		mg/L		112	71 - 125	4	25
Trichloroethene	0.0500	0.05592		mg/L		112	62 - 137	2	25
Vinyl chloride	0.0500	0.05116		mg/L		102	60 - 140	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	99		75 - 131
Toluene-d8 (Surr)	100		80 - 117
4-Bromofluorobenzene (Surr)	98		74 - 124
1,2-Dichloroethane-d4 (Surr)	91		63 - 144

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

Lab Sample ID: 860-17367-B-27 MS
Matrix: Water
Analysis Batch: 35063

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.000244	U	0.0500	0.06174		mg/L		123	72 - 125
1,2-Dichloroethane	0.000285	U	0.0500	0.05290		mg/L		106	68 - 127
1,1-Dichloroethene	0.000216	U	0.0500	0.06434		mg/L		129	59 - 172
cis-1,2-Dichloroethene	0.000174	U	0.0500	0.06099		mg/L		122	75 - 125
Tetrachloroethene	0.000500	U	0.0500	0.06716	N1	mg/L		134	71 - 125
Trichloroethene	0.000424	U	0.0500	0.06580		mg/L		132	62 - 137
Vinyl chloride	0.000234	U	0.0500	0.06070		mg/L		121	60 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*97*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 144*

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17370-1

GC/MS VOA

Analysis Batch: 35040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17370-1	MW-01-121421	Total/NA	Water	8260C	
860-17370-5	MW-110-121421	Total/NA	Water	8260C	
860-17370-6	MW-111-121521	Total/NA	Water	8260C	
860-17370-7	MW-112-121421	Total/NA	Water	8260C	
860-17370-8	MW-113-121421	Total/NA	Water	8260C	
860-17370-9	FD-02-121421	Total/NA	Water	8260C	
MB 860-35040/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35040/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35040/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17370-1 MS	MW-01-121421	Total/NA	Water	8260C	

Analysis Batch: 35041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17370-2	MW-65-121421	Total/NA	Water	8260C	
860-17370-3	MW-108-121421	Total/NA	Water	8260C	
MB 860-35041/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35041/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35041/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 35063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17370-4	MW-109-121421	Total/NA	Water	8260C	
860-17370-6	MW-111-121521	Total/NA	Water	8260C	
MB 860-35063/10	Method Blank	Total/NA	Water	8260C	
LCS 860-35063/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35063/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17367-B-27 MS	Matrix Spike	Total/NA	Water	8260C	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17370-1

Client Sample ID: MW-01-121421
Lab Sample ID: 860-17370-1
Date Collected: 12/14/21 08:05
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35040	12/20/21 23:50	PXS	XEN STF

Client Sample ID: MW-65-121421
Lab Sample ID: 860-17370-2
Date Collected: 12/14/21 09:20
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35041	12/21/21 03:07	NA	XEN STF

Client Sample ID: MW-108-121421
Lab Sample ID: 860-17370-3
Date Collected: 12/14/21 08:15
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35041	12/21/21 03:26	NA	XEN STF

Client Sample ID: MW-109-121421
Lab Sample ID: 860-17370-4
Date Collected: 12/14/21 08:30
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35063	12/21/21 13:52	NA	XEN STF

Client Sample ID: MW-110-121421
Lab Sample ID: 860-17370-5
Date Collected: 12/14/21 08:40
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35040	12/21/21 00:10	PXS	XEN STF

Client Sample ID: MW-111-121521
Lab Sample ID: 860-17370-6
Date Collected: 12/15/21 07:30
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35040	12/21/21 00:31	PXS	XEN STF
Total/NA	Analysis	8260C		10	5 mL	5 mL	35063	12/21/21 14:12	NA	XEN STF

Client Sample ID: MW-112-121421
Lab Sample ID: 860-17370-7
Date Collected: 12/14/21 08:50
Matrix: Water
Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35040	12/21/21 00:51	PXS	XEN STF

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17370-1

Client Sample ID: MW-113-121421

Lab Sample ID: 860-17370-8

Date Collected: 12/14/21 09:00

Matrix: Water

Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35040	12/21/21 01:12	PXS	XEN STF

Client Sample ID: FD-02-121421

Lab Sample ID: 860-17370-9

Date Collected: 12/14/21 00:00

Matrix: Water

Date Received: 12/15/21 12:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35040	12/21/21 01:32	PXS	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Job ID: 860-17370-1
Project/Site: STC Silber Rd, TX

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	21-038-0	08-04-22
Florida	NELAP	E871002	06-30-22
Louisiana	NELAP	03054	06-30-22
Oklahoma	State	1306	08-31-22
Texas	NELAP	T104704215-21-44	06-30-22
Texas	TCEQ Water Supply	T104704215	06-30-22

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17370-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF

Protocol References:

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17370-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17370-1	MW-01-121421	Water	12/14/21 08:05	12/15/21 12:17
860-17370-2	MW-65-121421	Water	12/14/21 09:20	12/15/21 12:17
860-17370-3	MW-108-121421	Water	12/14/21 08:15	12/15/21 12:17
860-17370-4	MW-109-121421	Water	12/14/21 08:30	12/15/21 12:17
860-17370-5	MW-110-121421	Water	12/14/21 08:40	12/15/21 12:17
860-17370-6	MW-111-121521	Water	12/15/21 07:30	12/15/21 12:17
860-17370-7	MW-112-121421	Water	12/14/21 08:50	12/15/21 12:17
860-17370-8	MW-113-121421	Water	12/14/21 09:00	12/15/21 12:17
860-17370-9	FD-02-121421	Water	12/14/21 00:00	12/15/21 12:17

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford TX 77477
Phone: 281-240-4200

Chain of Custody Record

860-17370 Chain of Custody

urofins | Environment Testing America

Client Information	Sampler: DJ2	Lab PM: McDaniel, Bethany A	No: 6507-2299.6
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	Page: ~~Page 6 of 6~~ 1 of 1
Company: Jacobs Engineering Group, Inc.	PWSID:	Analysis Requested	Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:		Preservation Codes:
City: Houston	TAT Requested (days): STD TAT		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 Z other (specify) Other
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No		
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02		
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02		
Project Name: STC Silber Rd TX GW	Project #: 86002024		
Site:	SSOW#:		

Temp: 2.2 IR ID:HOU-223
C/F: +0.0
Corrected Temp: 2.2

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)	8260B (MOD) VOCs Custom List (7)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
MW-01 - 12142021	12/14/21	0805	G	Water			X	3	
MW-05 - 12142021	12/14/21	0920	G	Water			X	3	
MW-108 - 12142021	12/14/21	0815	G	Water			X	3	
MW-109 - 12142021	12/14/21	0830	G	Water			X	3	
MW-110 - 12142021	12/14/21	0840	G	Water			X	3	
MW-111 - 12152021	12/15/21	0730	G	Water			X	3	
MW-112 - 12142021	12/14/21	0850	G	Water			X	3	
MW-113 - 12142021	12/14/21	0900	G	Water			X	3	
FD-02 - 12142021	12/14/21	NG	G	Water			X	3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: DJ2	Date/Time: 12/15/21 1110	Company: ITZM	Received by: YCIPS	Date/Time: 12/15/21 1217	Company: EX
Relinquished by:	Date/Time: 1217	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:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17370-1

Login Number: 17370
List Number: 1
Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

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	
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	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17586-1
Client Project/Site: STC Silber Rd, TX

For:
Jacobs Engineering Group, Inc.
12750 Merit Drive
Suite 1100
Dallas, Texas 75251

Attn: John Knott

Bethany McDaniel

Authorized for release by:
12/28/2021 9:16:13 AM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17586-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

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

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Prep Method: **SW5030B** Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Benzene	0.000214	0.00100	0.000250	0.000370	mg/L
Bromobenzene	0.000300	0.00100	0.000250	0.000370	mg/L
Bromochloromethane	0.000209	0.00100	0.000500	0.000440	mg/L
Bromodichloromethane	0.000231	0.00100	0.000250	0.000460	mg/L
Bromoform	0.000630	0.00500	0.00100	0.00124	mg/L
Methyl bromide	0.00105	0.00500	0.000500	0.000570	mg/L
2-Butanone	0.00575	0.0500	0.00500	0.00575	mg/L
n-Butylbenzene	0.000286	0.00100	0.00200	0.00176	mg/L
Sec-Butylbenzene	0.000199	0.00100	0.000250	0.000230	mg/L
tert-Butylbenzene	0.000195	0.00100	0.000250	0.000210	mg/L
Carbon Tetrachloride	0.000423	0.00500	0.000250	0.000270	mg/L
Chlorobenzene	0.000159	0.00100	0.000250	0.000280	mg/L
Chloroethane	0.000433	0.0100	0.000500	0.000630	mg/L
Chloroform	0.000259	0.00100	0.000250	0.000600	mg/L
Methyl Chloride	0.000318	0.0100	0.000250	0.000450	mg/L
2-Chlorotoluene	0.000214	0.00100	0.000250	0.000210	mg/L
4-Chlorotoluene	0.000183	0.00100	0.000250	0.000260	mg/L
p-Cymene (p-Isopropyl	0.000233	0.00100	0.000250	0.000150	mg/L
Dibromochloromethane	0.000739	0.00500	0.000250	0.000440	mg/L
1,2-Dibromo-3-Chloropı	0.000319	0.00100	0.00100	0.000800	mg/L
1,2-Dibromoethane	0.000337	0.00500	0.000500	0.000450	mg/L
Methylene Bromide	0.000130	0.00100	0.000500	0.000460	mg/L
1,2-Dichlorobenzene	0.000236	0.00100	0.000250	0.000360	mg/L
1,3-Dichlorobenzene	0.000197	0.00100	0.000250	0.000370	mg/L
1,4-Dichlorobenzene	0.000199	0.00100	0.000250	0.000430	mg/L
Dichlorodifluoromethan	0.000316	0.00100	0.000250	0.000310	mg/L
1,1-Dichloroethane	0.000244	0.00100	0.000250	0.000300	mg/L
1,2-Dichloroethane	0.000285	0.00100	0.000250	0.000260	mg/L
1,1-Dichloroethene	0.000216	0.00100	0.000250	0.000280	mg/L
cis-1,2-Dichloroethylene	0.000174	0.00100	0.000250	0.000240	mg/L
trans-1,2-dichloroethyle	0.000256	0.00100	0.000250	0.000200	mg/L
1,2-Dichloropropane	0.000396	0.00500	0.000250	0.000270	mg/L
1,3-Dichloropropane	0.000439	0.00500	0.000250	0.000240	mg/L
2,2-Dichloropropane	0.000360	0.00500	0.000250	0.000170	mg/L
1,1-Dichloropropene	0.000481	0.00500	0.000250	0.000290	mg/L
cis-1,3-Dichloropropene	0.000690	0.00500	0.000500	0.000390	mg/L
trans-1,3-dichloroproper	0.000752	0.00500	0.000500	0.000420	mg/L
Ethylbenzene	0.000146	0.00100	0.000250	0.000260	mg/L
Hexachlorobutadiene	0.00200	0.00500	0.00200	0.00197	mg/L
Isopropylbenzene	0.000161	0.00100	0.000250	0.000240	mg/L
Methylene Chloride	0.00191	0.00500	0.00200	0.00206	mg/L
MTBE	0.000571	0.00500	0.000500	0.000750	mg/L
Naphthalene	0.00200	0.0100	0.00200	0.00145	mg/L
n-Propylbenzene	0.000179	0.00100	0.000250	0.000280	mg/L
Styrene	0.000162	0.00100	0.000250	0.000290	mg/L
1,1,1,2-Tetrachloroethar	0.000327	0.00100	0.000500	0.000540	mg/L
1,1,2,2-Tetrachloroethar	0.000284	0.00100	0.000500	0.000460	mg/L
Tetrachloroethylene	0.000500	0.00100	0.000500	0.000500	mg/L
Toluene	0.000500	0.00100	0.000500	0.000480	mg/L
1,2,3-Trichlorobenzene	0.00200	0.00500	0.00200	0.00174	mg/L
1,2,4-Trichlorobenzene	0.00200	0.00500	0.00200	0.00189	mg/L

DCS Summary 692514

Analytical Method: **VOCs by SW-846 8260C** Matrix: **Water**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
1,1,1-Trichloroethane	0.000504	0.00500	0.000250	0.000200	mg/L
1,1,2-Trichloroethane	0.000228	0.00100	0.000500	0.000460	mg/L
Trichloroethylene	0.000424	0.00500	0.000250	0.000210	mg/L
Trichlorofluoromethane	0.000245	0.00100	0.000250	0.000360	mg/L
1,2,3-Trichloropropane	0.000283	0.00100	0.000250	0.000270	mg/L
1,2,4-Trimethylbenzene	0.000252	0.00100	0.000250	0.000280	mg/L
1,3,5-Trimethylbenzene	0.000279	0.00100	0.000250	0.000210	mg/L
o-Xylene	0.000192	0.00100	0.000500	0.000430	mg/L
m,p-Xylenes	0.000330	0.0100	0.00100	0.000900	mg/L
Vinyl Chloride	0.000234	0.00200	0.000250	0.000240	mg/L

Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

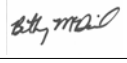
This data package is for Job No. 860-17586-1 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ☑ R1- Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. prepatation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified coumpounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☑ R10 - Other problems or anomalies.
- ☐ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on __/__/__. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Bethany McDaniel		Senior Project Manager	12/28/2021

Laboratory Data Package Cover Page - Page 2 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/28/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17586-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample detection limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?			✓		
		Were % moisture (or solids) reported for all soil and sediment samples?			✓		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			✓		
		If required for the project, are TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	✓				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	✓				

Laboratory Data Package Cover Page - Page 3 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/28/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17586-1
Reviewer Name:	

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	✓				
		Were percent RSDs or correlation coefficient criteria met?	✓				
		Was the number of standards recommended in the method used for all analytes?	✓				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
		Are ICAL data available for all instruments used?	✓				
		Has the initial calibration curve been verified using an appropriate second source standard?	✓				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	✓				
		Were percent differences for each analyte within the method-required QC limits?	✓				
		Was the ICAL curve verified for each analyte?	✓				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			✓		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	✓				
		Were ion abundance data within the method-required QC limits?	✓				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	✓				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
		Were data associated with manual integrations flagged on the raw data?	✓				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✓		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period;
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Cover Page - Page 4 of 4

Laboratory Name: Eurofins Xenco, Stafford	LRC Date: 12/28/2021
Project Name: STC Silber Rd, TX	Laboratory Job Number: 860-17586-1
Reviewer Name:	

ER#[1]	Description
	No Exceptions

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Job ID: 860-17586-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-17586-1

Receipt
The samples were received on 12/20/2021 11:31 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 4.7°C

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17586-1

Client Sample ID: TB-01-12202021 — Lab Sample ID: 860-17586-1

No Detections.

Client Sample ID: MW-146-12202021 — Lab Sample ID: 860-17586-2

No Detections.

Client Sample ID: MW-160-12202021 — Lab Sample ID: 860-17586-3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.00103		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.00235		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00287		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.00276		0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.00169	J	0.00500	0.000424	mg/L	1		8260C	Total/NA

Client Sample ID: MW-162-12202021 — Lab Sample ID: 860-17586-4

No Detections.

Client Sample ID: MW-163-12202021 — Lab Sample ID: 860-17586-5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0148		0.00100	0.000244	mg/L	1		8260C	Total/NA
1,1-Dichloroethene	0.0168		0.00100	0.000216	mg/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.00148		0.00100	0.000174	mg/L	1		8260C	Total/NA
Tetrachloroethene	0.000835	J	0.00100	0.000500	mg/L	1		8260C	Total/NA
Trichloroethene	0.000683	J	0.00500	0.000424	mg/L	1		8260C	Total/NA
Vinyl chloride	0.00110	J	0.00200	0.000234	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-01-12202021

Lab Sample ID: 860-17586-1

Date Collected: 12/20/21 08:05

Matrix: Water

Date Received: 12/20/21 11:31

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/24/21 00:40	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/24/21 00:40	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/24/21 00:40	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/24/21 00:40	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/24/21 00:40	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/24/21 00:40	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/24/21 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*75 - 131*		*12/24/21 00:40*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/24/21 00:40*	*1*
4-Bromofluorobenzene (Surr)	*98*		*74 - 124*		*12/24/21 00:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 144*		*12/24/21 00:40*	*1*

Client Sample ID: MW-146-12202021

Lab Sample ID: 860-17586-2

Date Collected: 12/20/21 10:20

Matrix: Water

Date Received: 12/20/21 11:31

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/24/21 01:00	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/24/21 01:00	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/24/21 01:00	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/24/21 01:00	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/24/21 01:00	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/24/21 01:00	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/24/21 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*12/24/21 01:00*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/24/21 01:00*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/24/21 01:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 144*		*12/24/21 01:00*	*1*

Client Sample ID: MW-160-12202021

Lab Sample ID: 860-17586-3

Date Collected: 12/20/21 10:00

Matrix: Water

Date Received: 12/20/21 11:31

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.00103**		0.00100	0.000244	mg/L			12/24/21 02:02	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/24/21 02:02	1
1,1-Dichloroethene	**0.00235**		0.00100	0.000216	mg/L			12/24/21 02:02	1
cis-1,2-Dichloroethene	**0.00287**		0.00100	0.000174	mg/L			12/24/21 02:02	1
Tetrachloroethene	**0.00276**		0.00100	0.000500	mg/L			12/24/21 02:02	1
Trichloroethene	**0.00169**	**J**	0.00500	0.000424	mg/L			12/24/21 02:02	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/24/21 02:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*75 - 131*		*12/24/21 02:02*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/24/21 02:02*	*1*

Client Sample ID: MW-160-12202021 — Lab Sample ID: 860-17586-3

Date Collected: 12/20/21 10:00 — **Matrix: Water**
Date Received: 12/20/21 11:31

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*74 - 124*		*12/24/21 02:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/24/21 02:02*	*1*

Client Sample ID: MW-162-12202021 — Lab Sample ID: 860-17586-4

Date Collected: 12/20/21 09:45 — **Matrix: Water**
Date Received: 12/20/21 11:31

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/24/21 01:21	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/24/21 01:21	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/24/21 01:21	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/24/21 01:21	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/24/21 01:21	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/24/21 01:21	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/24/21 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*12/24/21 01:21*	*1*
Toluene-d8 (Surr)	*101*		*80 - 117*		*12/24/21 01:21*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/24/21 01:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 144*		*12/24/21 01:21*	*1*

Client Sample ID: MW-163-12202021 — Lab Sample ID: 860-17586-5

Date Collected: 12/20/21 09:30 — **Matrix: Water**
Date Received: 12/20/21 11:31

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.0148**		0.00100	0.000244	mg/L			12/24/21 01:42	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/24/21 01:42	1
1,1-Dichloroethene	**0.0168**		0.00100	0.000216	mg/L			12/24/21 01:42	1
cis-1,2-Dichloroethene	**0.00148**		0.00100	0.000174	mg/L			12/24/21 01:42	1
Tetrachloroethene	**0.000835**	**J**	0.00100	0.000500	mg/L			12/24/21 01:42	1
Trichloroethene	**0.000683**	**J**	0.00500	0.000424	mg/L			12/24/21 01:42	1
Vinyl chloride	**0.00110**	**J**	0.00200	0.000234	mg/L			12/24/21 01:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*75 - 131*		*12/24/21 01:42*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*12/24/21 01:42*	*1*
4-Bromofluorobenzene (Surr)	*101*		*74 - 124*		*12/24/21 01:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*		*12/24/21 01:42*	*1*

Unadjusted Detection Limits

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17586-1

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

Analyte	MQL	MDL	Units
1,1-Dichloroethane	0.00100	0.000244	mg/L
1,1-Dichloroethene	0.00100	0.000216	mg/L
1,2-Dichloroethane	0.00100	0.000285	mg/L
cis-1,2-Dichloroethene	0.00100	0.000174	mg/L
Tetrachloroethene	0.00100	0.000500	mg/L
Trichloroethene	0.00500	0.000424	mg/L
Vinyl chloride	0.00200	0.000234	mg/L

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17586-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(75-131)	(80-117)	(74-124)	(63-144)
860-17555-F-1 MS	Matrix Spike	99	99	100	90
860-17555-G-1 MSD	Matrix Spike Duplicate	99	100	99	91
860-17586-1	TB-01-12202021	103	102	98	96
860-17586-2	MW-146-12202021	104	101	101	96
860-17586-3	MW-160-12202021	102	102	97	97
860-17586-4	MW-162-12202021	104	101	100	97
860-17586-5	MW-163-12202021	103	102	101	98
LCS 860-35490/3	Lab Control Sample	100	100	100	89
LCSD 860-35490/4	Lab Control Sample Dup	99	101	99	90
MB 860-35490/8	Method Blank	101	100	100	93

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 860-35490/8
Matrix: Water
Analysis Batch: 35490

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000244	U	0.00100	0.000244	mg/L			12/23/21 20:54	1
1,2-Dichloroethane	0.000285	U	0.00100	0.000285	mg/L			12/23/21 20:54	1
1,1-Dichloroethene	0.000216	U	0.00100	0.000216	mg/L			12/23/21 20:54	1
cis-1,2-Dichloroethene	0.000174	U	0.00100	0.000174	mg/L			12/23/21 20:54	1
Tetrachloroethene	0.000500	U	0.00100	0.000500	mg/L			12/23/21 20:54	1
Trichloroethene	0.000424	U	0.00500	0.000424	mg/L			12/23/21 20:54	1
Vinyl chloride	0.000234	U	0.00200	0.000234	mg/L			12/23/21 20:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*75 - 131*		*12/23/21 20:54*	*1*
Toluene-d8 (Surr)	*100*		*80 - 117*		*12/23/21 20:54*	*1*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*		*12/23/21 20:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*63 - 144*		*12/23/21 20:54*	*1*

Lab Sample ID: LCS 860-35490/3
Matrix: Water
Analysis Batch: 35490

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			0.0500	0.05013		mg/L		100	72 - 125		
1,2-Dichloroethane			0.0500	0.04371		mg/L		87	68 - 127		
1,1-Dichloroethene			0.0500	0.04338		mg/L		87	59 - 172		
cis-1,2-Dichloroethene			0.0500	0.04853		mg/L		97	75 - 125		
Tetrachloroethene			0.0500	0.04838		mg/L		97	71 - 125		
Trichloroethene			0.0500	0.04863		mg/L		97	62 - 137		
Vinyl chloride			0.0500	0.05642		mg/L		113	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 117*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*89*		*63 - 144*

Lab Sample ID: LCSD 860-35490/4
Matrix: Water
Analysis Batch: 35490

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			0.0500	0.04892		mg/L		98	72 - 125	2	25
1,2-Dichloroethane			0.0500	0.04330		mg/L		87	68 - 127	1	25
1,1-Dichloroethene			0.0500	0.04391		mg/L		88	59 - 172	1	25
cis-1,2-Dichloroethene			0.0500	0.04706		mg/L		94	75 - 125	3	25
Tetrachloroethene			0.0500	0.04862		mg/L		97	71 - 125	0	25
Trichloroethene			0.0500	0.04961		mg/L		99	62 - 137	2	25
Vinyl chloride			0.0500	0.05619		mg/L		112	60 - 140	0	25

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

Lab Sample ID: LCSD 860-35490/4
Matrix: Water
Analysis Batch: 35490

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*99*		*75 - 131*
Toluene-d8 (Surr)	*101*		*80 - 117*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 144*

Lab Sample ID: 860-17555-F-1 MS
Matrix: Water
Analysis Batch: 35490

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.00489	U	1.00	1.101		mg/L		110	72 - 125
1,2-Dichloroethane	0.00570	U	1.00	0.9971		mg/L		100	68 - 127
1,1-Dichloroethene	0.00433	U	1.00	0.9893		mg/L		99	59 - 172
cis-1,2-Dichloroethene	0.00348	U	1.00	1.034		mg/L		103	75 - 125
Tetrachloroethene	0.0100	U	1.00	1.055		mg/L		106	71 - 125
Trichloroethene	0.00848	U	1.00	1.086		mg/L		109	62 - 137
Vinyl chloride	0.00467	U	1.00	1.125		mg/L		113	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*99*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 117*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 144*

Lab Sample ID: 860-17555-G-1 MSD
Matrix: Water
Analysis Batch: 35490

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.00489	U	1.00	1.047		mg/L		105	72 - 125	5	25
1,2-Dichloroethane	0.00570	U	1.00	0.9710		mg/L		97	68 - 127	3	25
1,1-Dichloroethene	0.00433	U	1.00	0.9511		mg/L		95	59 - 172	4	25
cis-1,2-Dichloroethene	0.00348	U	1.00	0.9837		mg/L		98	75 - 125	5	25
Tetrachloroethene	0.0100	U	1.00	1.019		mg/L		102	71 - 125	4	25
Trichloroethene	0.00848	U	1.00	1.046		mg/L		105	62 - 137	4	25
Vinyl chloride	0.00467	U	1.00	1.089		mg/L		109	60 - 140	3	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*99*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 117*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*
1,2-Dichloroethane-d4 (Surr)	*91*		*63 - 144*

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17586-1

GC/MS VOA

Analysis Batch: 35490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17586-1	TB-01-12202021	Total/NA	Water	8260C	
860-17586-2	MW-146-12202021	Total/NA	Water	8260C	
860-17586-3	MW-160-12202021	Total/NA	Water	8260C	
860-17586-4	MW-162-12202021	Total/NA	Water	8260C	
860-17586-5	MW-163-12202021	Total/NA	Water	8260C	
MB 860-35490/8	Method Blank	Total/NA	Water	8260C	
LCS 860-35490/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35490/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-17555-F-1 MS	Matrix Spike	Total/NA	Water	8260C	
860-17555-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17586-1

Client Sample ID: TB-01-12202021

Lab Sample ID: 860-17586-1
Matrix: Water
Date Collected: 12/20/21 08:05
Date Received: 12/20/21 11:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35490	12/24/21 00:40	A1S	XEN STF

Client Sample ID: MW-146-12202021

Lab Sample ID: 860-17586-2
Matrix: Water
Date Collected: 12/20/21 10:20
Date Received: 12/20/21 11:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35490	12/24/21 01:00	A1S	XEN STF

Client Sample ID: MW-160-12202021

Lab Sample ID: 860-17586-3
Matrix: Water
Date Collected: 12/20/21 10:00
Date Received: 12/20/21 11:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35490	12/24/21 02:02	A1S	XEN STF

Client Sample ID: MW-162-12202021

Lab Sample ID: 860-17586-4
Matrix: Water
Date Collected: 12/20/21 09:45
Date Received: 12/20/21 11:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35490	12/24/21 01:21	A1S	XEN STF

Client Sample ID: MW-163-12202021

Lab Sample ID: 860-17586-5
Matrix: Water
Date Collected: 12/20/21 09:30
Date Received: 12/20/21 11:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	35490	12/24/21 01:42	A1S	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Job ID: 860-17586-1
Project/Site: STC Silber Rd, TX

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	21-038-0	08-04-22
Florida	NELAP	E871002	06-30-22
Louisiana	NELAP	03054	06-30-22
Oklahoma	State	1306	08-31-22
Texas	NELAP	T104704215-21-44	06-30-22
Texas	TCEQ Water Supply	T104704215	06-30-22

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17586-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF

Protocol References:

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: STC Silber Rd, TX

Job ID: 860-17586-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17586-1	TB-01-12202021	Water	12/20/21 08:05	12/20/21 11:31
860-17586-2	MW-146-12202021	Water	12/20/21 10:20	12/20/21 11:31
860-17586-3	MW-160-12202021	Water	12/20/21 10:00	12/20/21 11:31
860-17586-4	MW-162-12202021	Water	12/20/21 09:45	12/20/21 11:31
860-17586-5	MW-163-12202021	Water	12/20/21 09:30	12/20/21 11:31

Eurofins Xenco, Stafford
4145 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: DR	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 860-6507-2299.1
Client Contact: John Ynfante	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin:	Page: Page ~~1 of 6~~ 1 of 1
Company: Jacobs Engineering Group, Inc.	PWSID:	Analysis Requested		Job #:
Address: 14701 St. Mary's Lane Suite 300	Due Date Requested:			Preservation Codes:
City: Houston	TAT Requested (days): STD TAT			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 Z other (specify)
State, Zip: TX, 77079	Compliance Project: Δ Yes Δ No			
Phone:	PO #: D3542628.C.CS.TPE.SIL.22-05-02			Other:
Email: John.Ynfante@jacobs.com	WO #: D3542628.C.CS.TPE.SIL.22-05-02			
Project Name: STC Silber Rd, TX GW	Project #: 86002024			
Site:	SSOW#:			

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)	8260B (MOD) VOCs Custom List (7)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
TB-01-12202021	12/20/21	0805		Water			X	3	
MW-146-12202021	12/20/21	1020	G	Water			X	3	
MW-160-12202021	12/20/21	1000	G	Water			X	3	
MW-162-12202021	12/20/21	0945	G	Water			X	3	
MW-163-12202021	12/20/21	0930	G	Water			X	3	
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

860-17586 Chain of Custody

Temp: 4.7 IR ID:HOU-272
C/F: +0.0
Corrected Temp: 4.7

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by: DR	Date/Time: 12/20/21 1131	Company: CH2M	Received by:	Date/Time: 12/20 1131	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:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17586-1

Login Number: 17586
List Number: 1
Creator: Rubio, Yuri

List Source: Eurofins Xenco, Stafford

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.7
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?	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	

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 860-17586-1

Login Number: 17586
List Number: 2
Creator: Rubio, Yuri

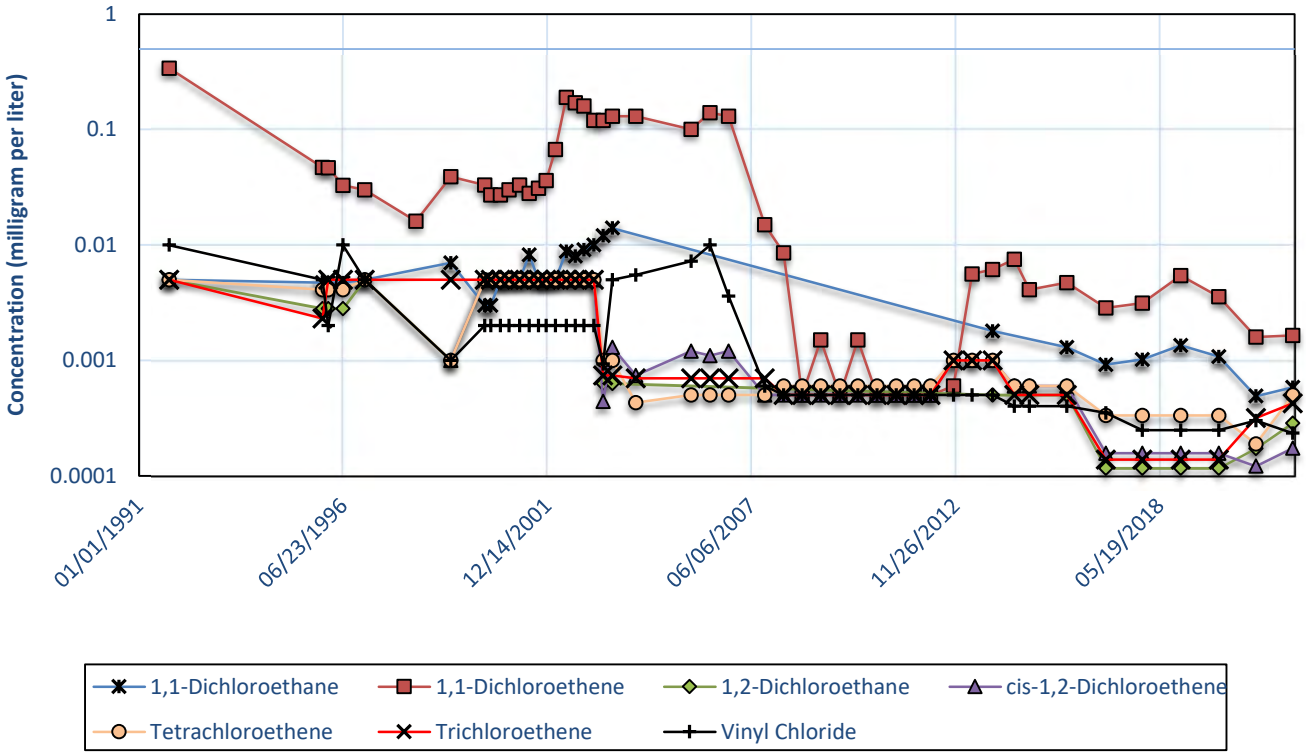
List Source: Eurofins Xenco, Stafford

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.7
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?	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	Check done at department level as required.

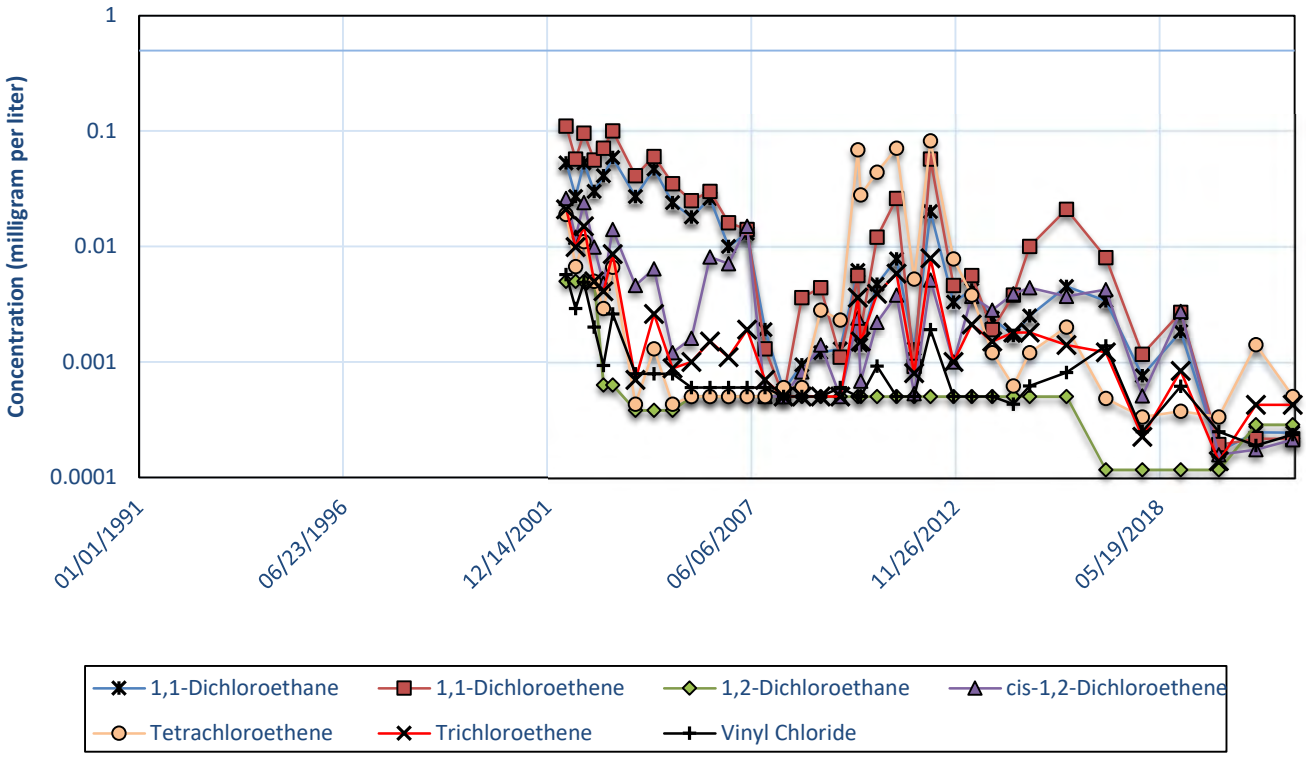
Appendix D
Concentration versus Time Graphs

Appendix D
Concentration versus Time Graphs

MW-01

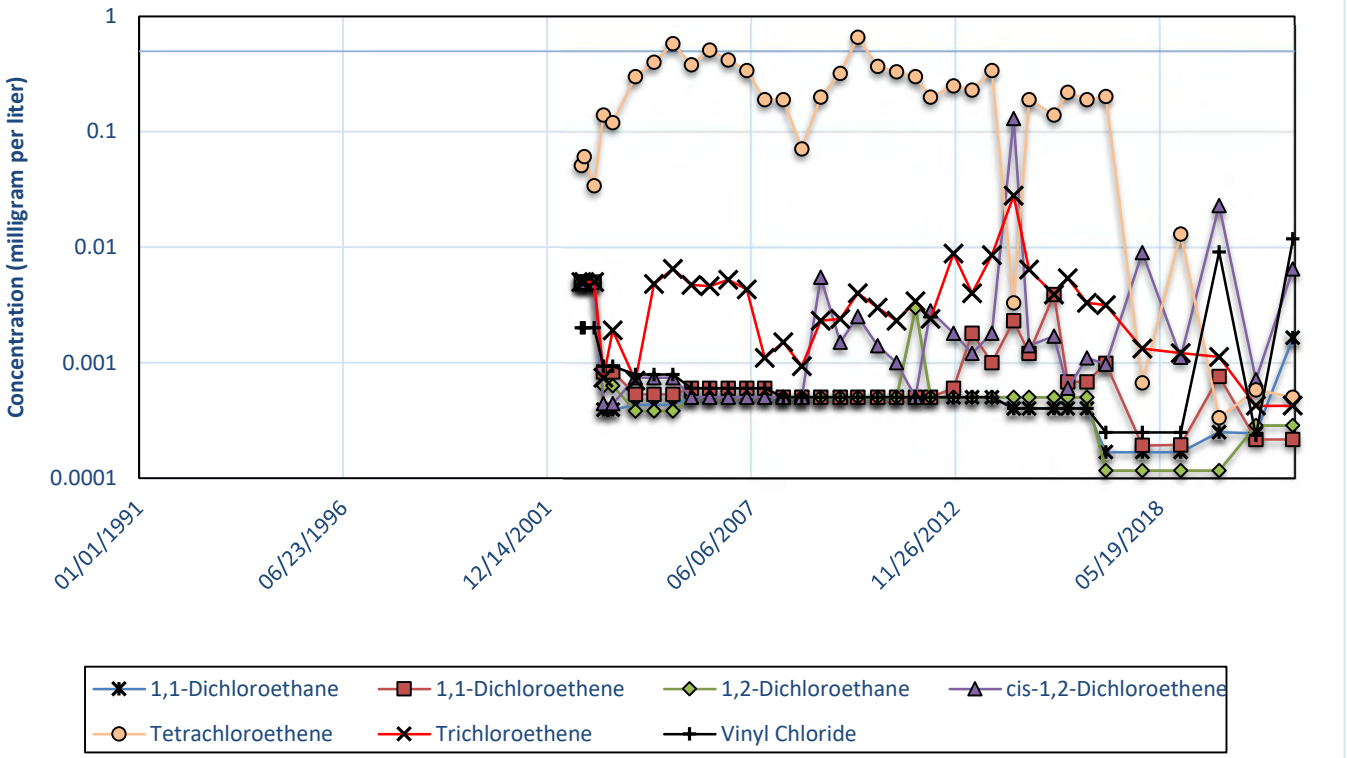


MW-100

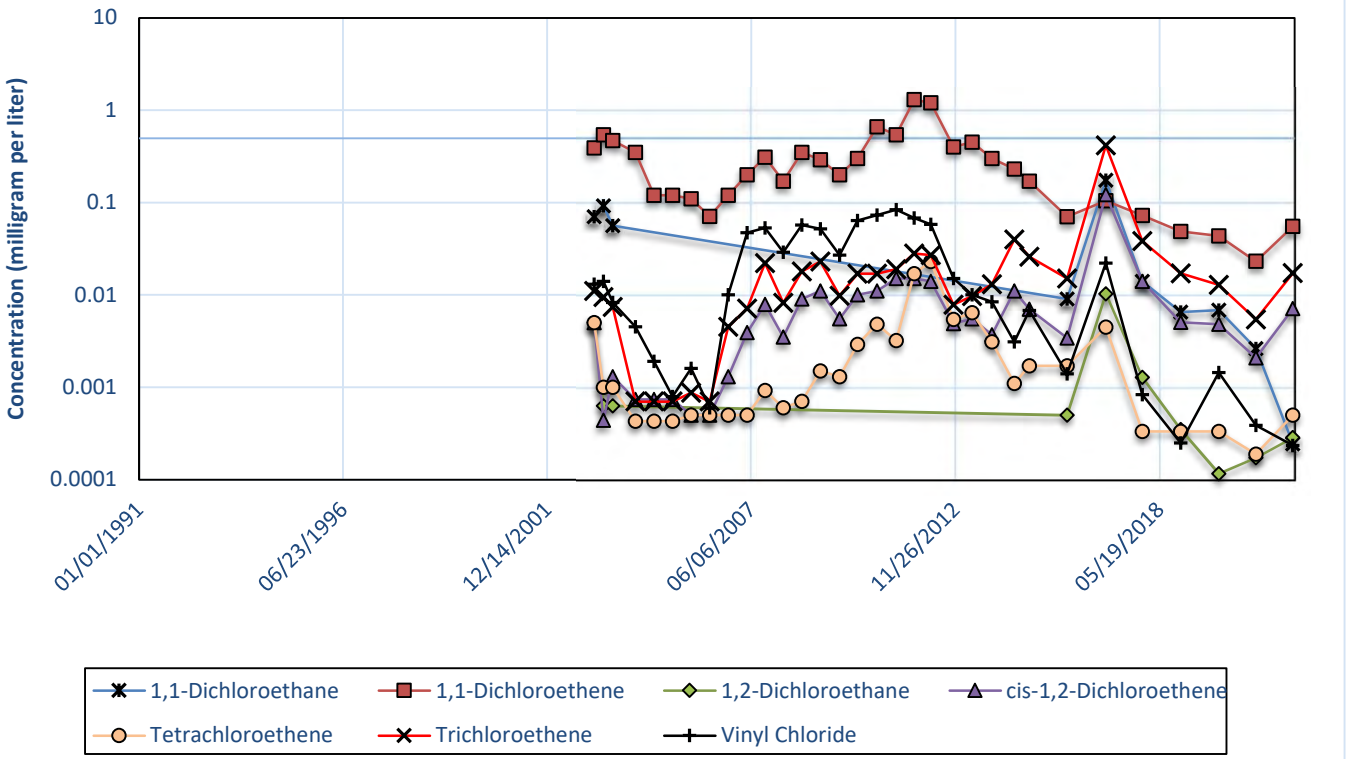


Appendix D
Concentration versus Time Graphs

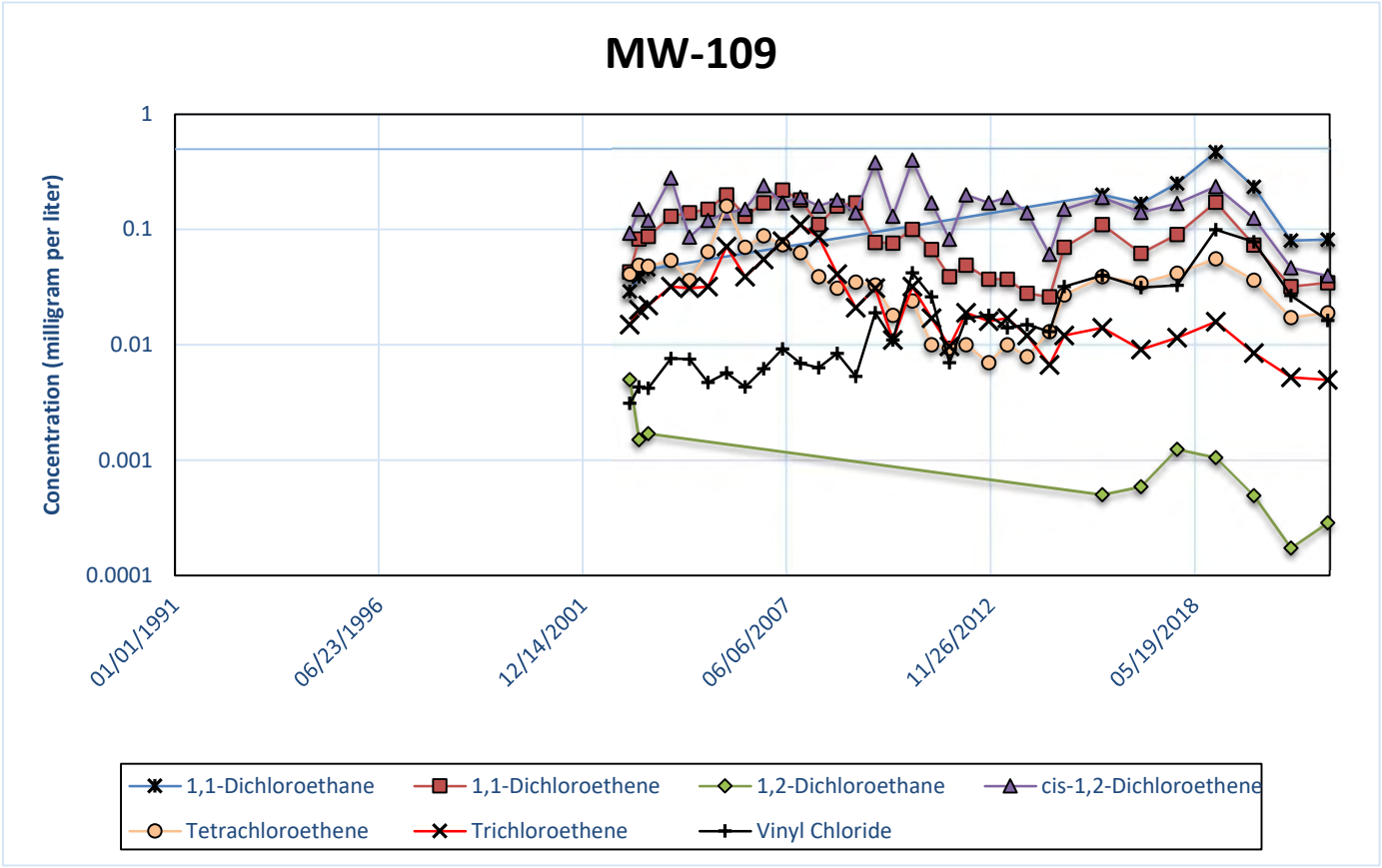
MW-106

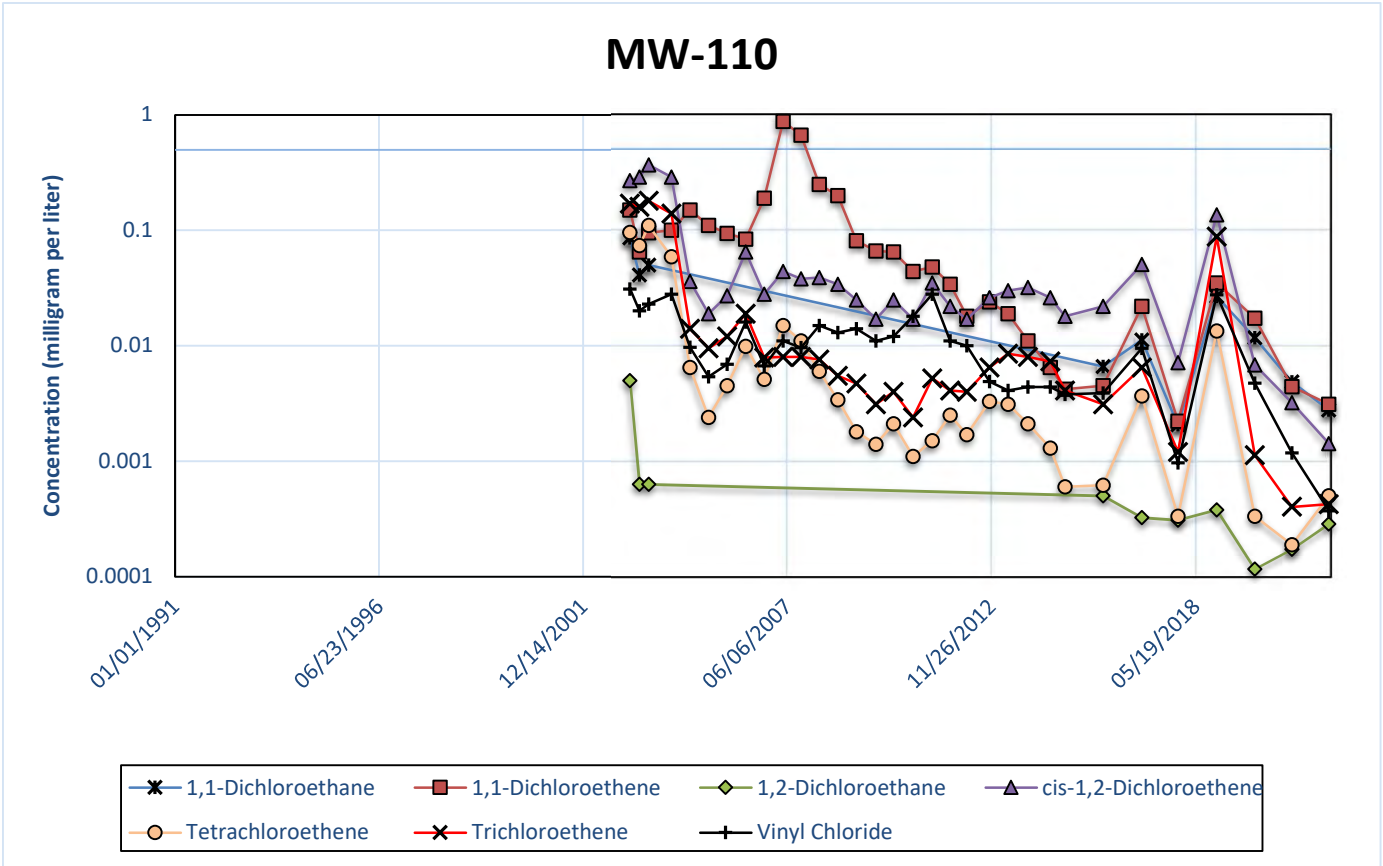


MW-108



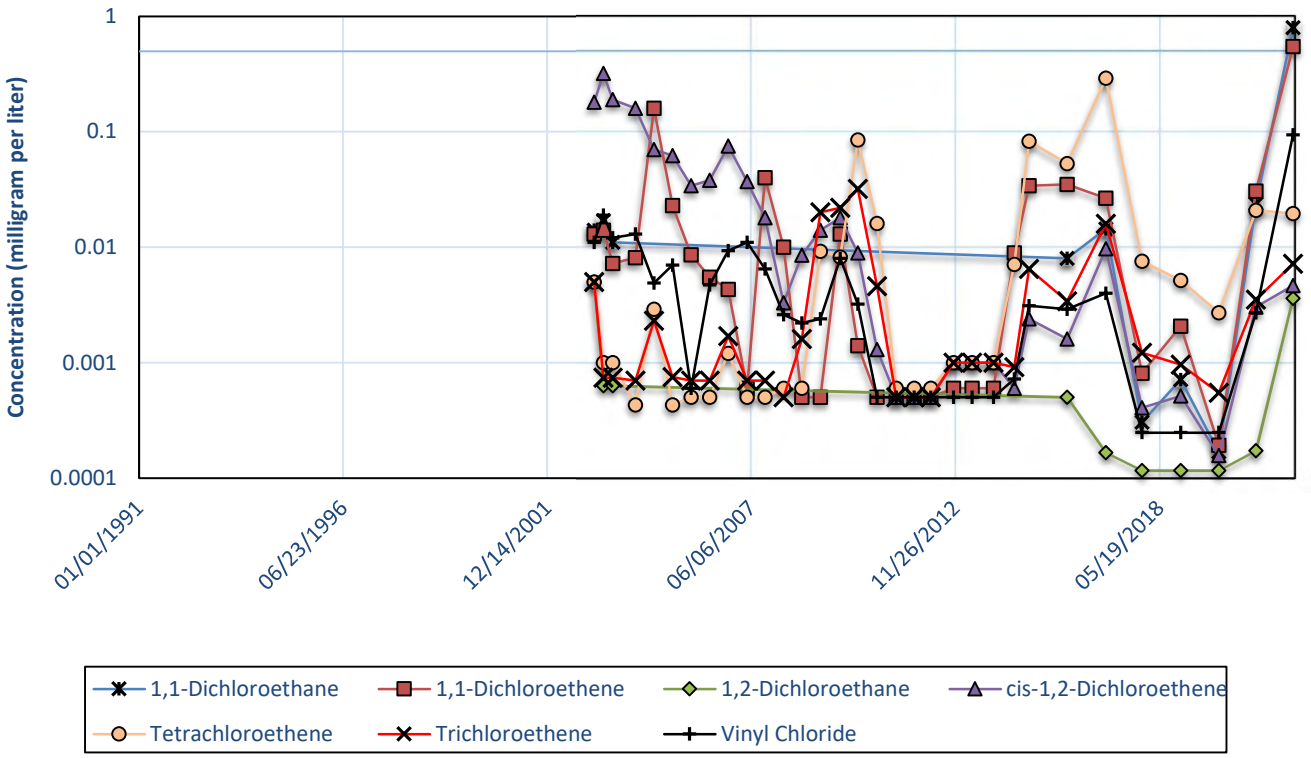
Appendix D
Concentration versus Time Graphs



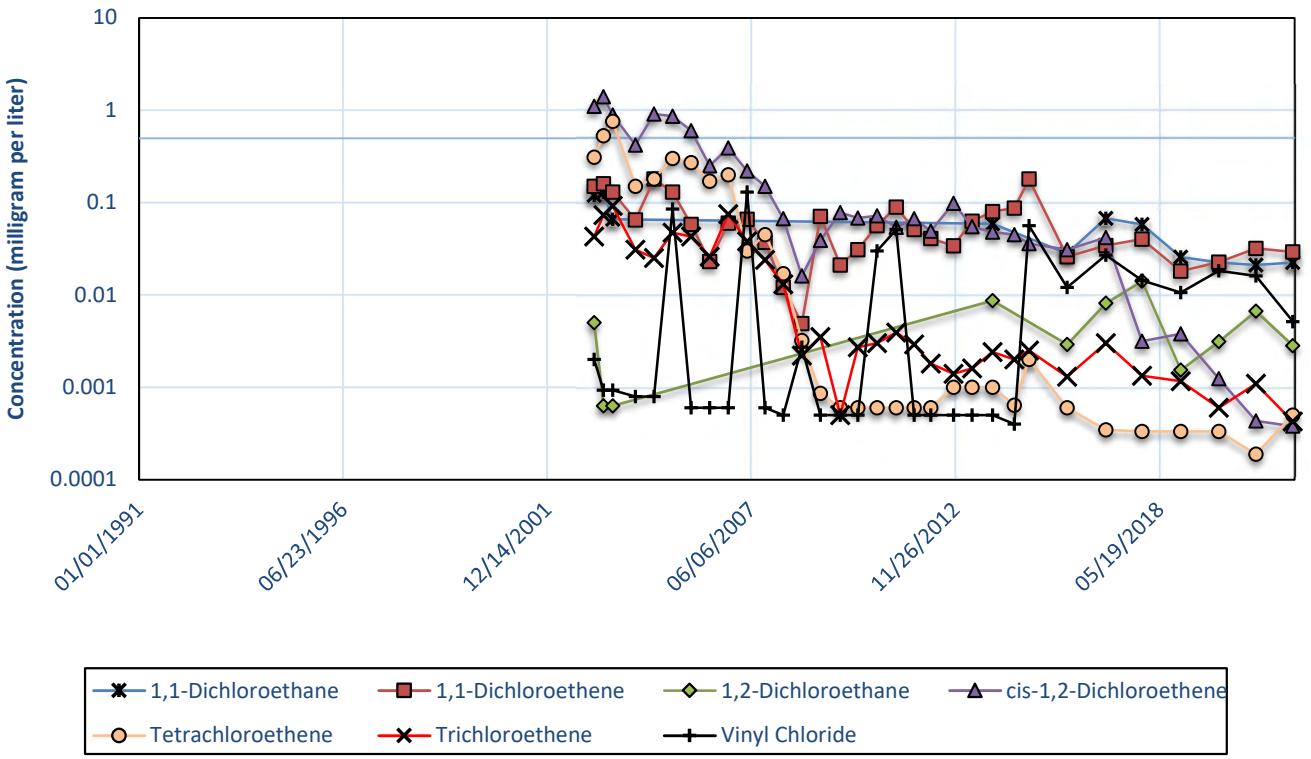


Appendix D
Concentration versus Time Graphs

MW-111

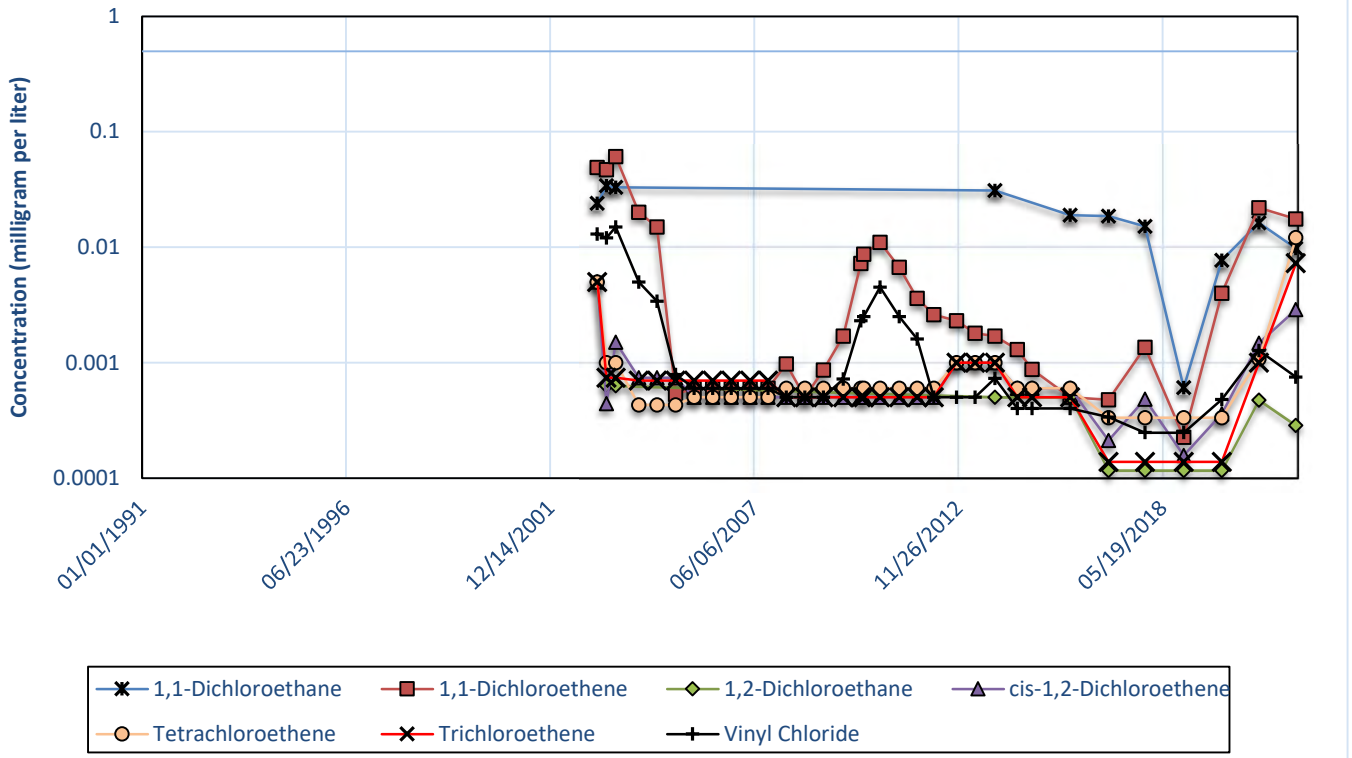


MW-112

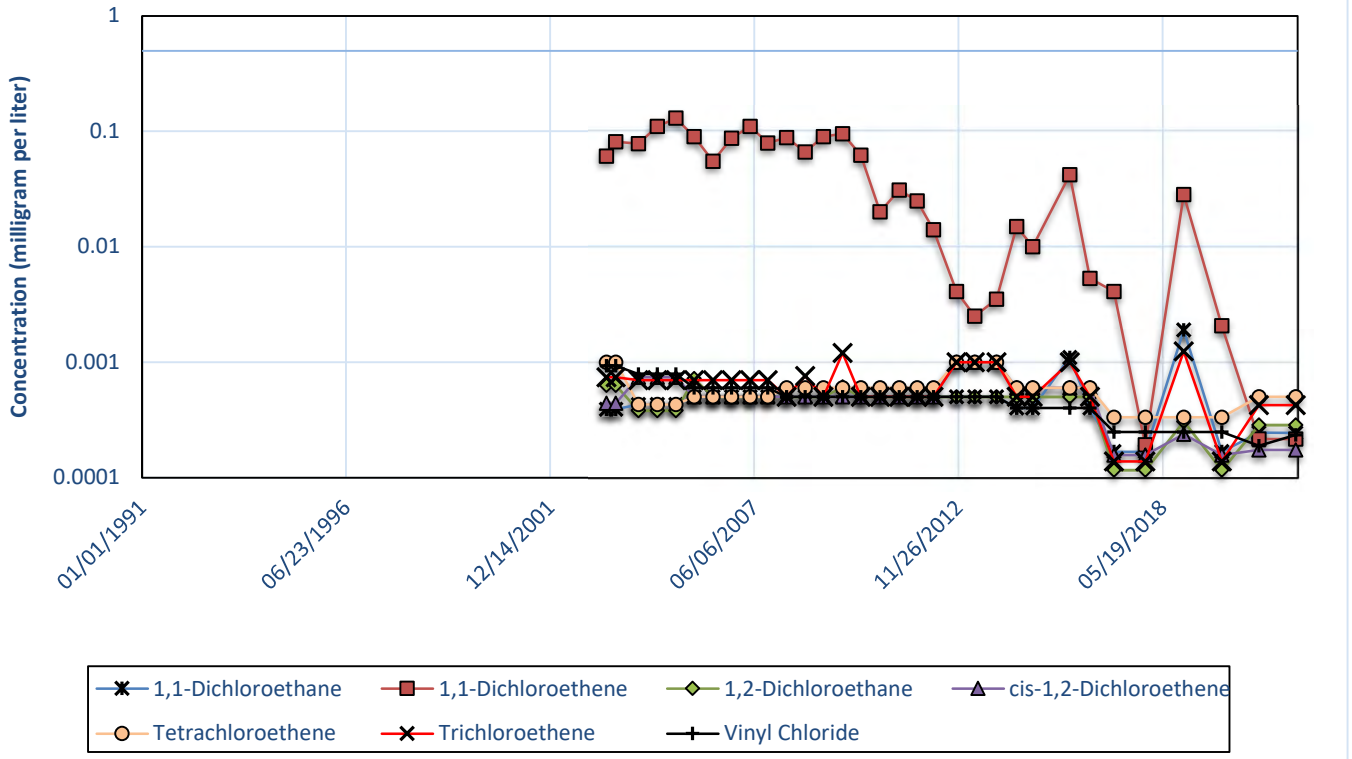


Appendix D
Concentration versus Time Graphs

MW-113

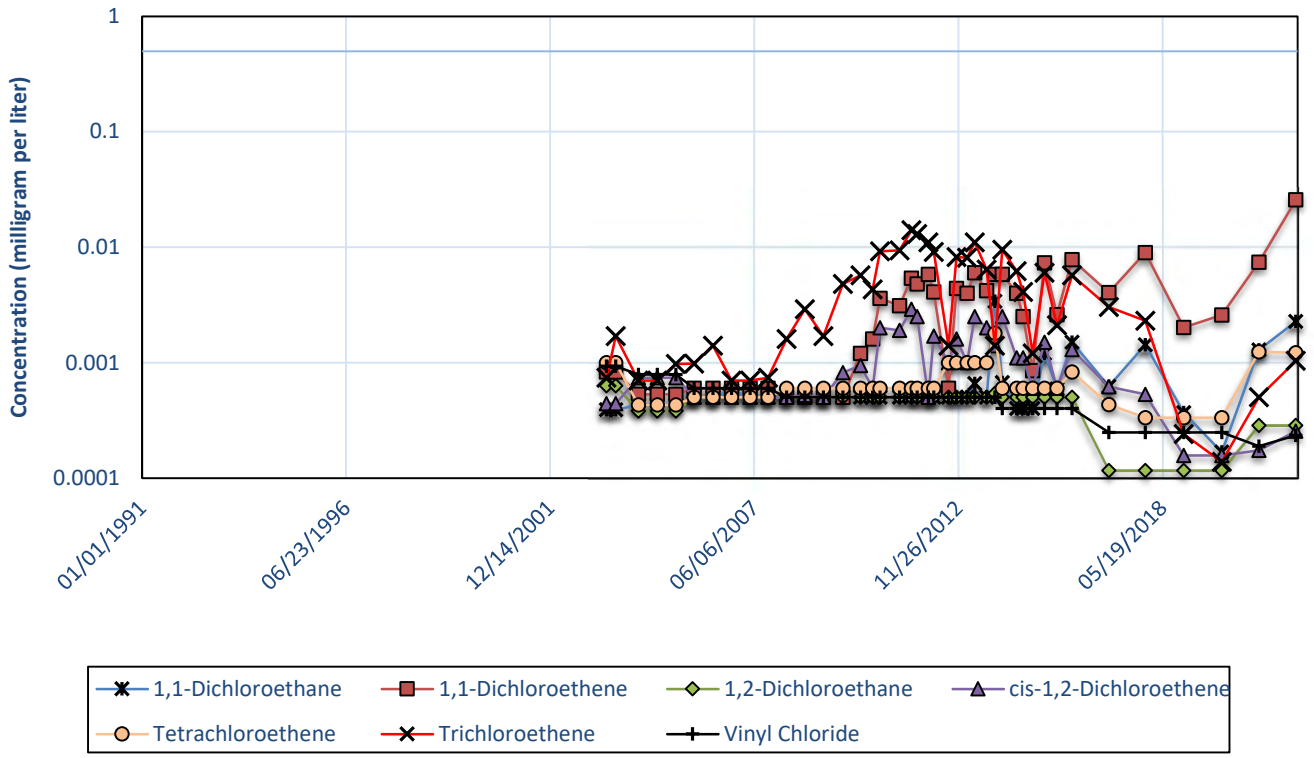


MW-121

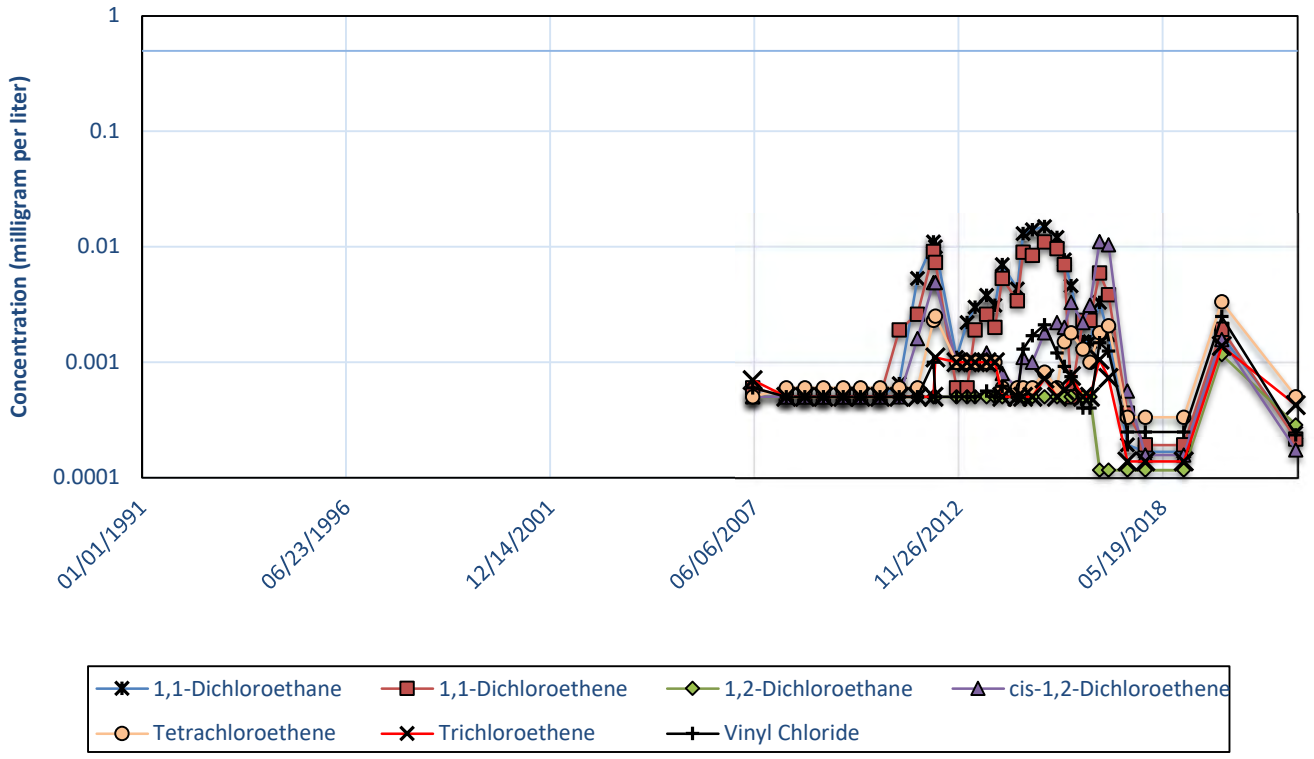


Appendix D
Concentration versus Time Graphs

MW-122

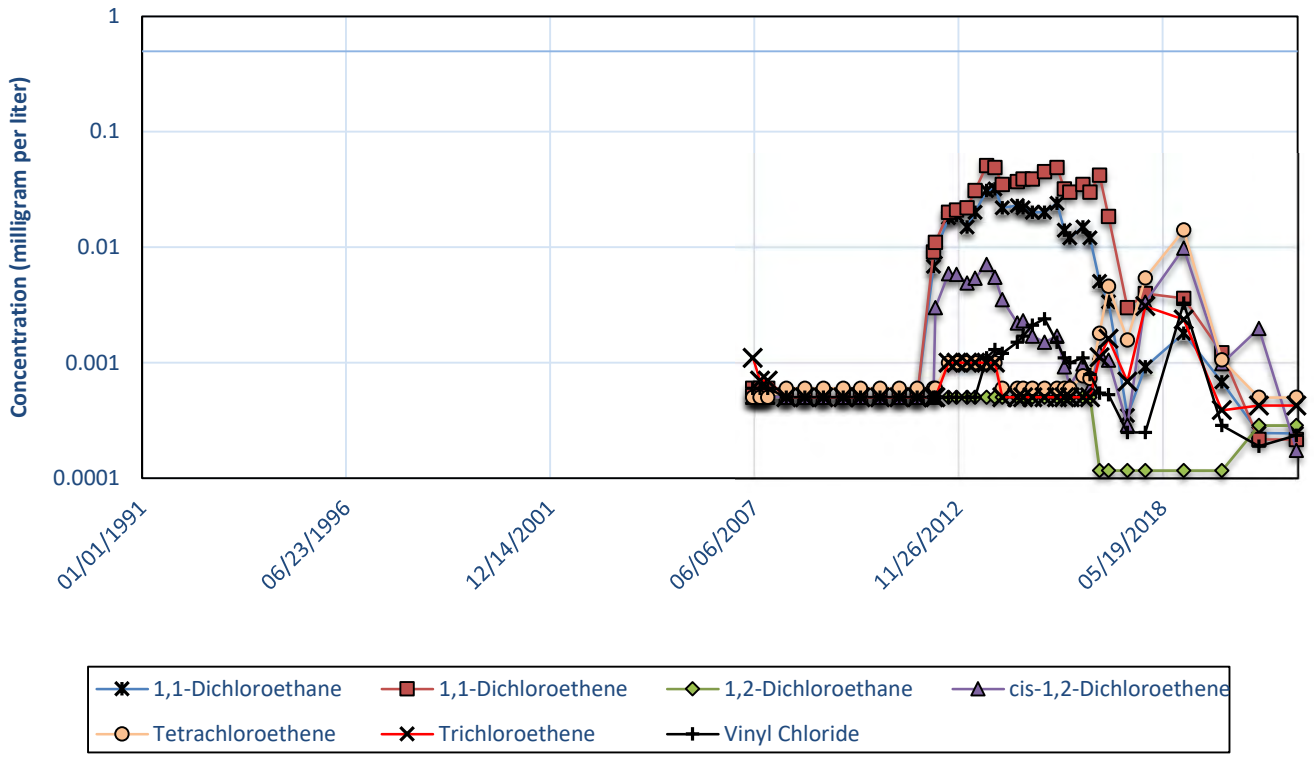


MW-145

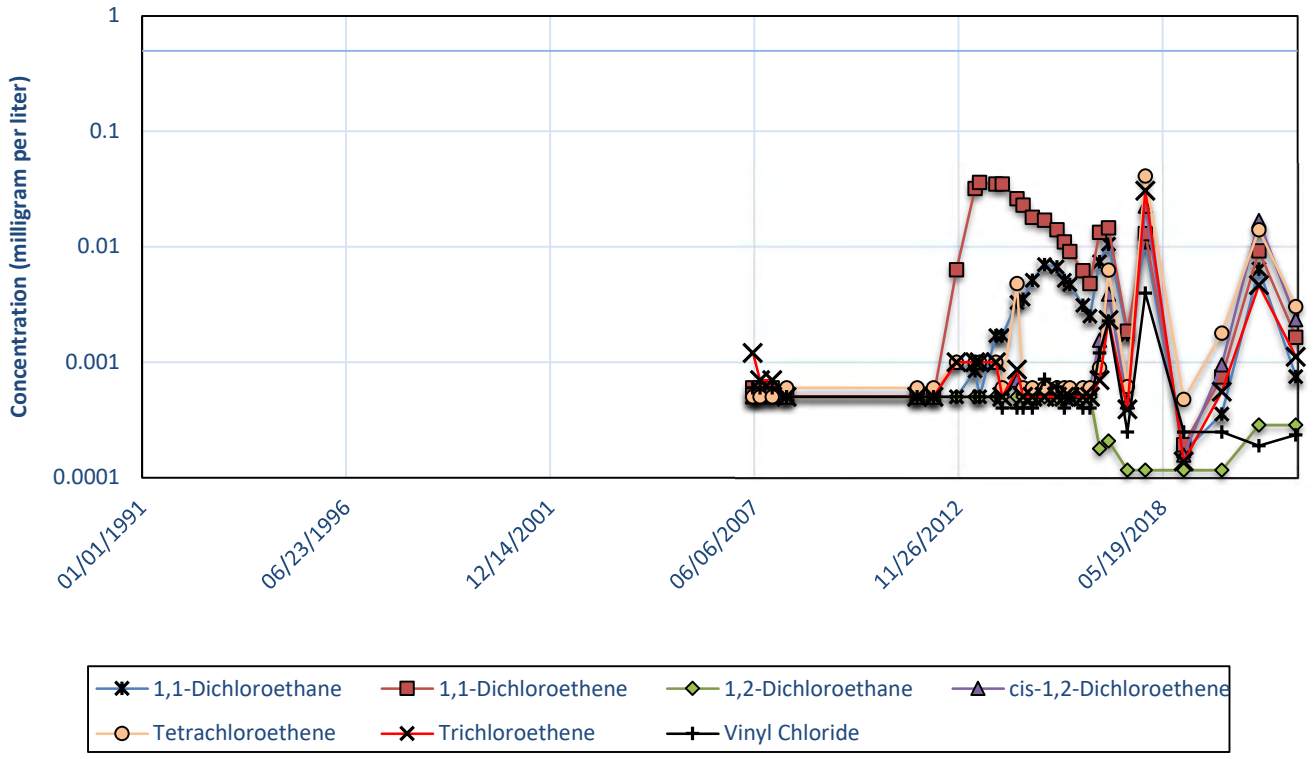


Appendix D
Concentration versus Time Graphs

MW-146

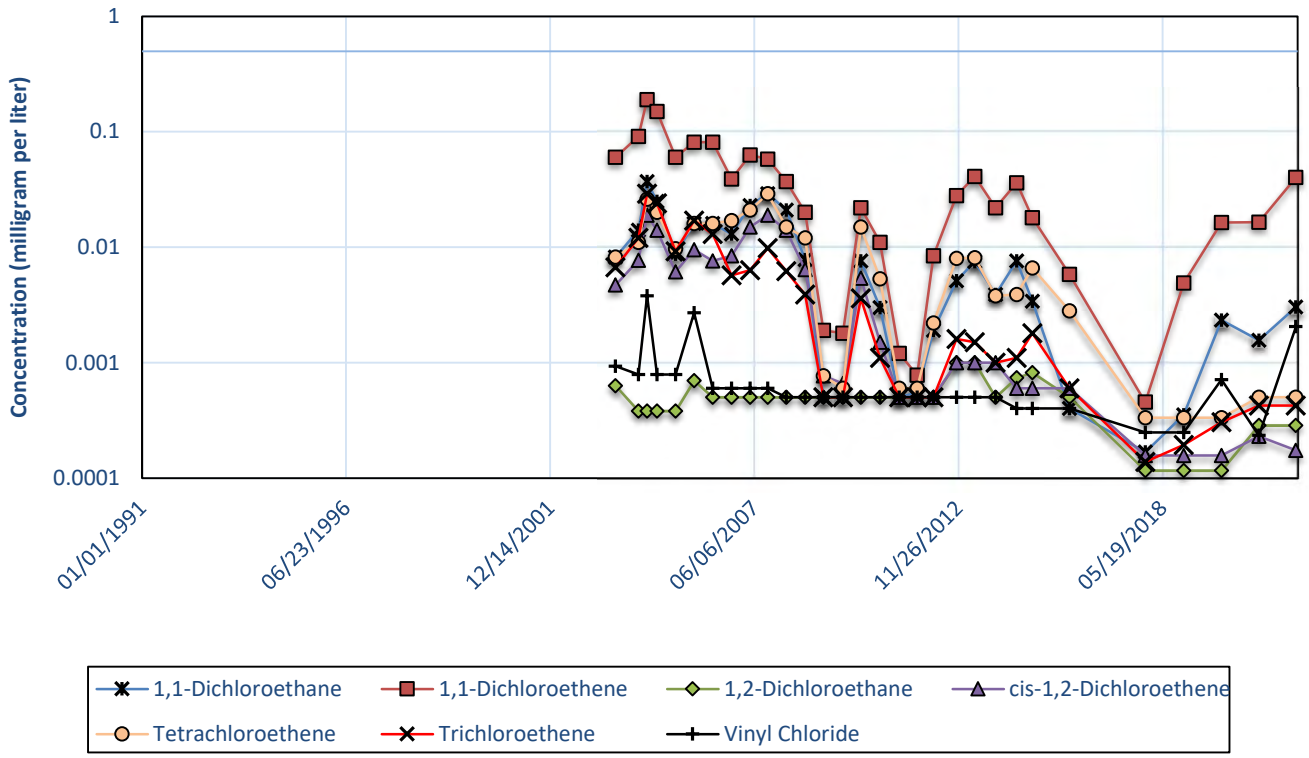


MW-147

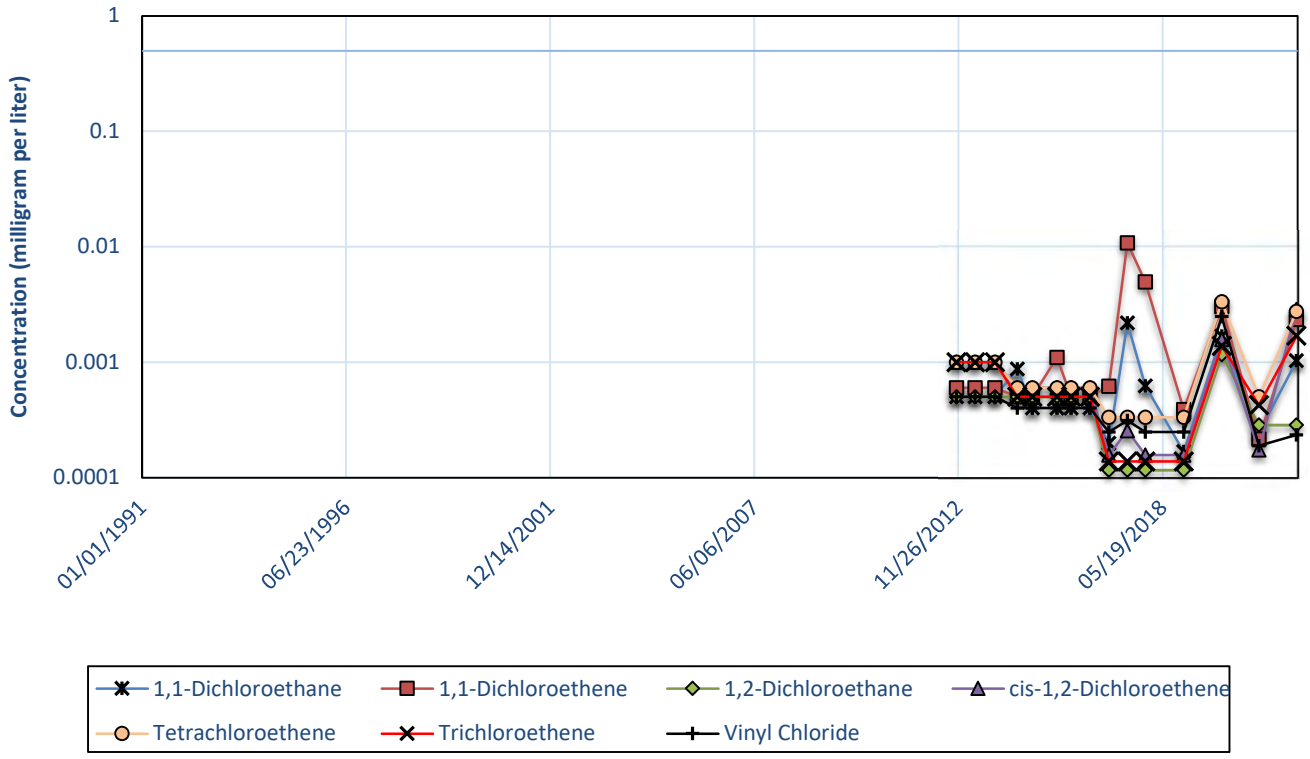


Appendix D
Concentration versus Time Graphs

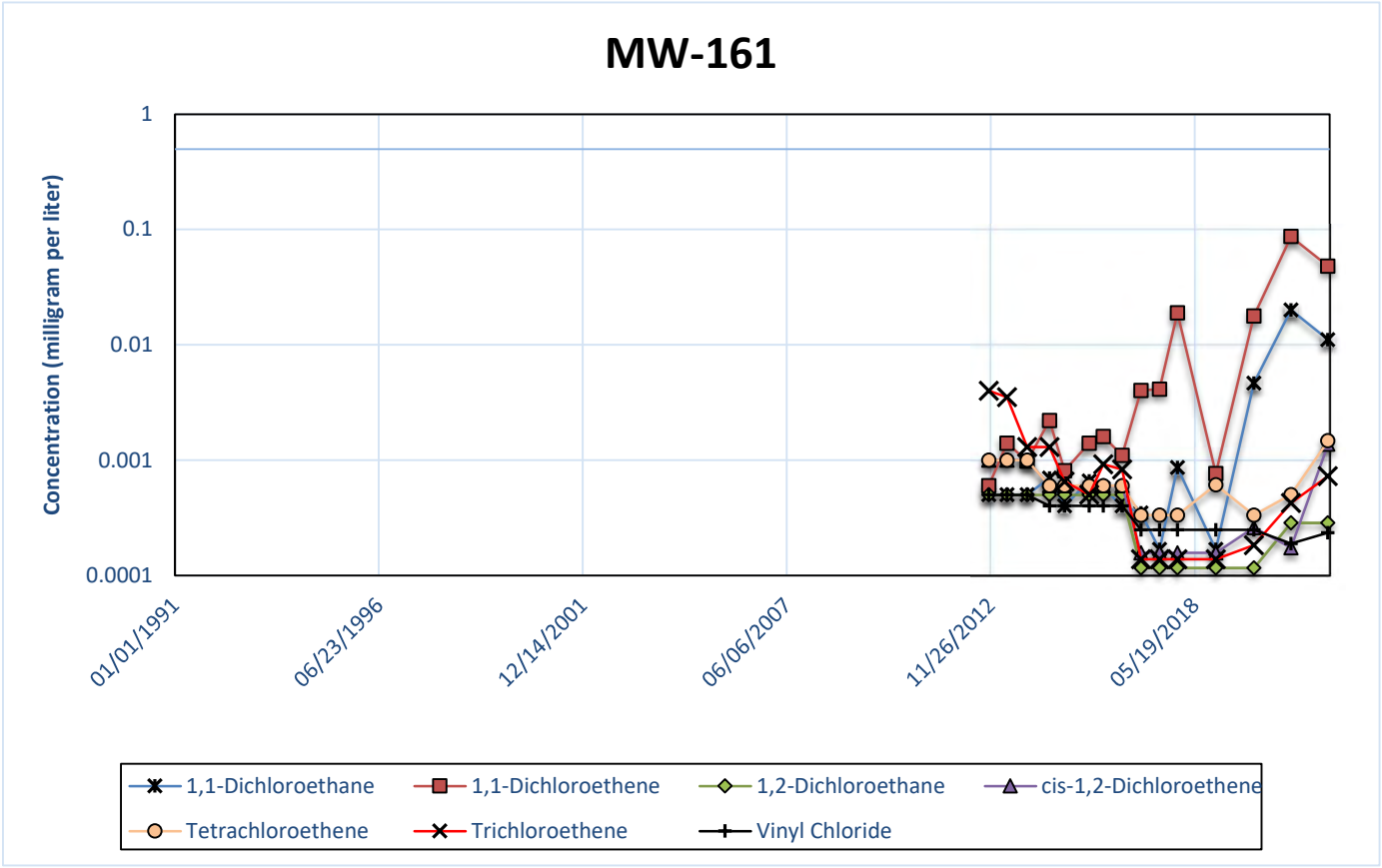
MW-15R

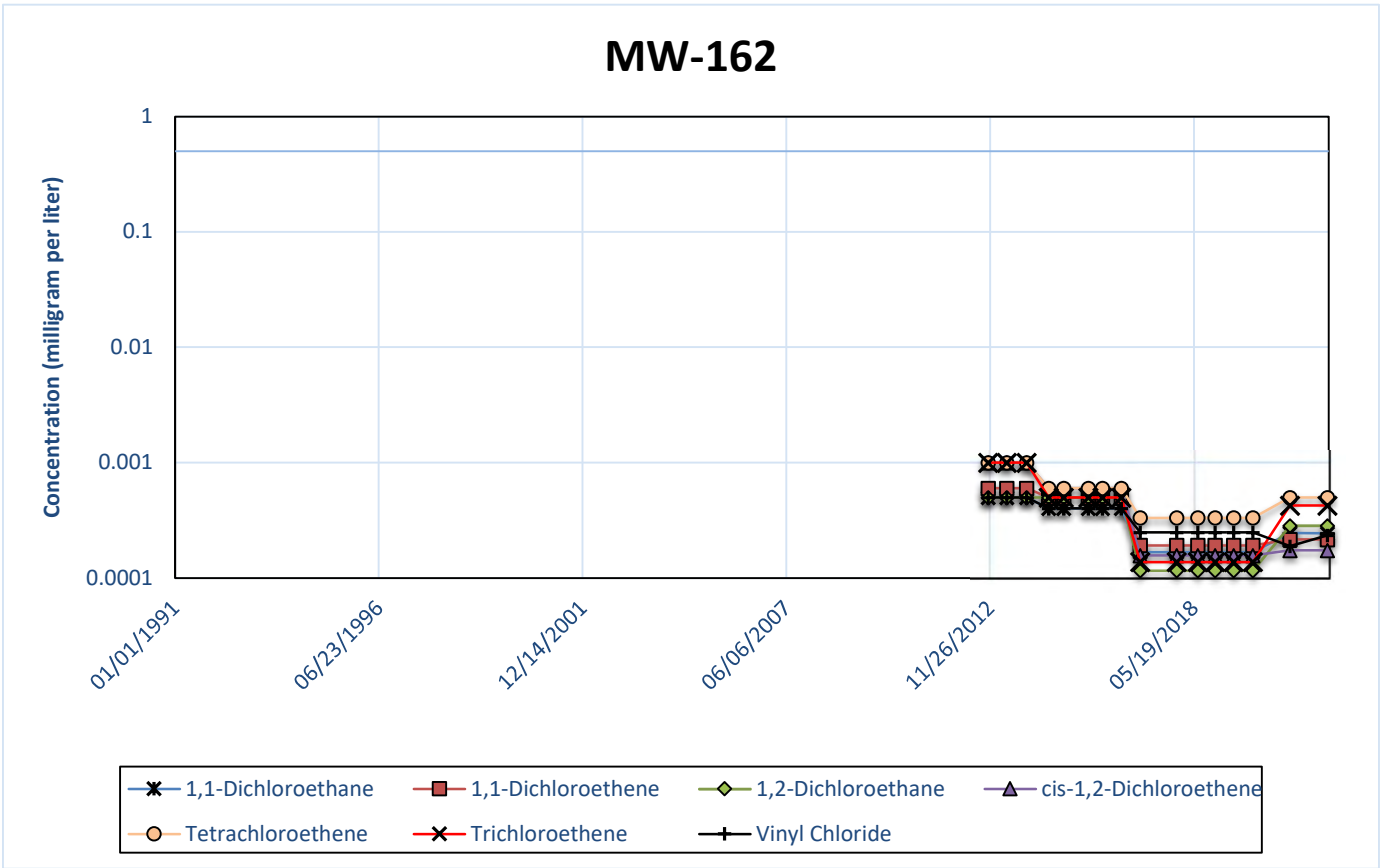


MW-160

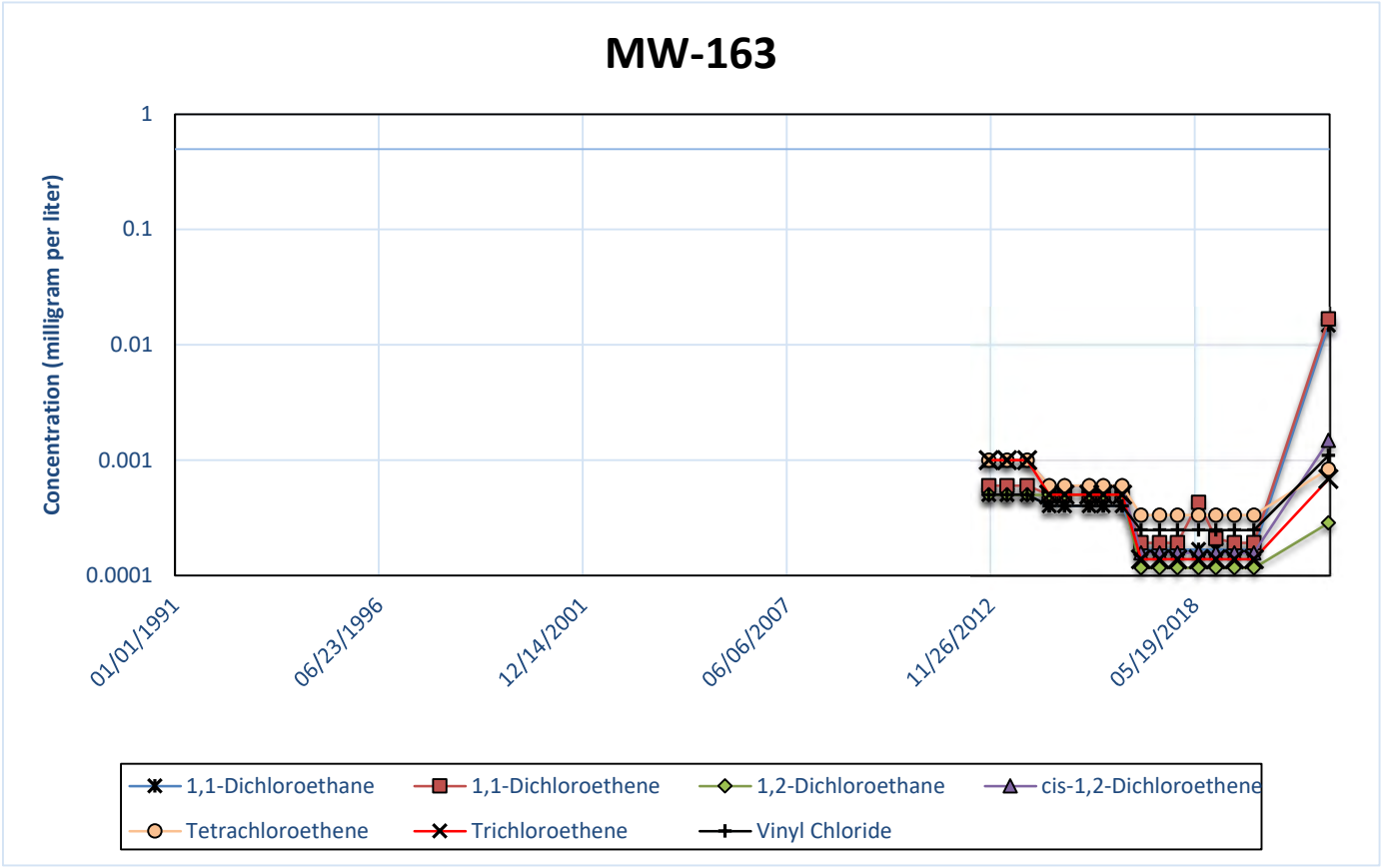


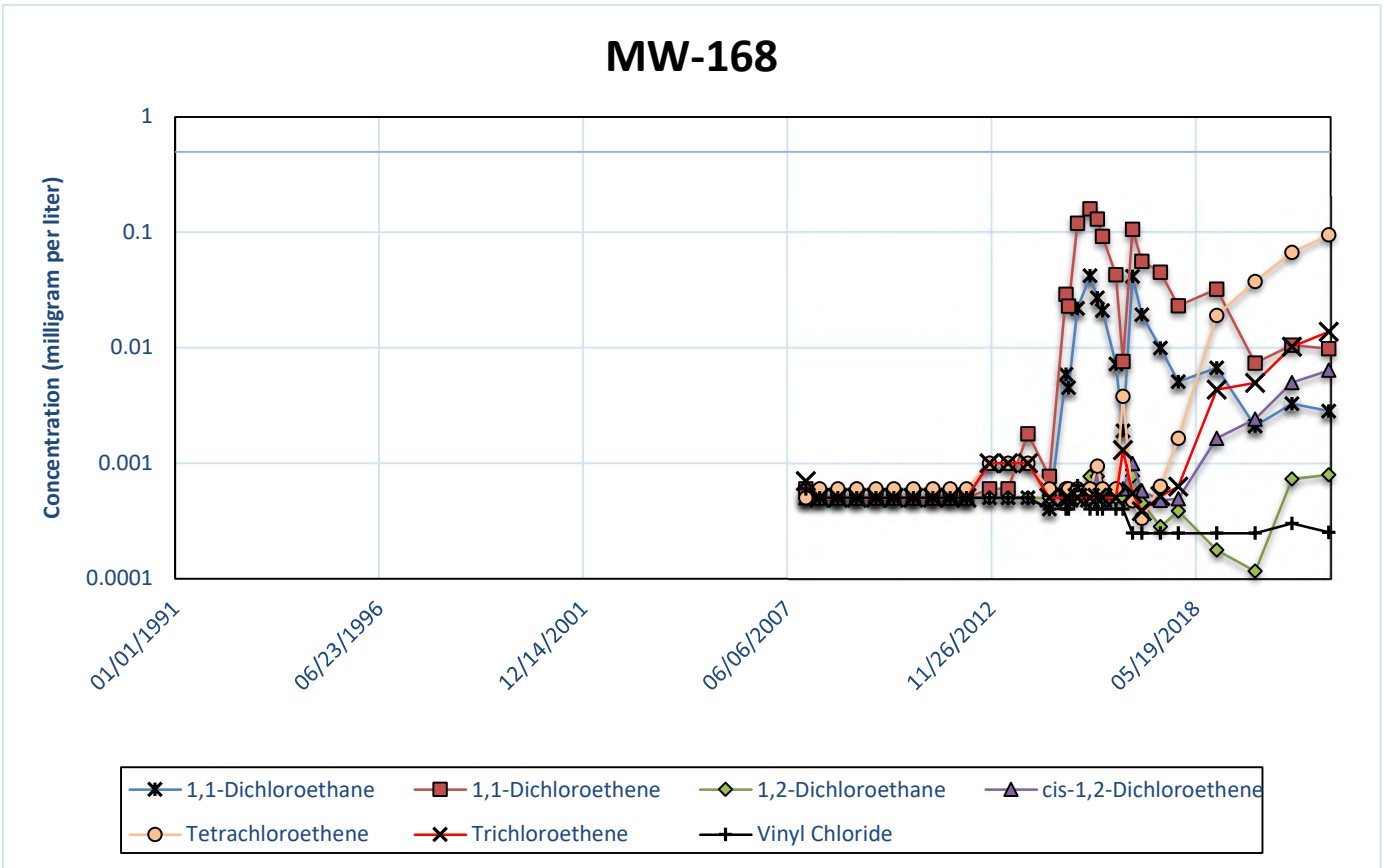
Appendix D
Concentration versus Time Graphs



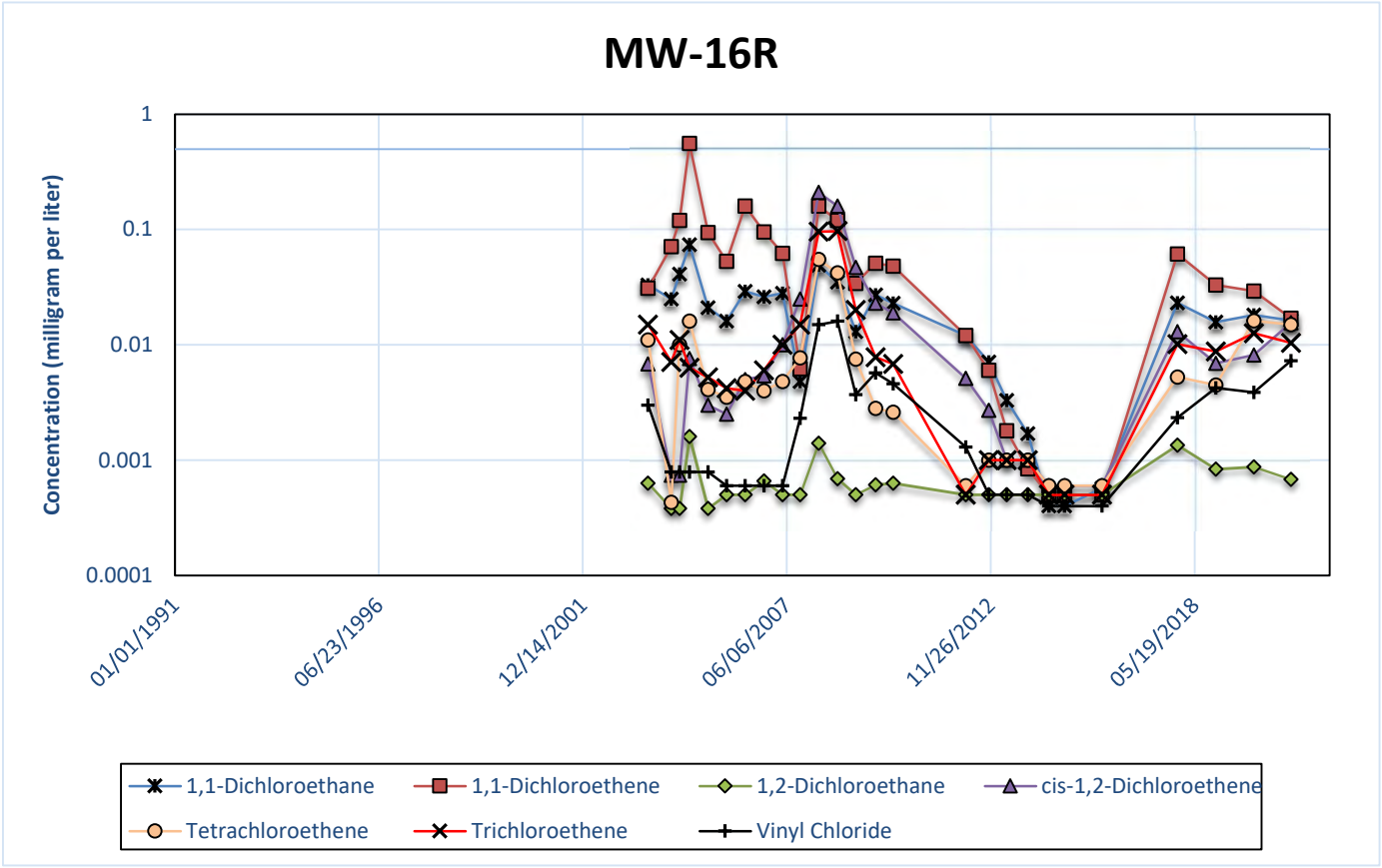


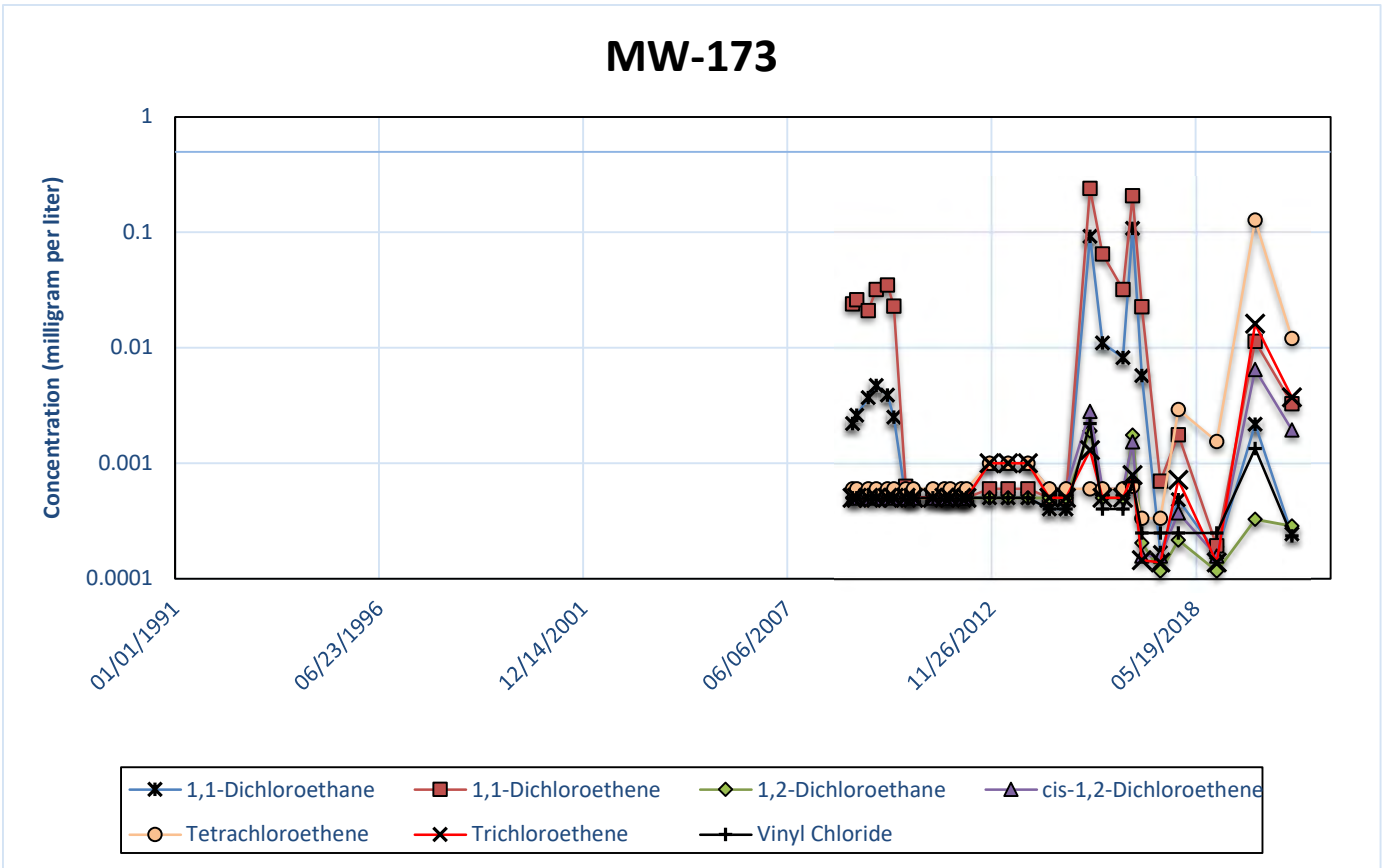
Appendix D
Concentration versus Time Graphs



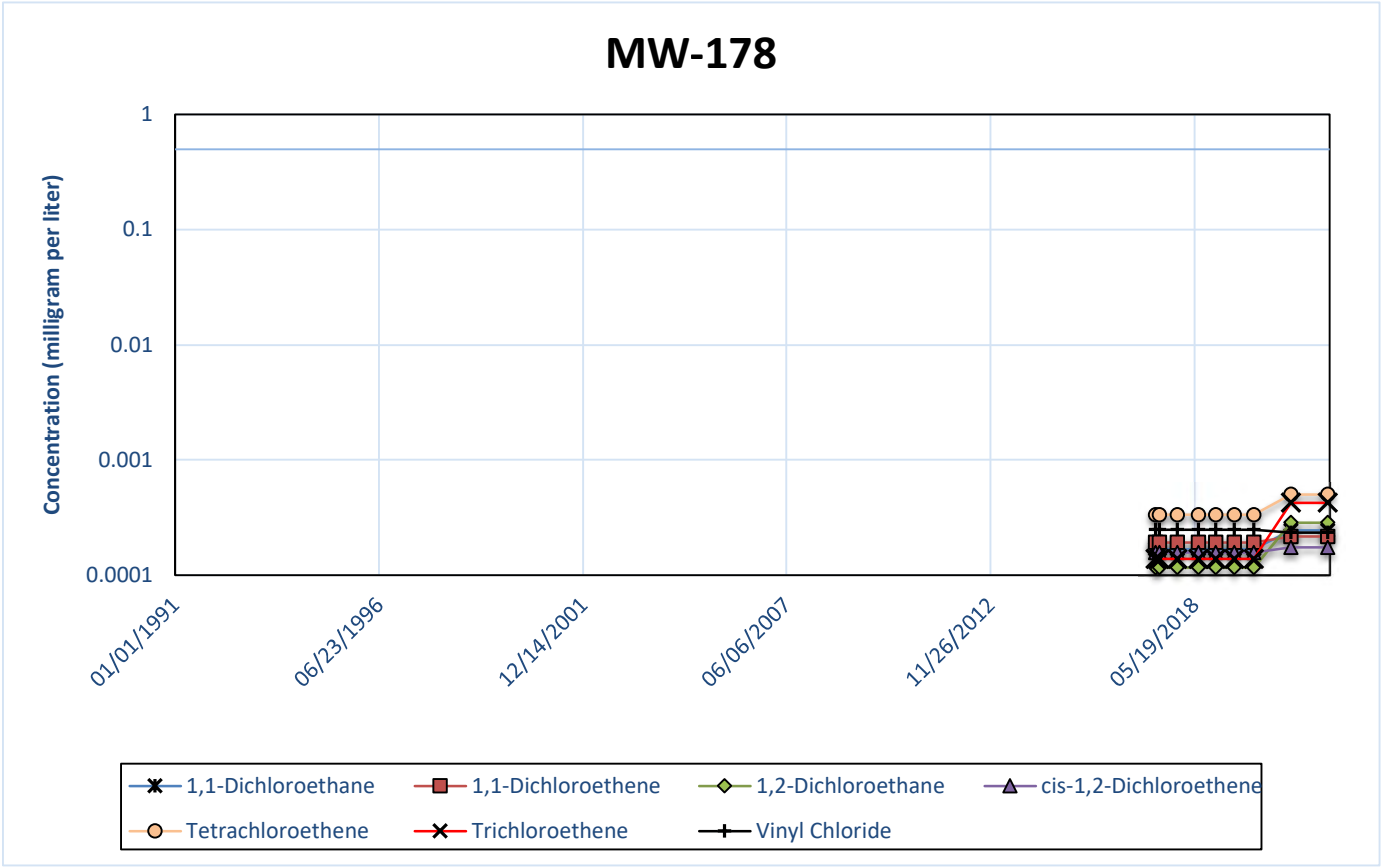


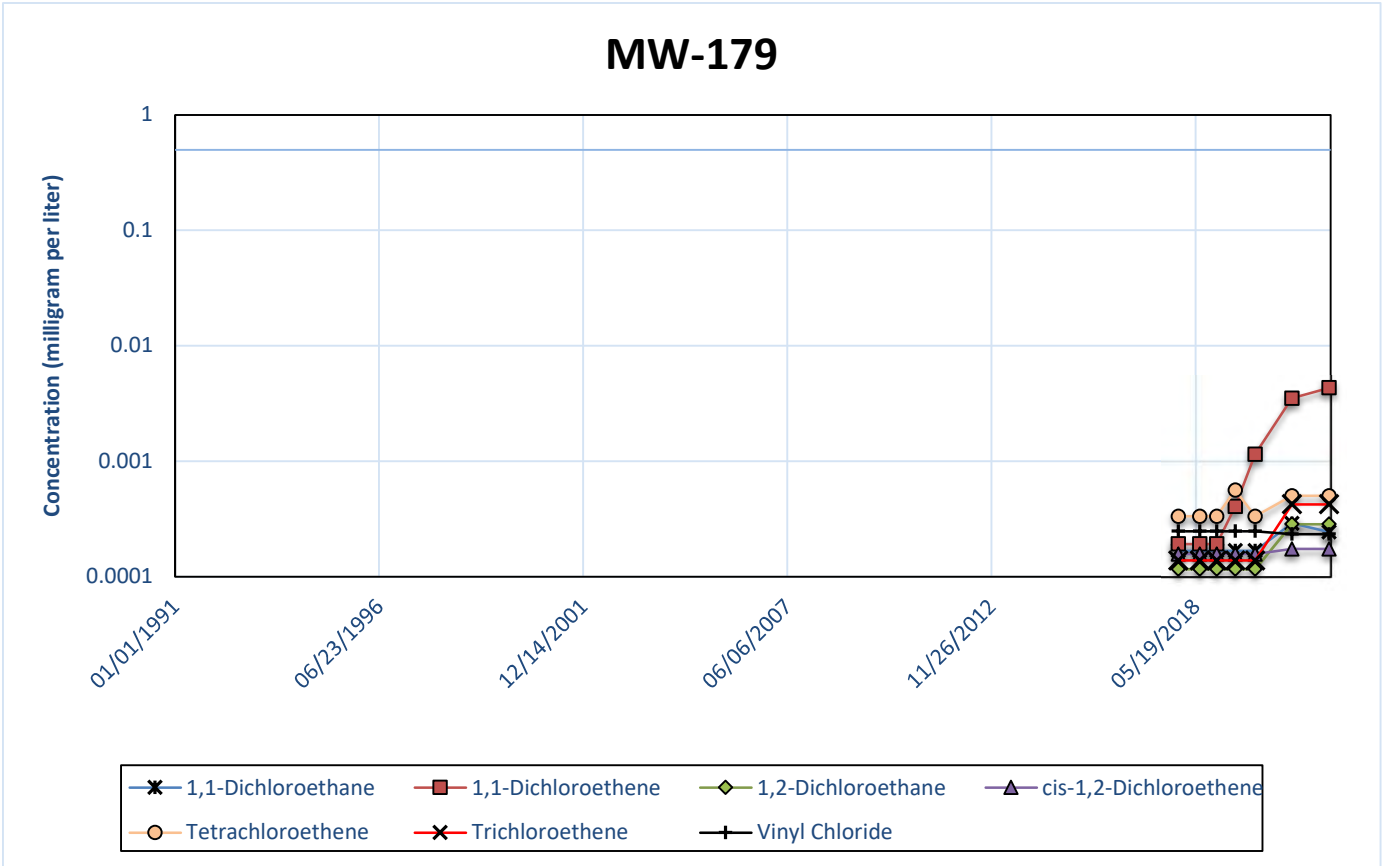
Appendix D
Concentration versus Time Graphs



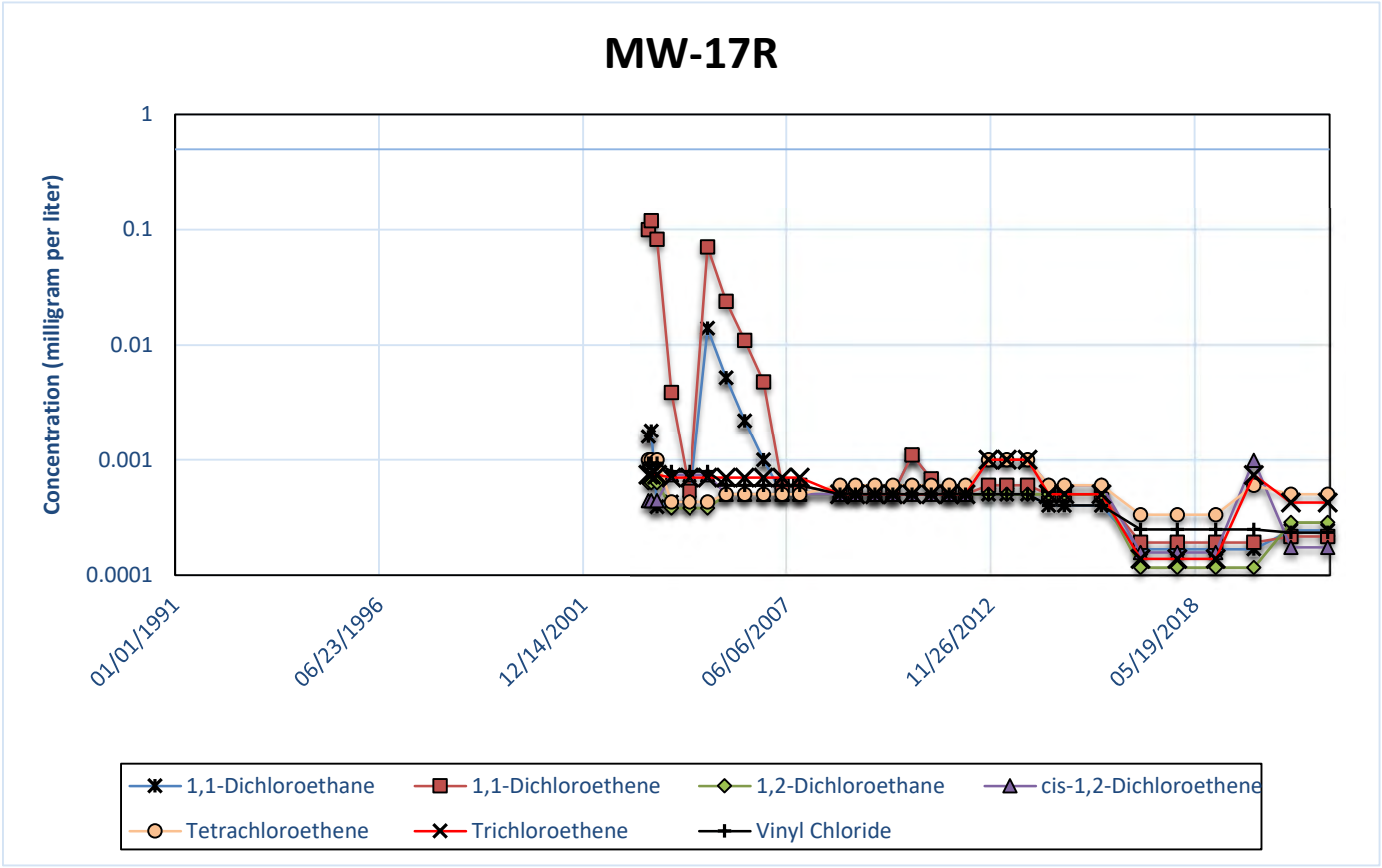


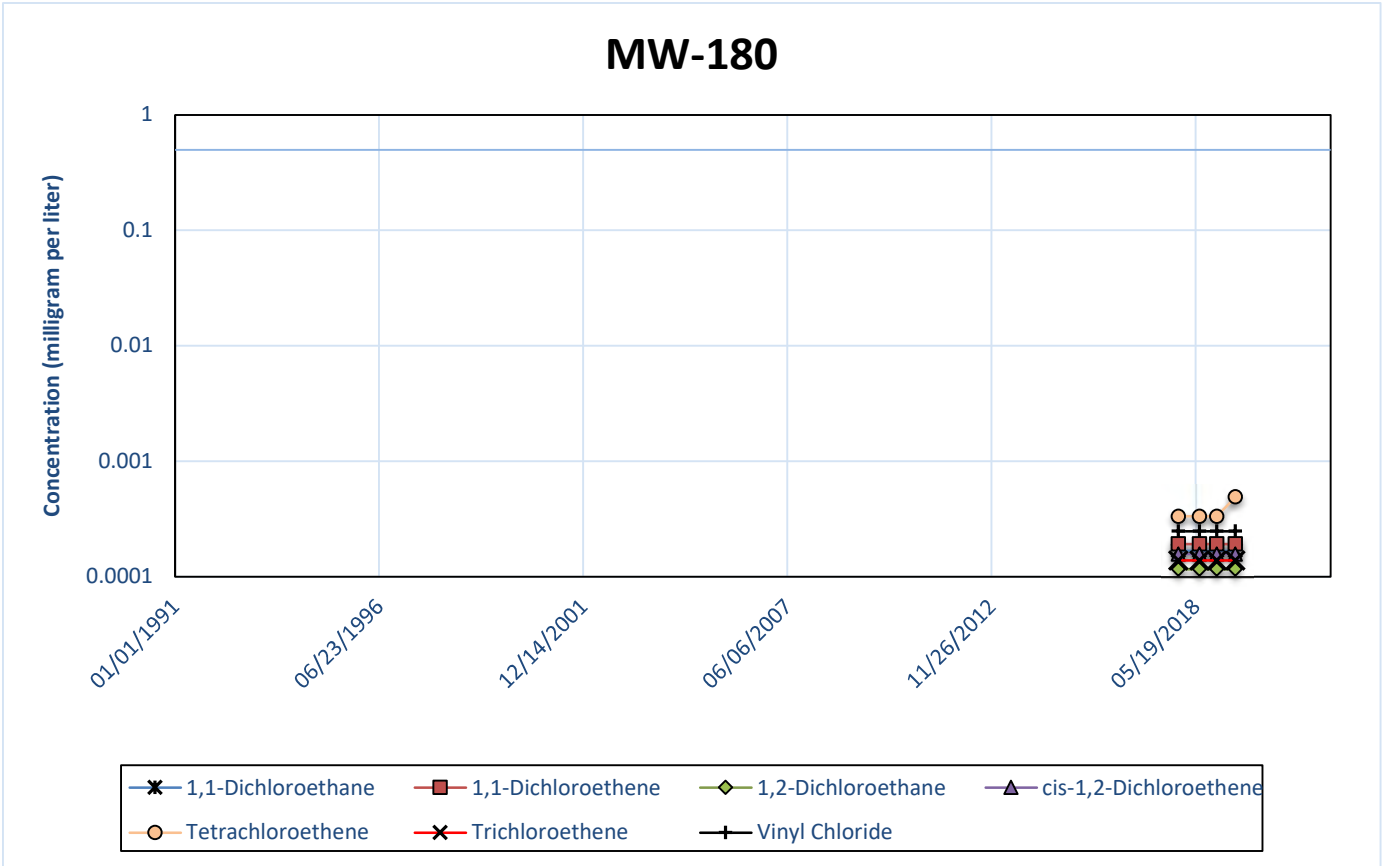
Appendix D
Concentration versus Time Graphs





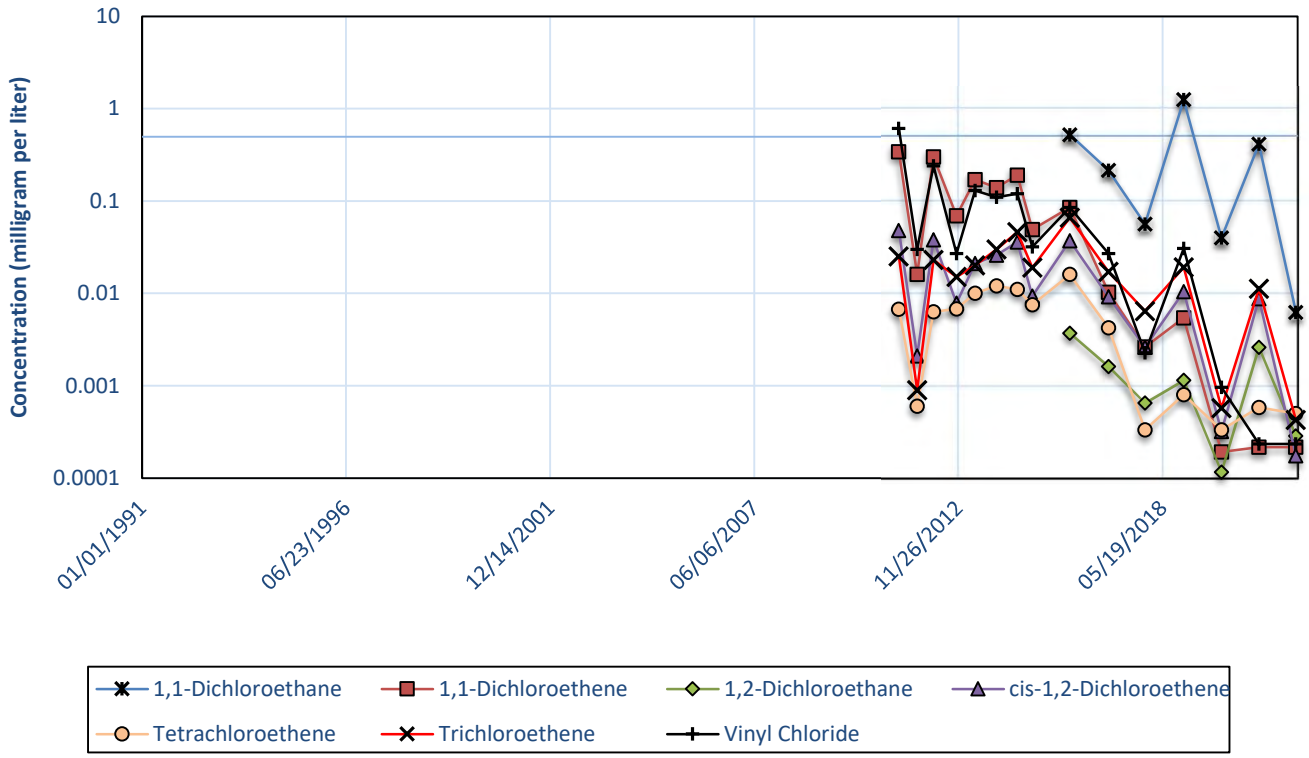
Appendix D
Concentration versus Time Graphs



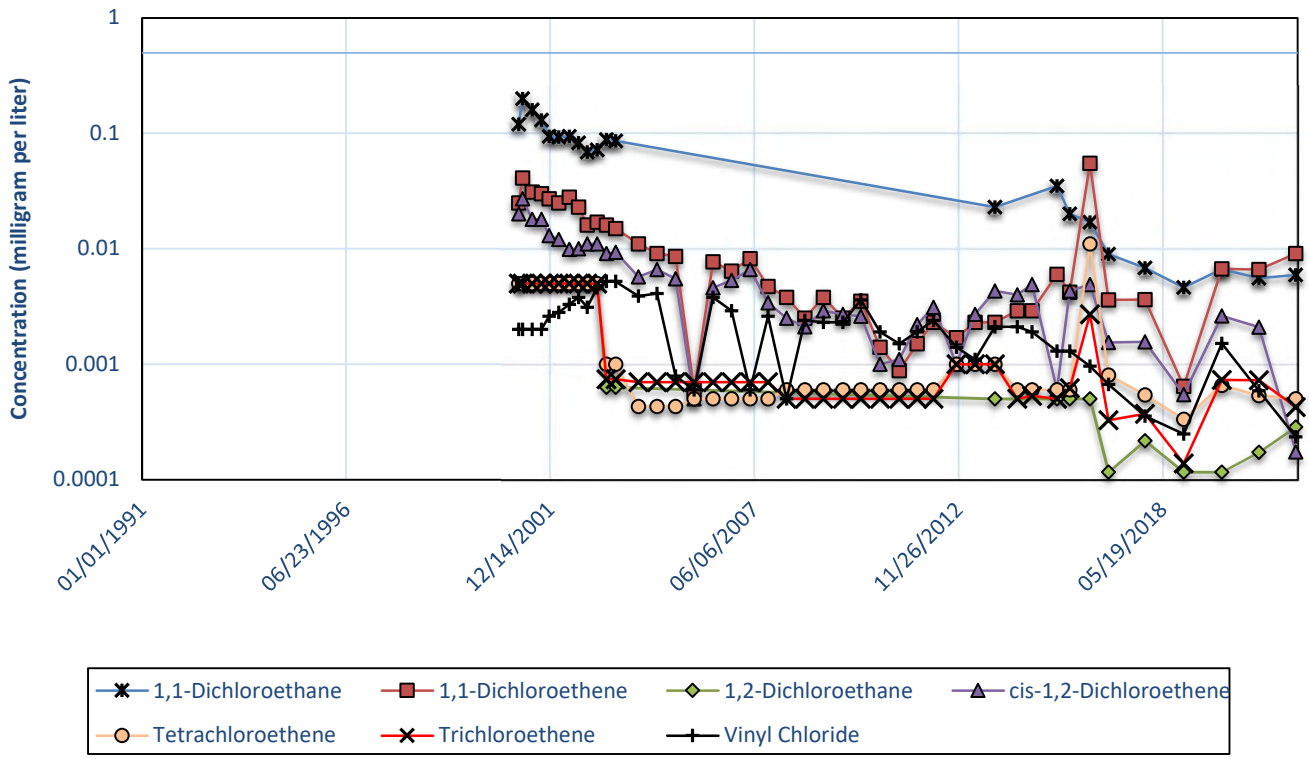


Appendix D
Concentration versus Time Graphs

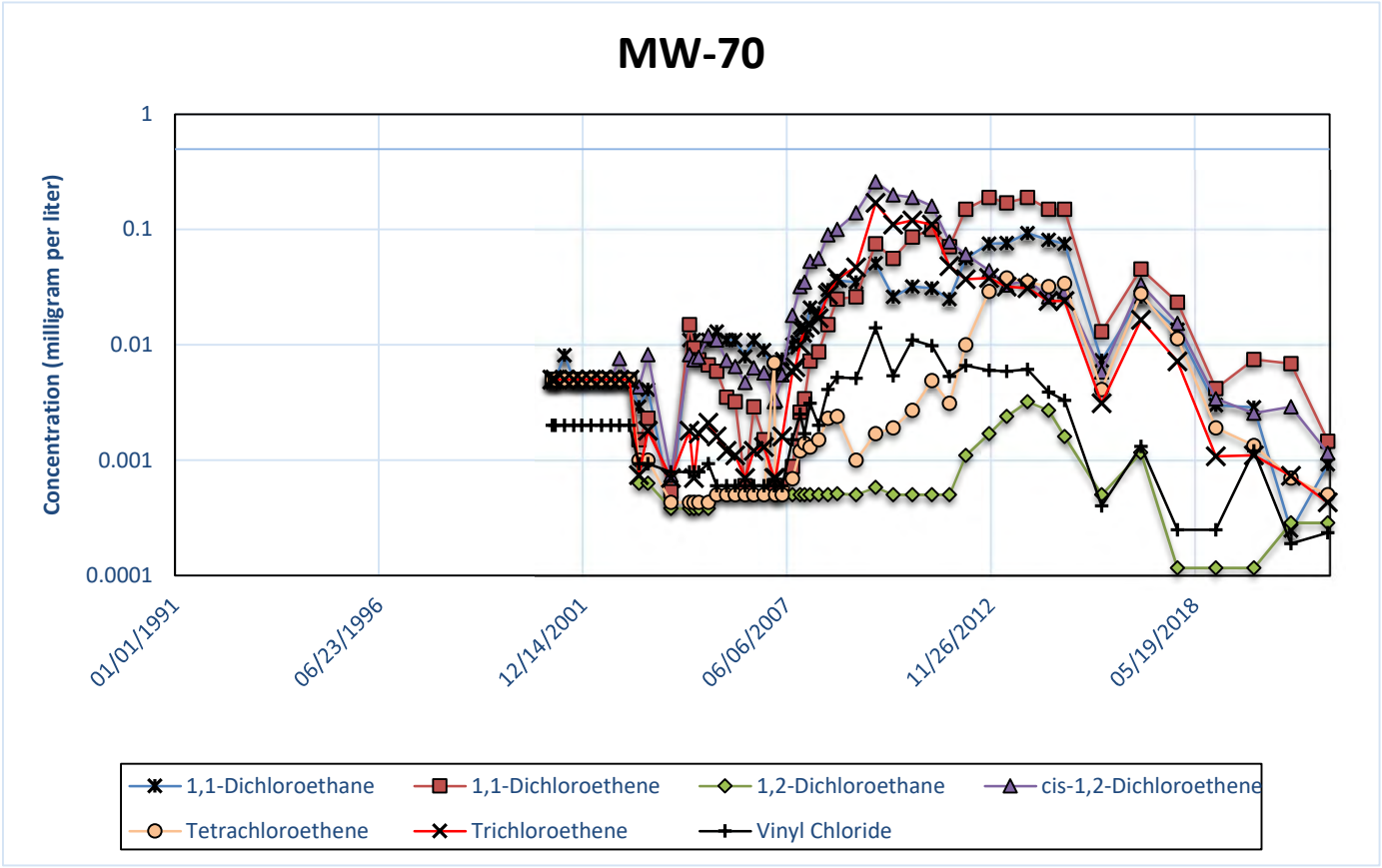
MW-50R

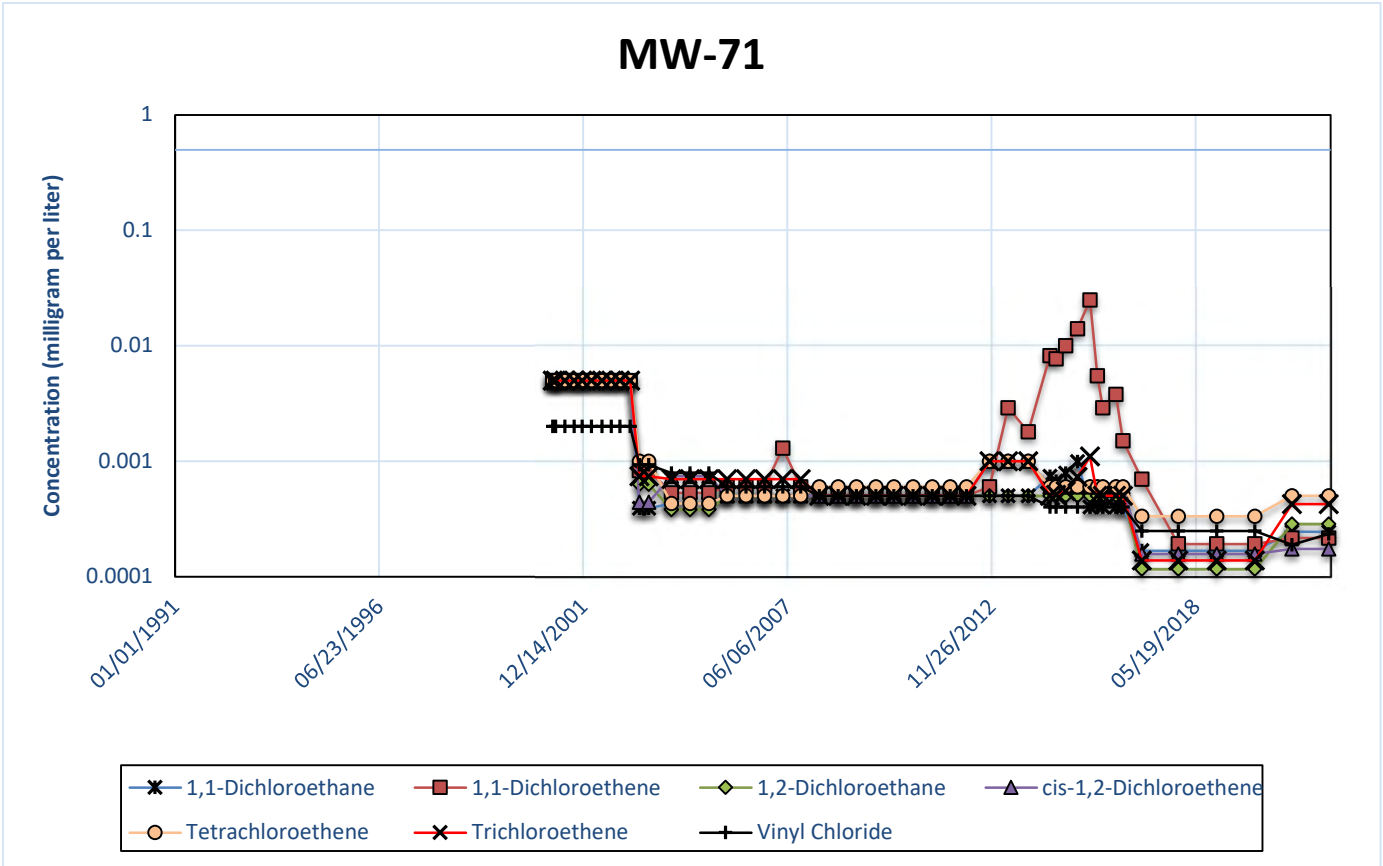


MW-65



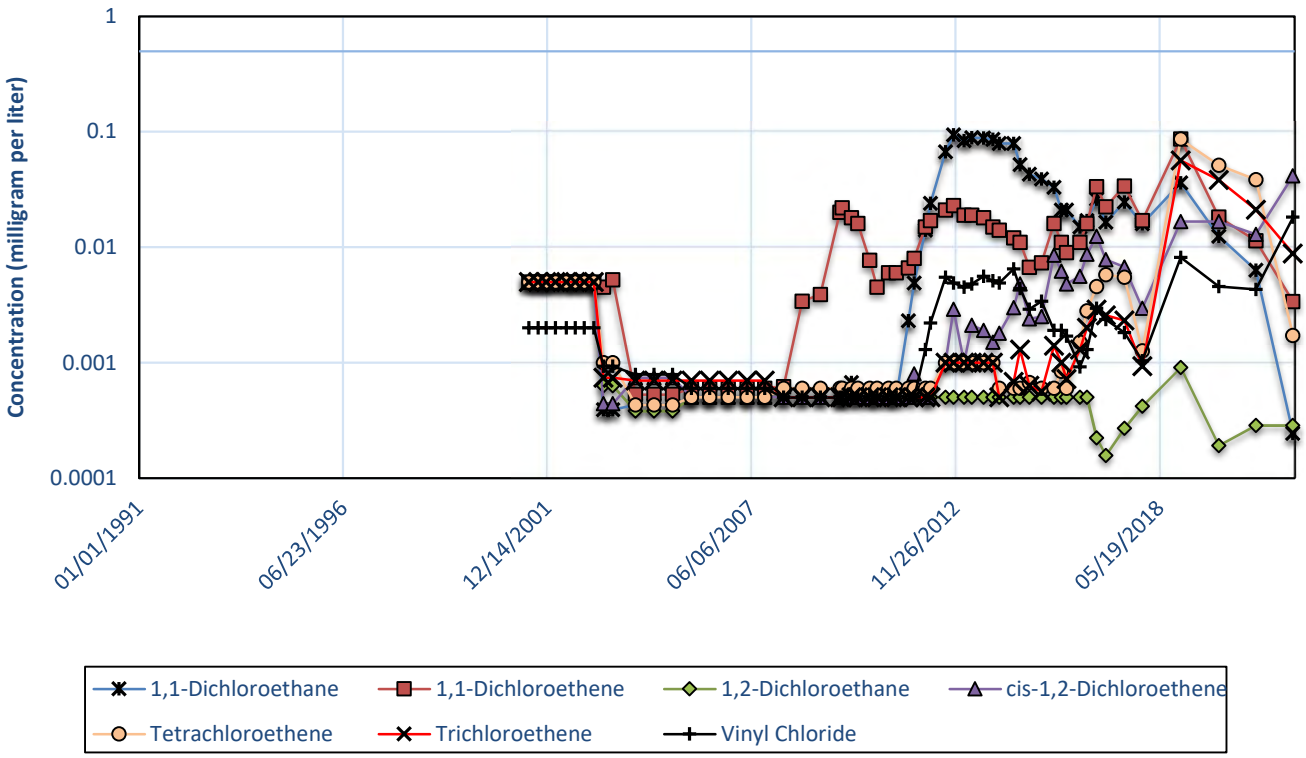
Appendix D
Concentration versus Time Graphs



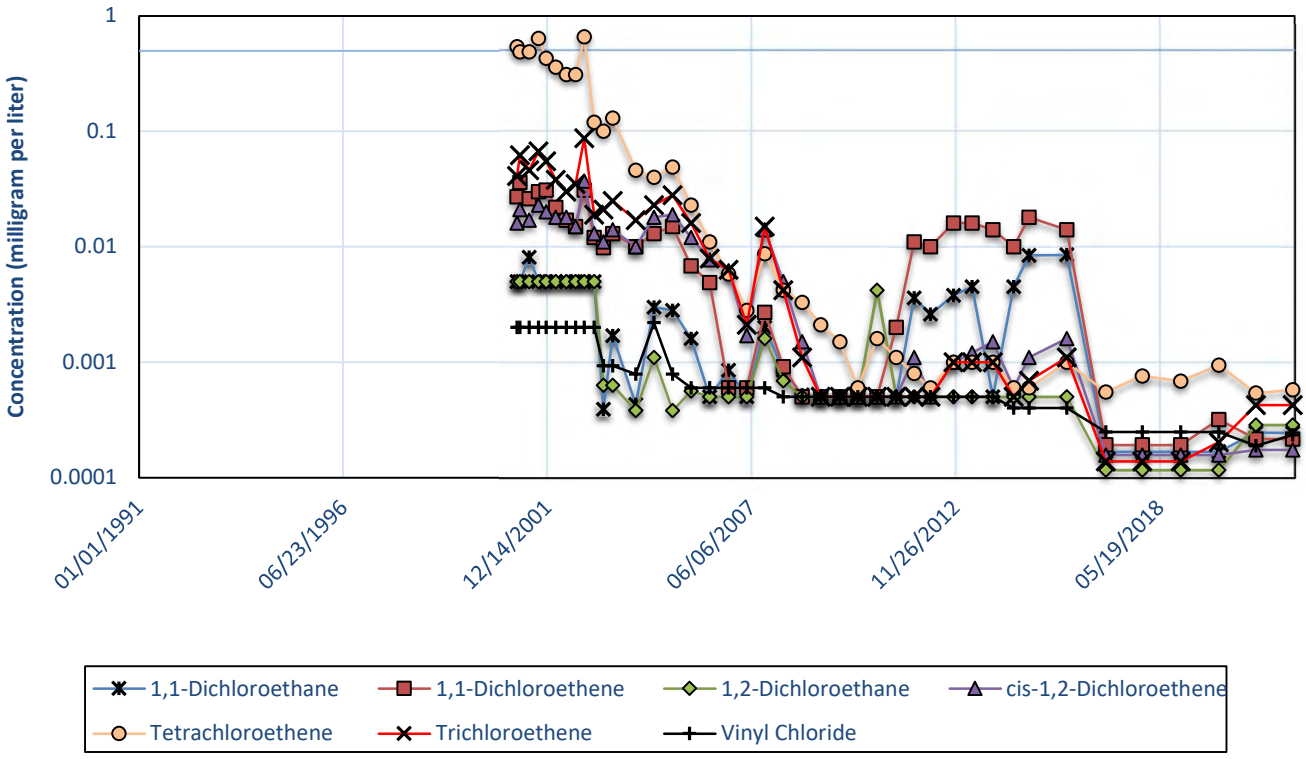


Appendix D
Concentration versus Time Graphs

MW-74

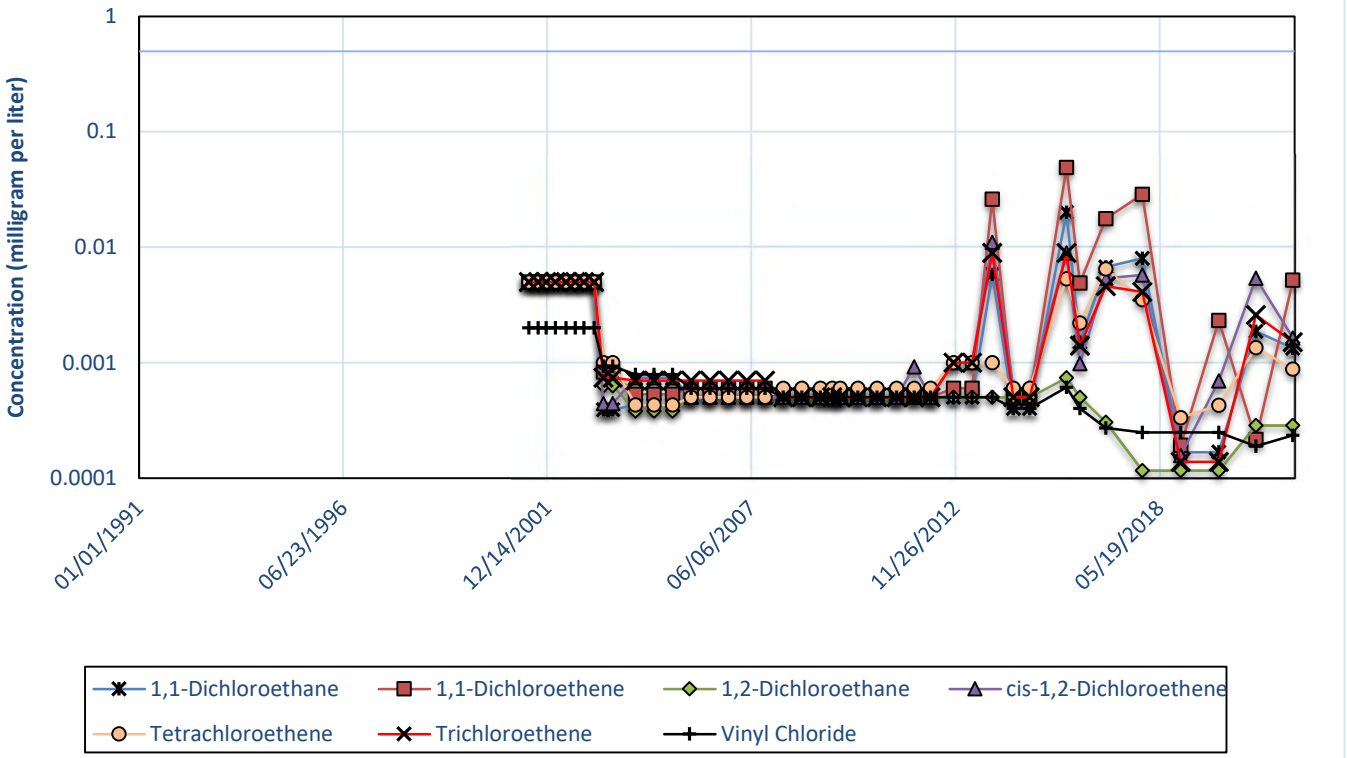


MW-76

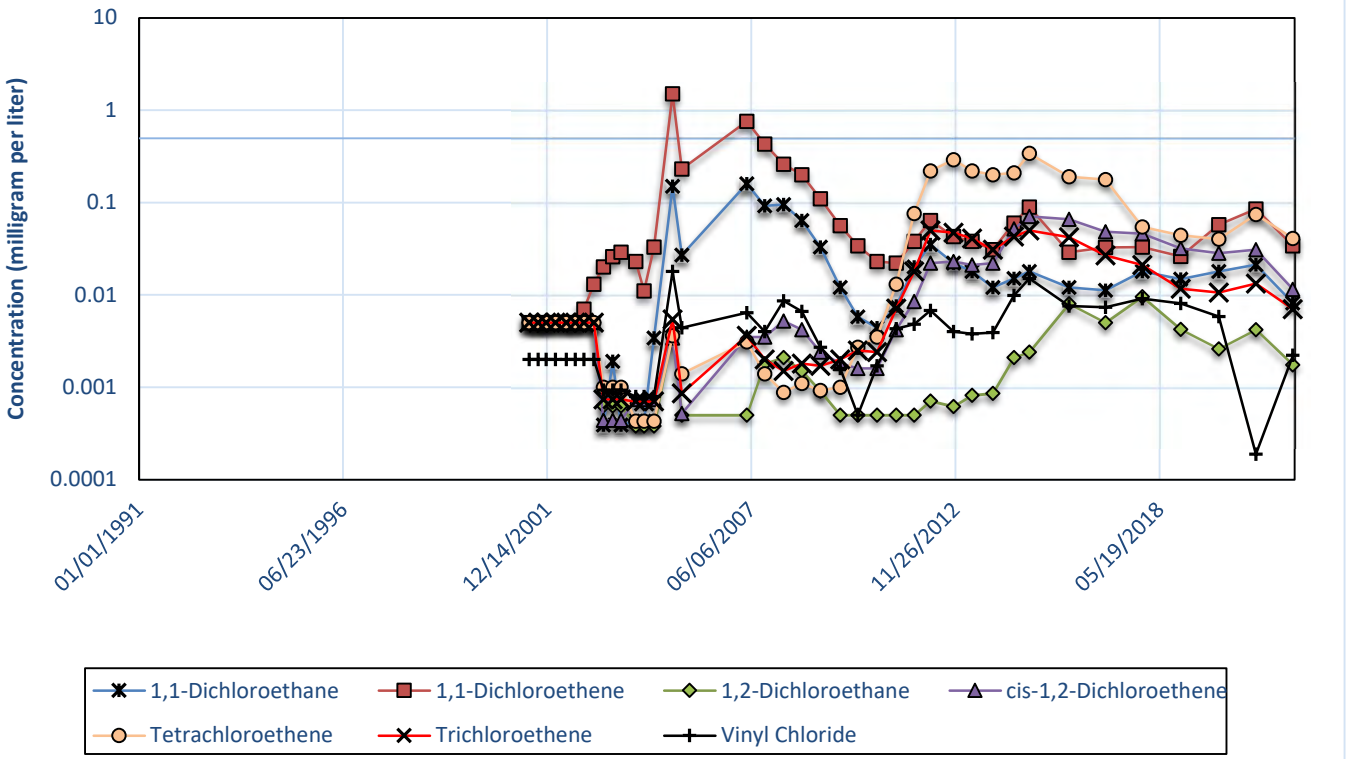


Appendix D
Concentration versus Time Graphs

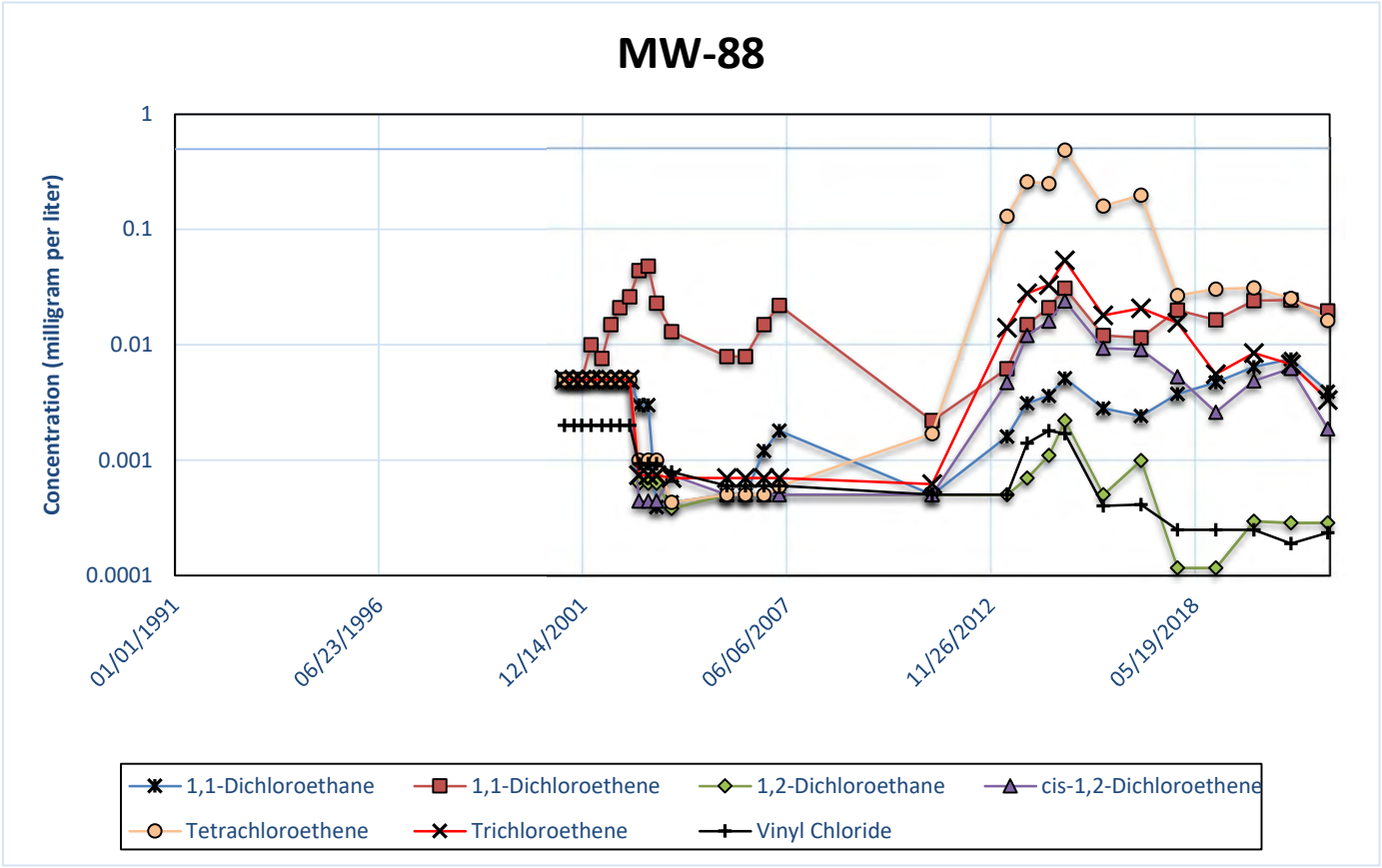
MW-77

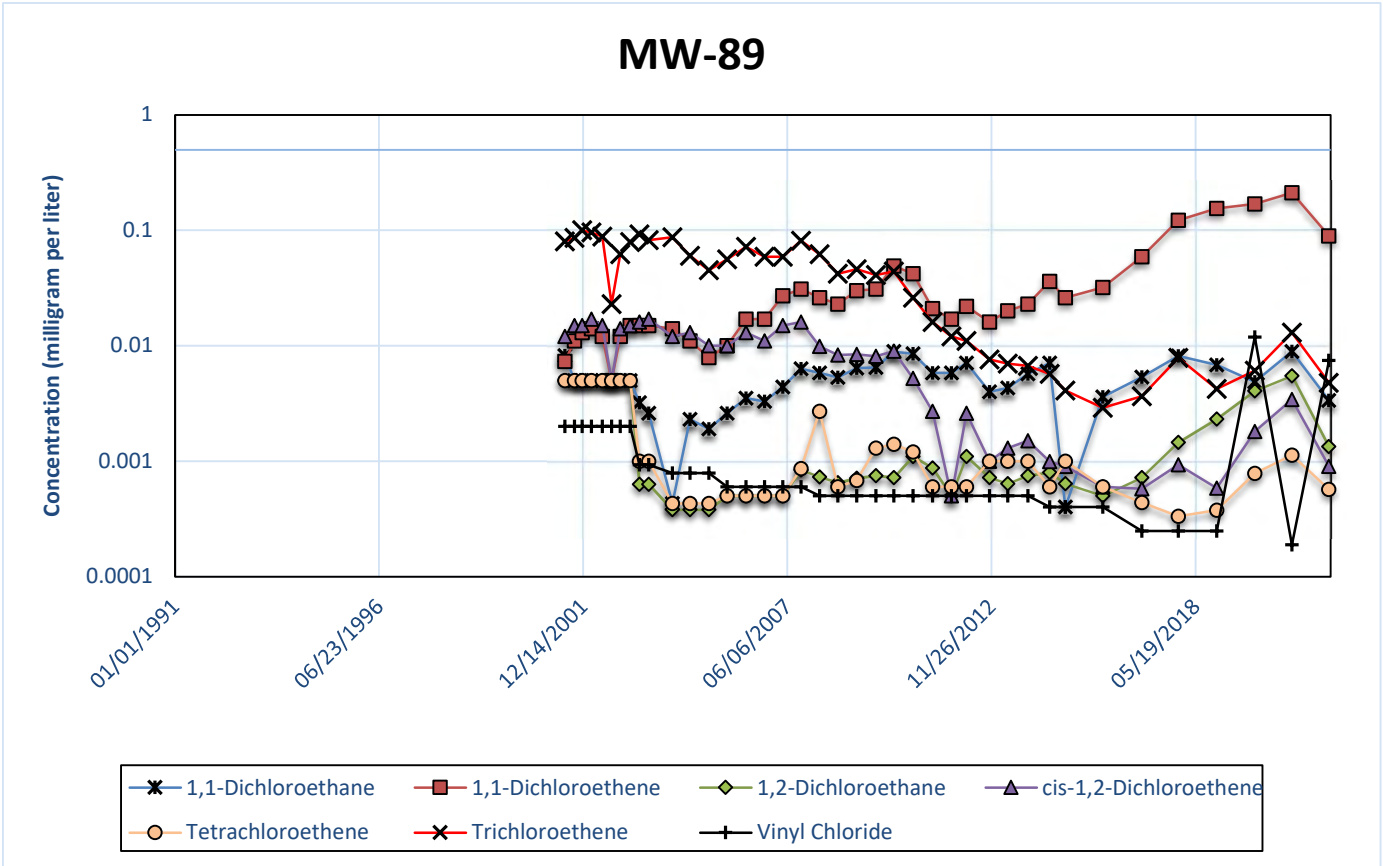


MW-83

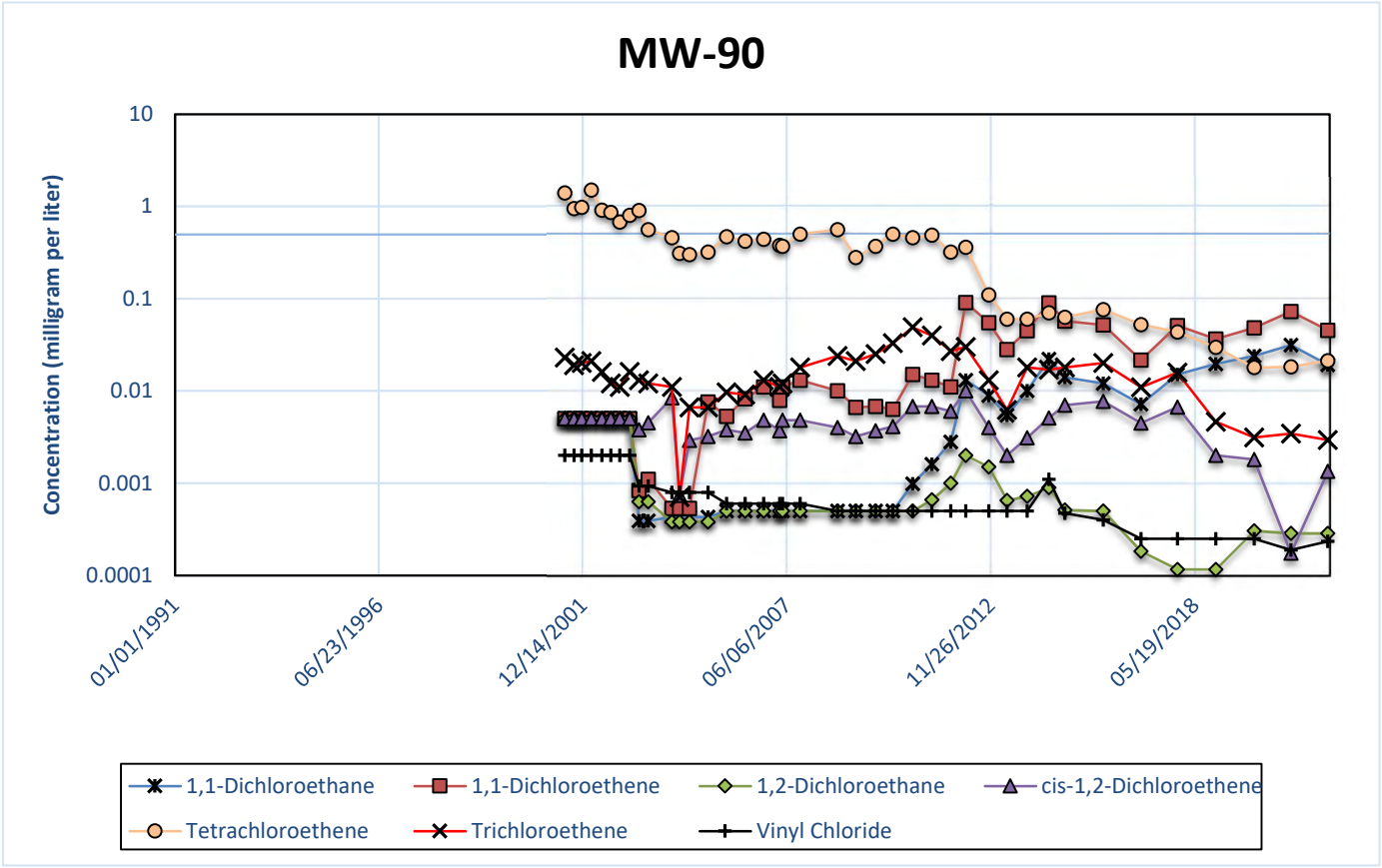


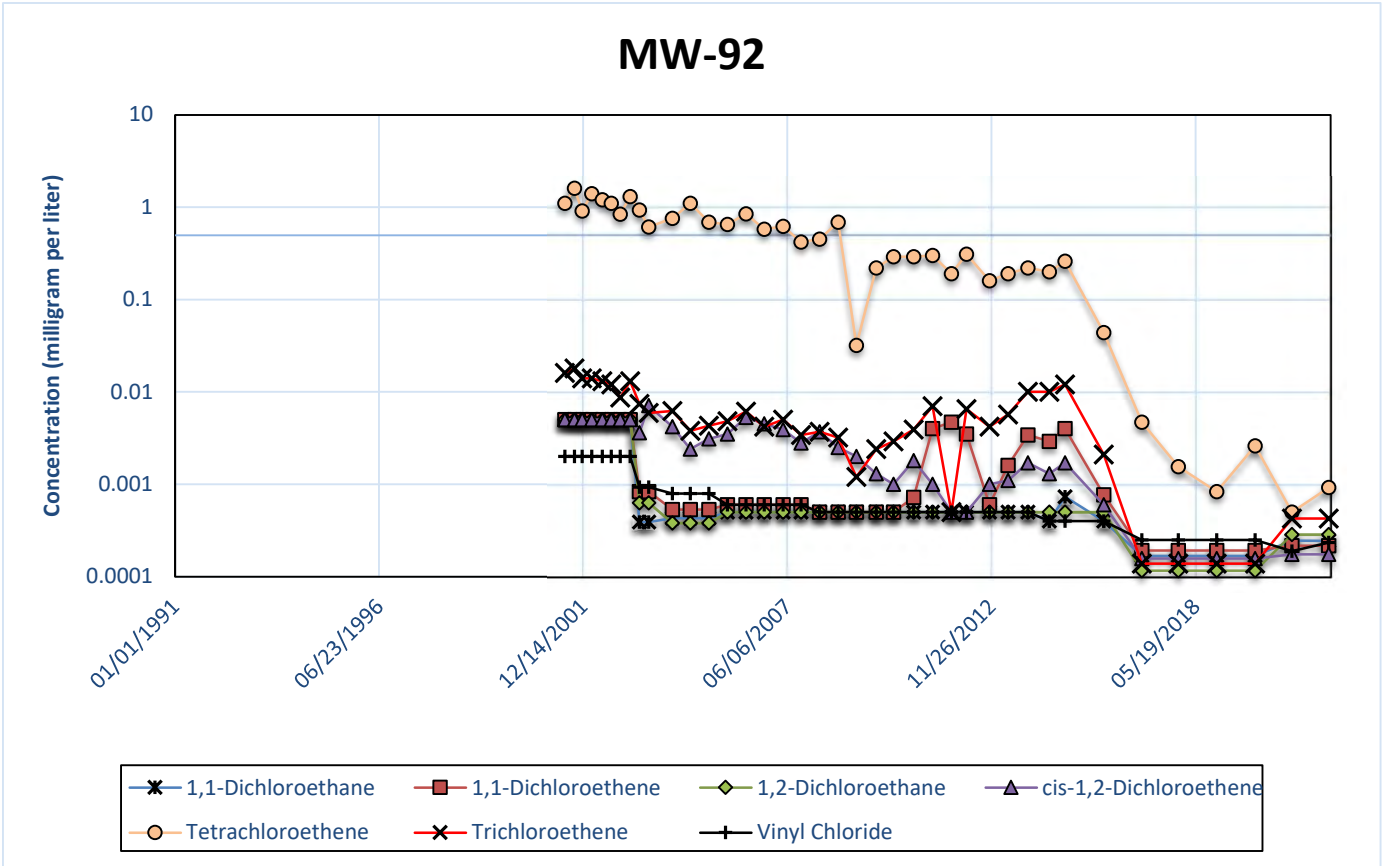
Appendix D
Concentration versus Time Graphs



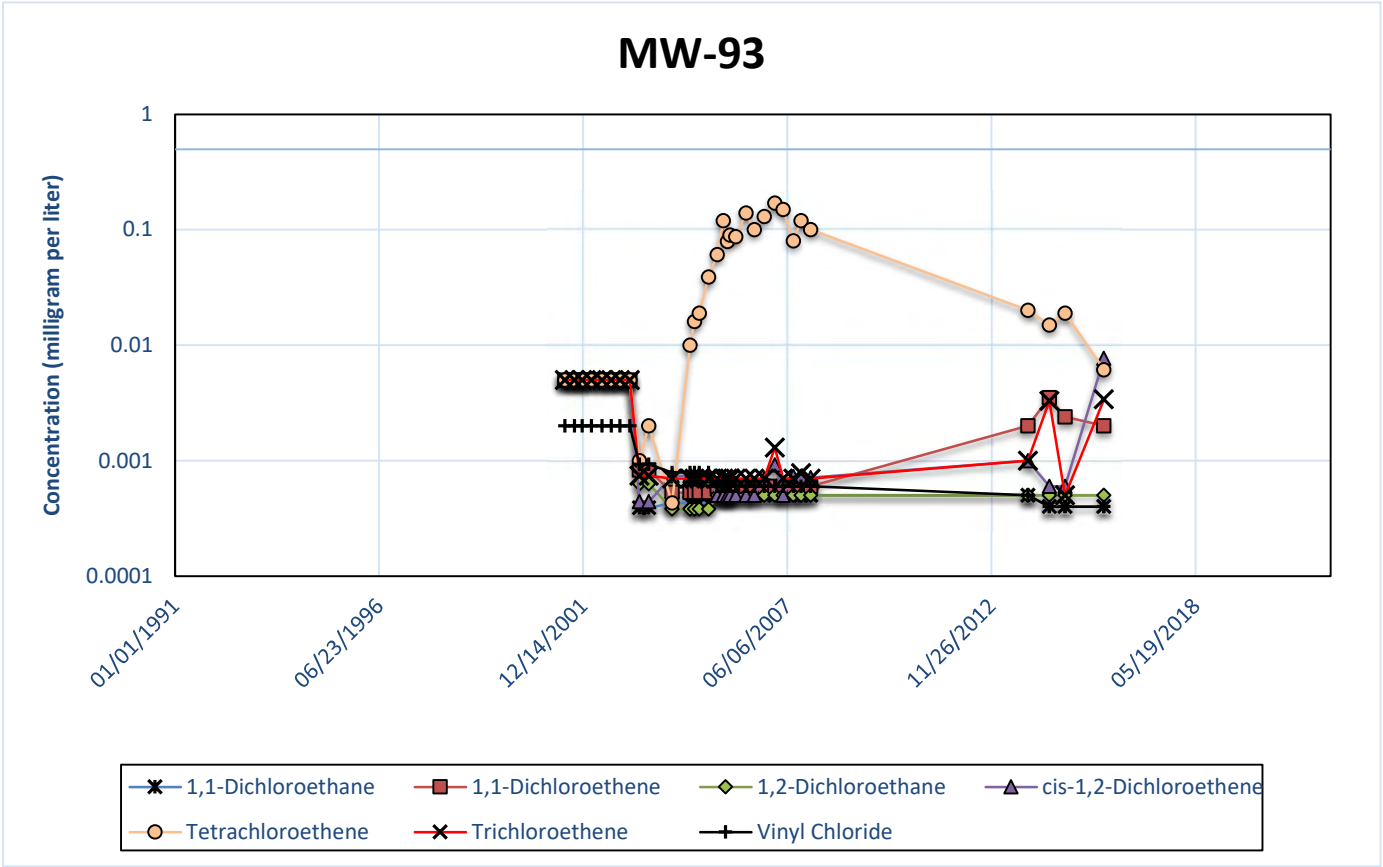


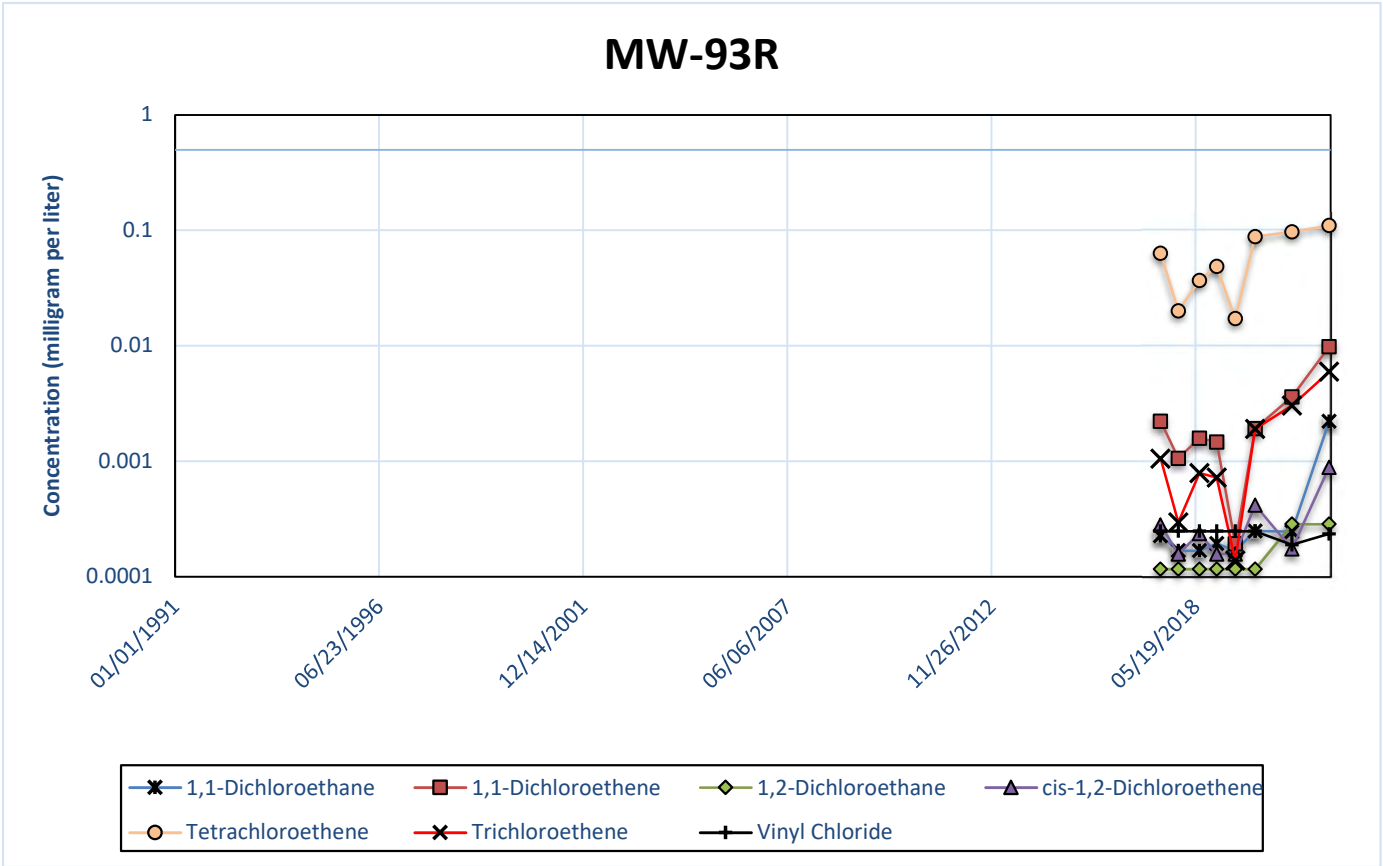
Appendix D
Concentration versus Time Graphs



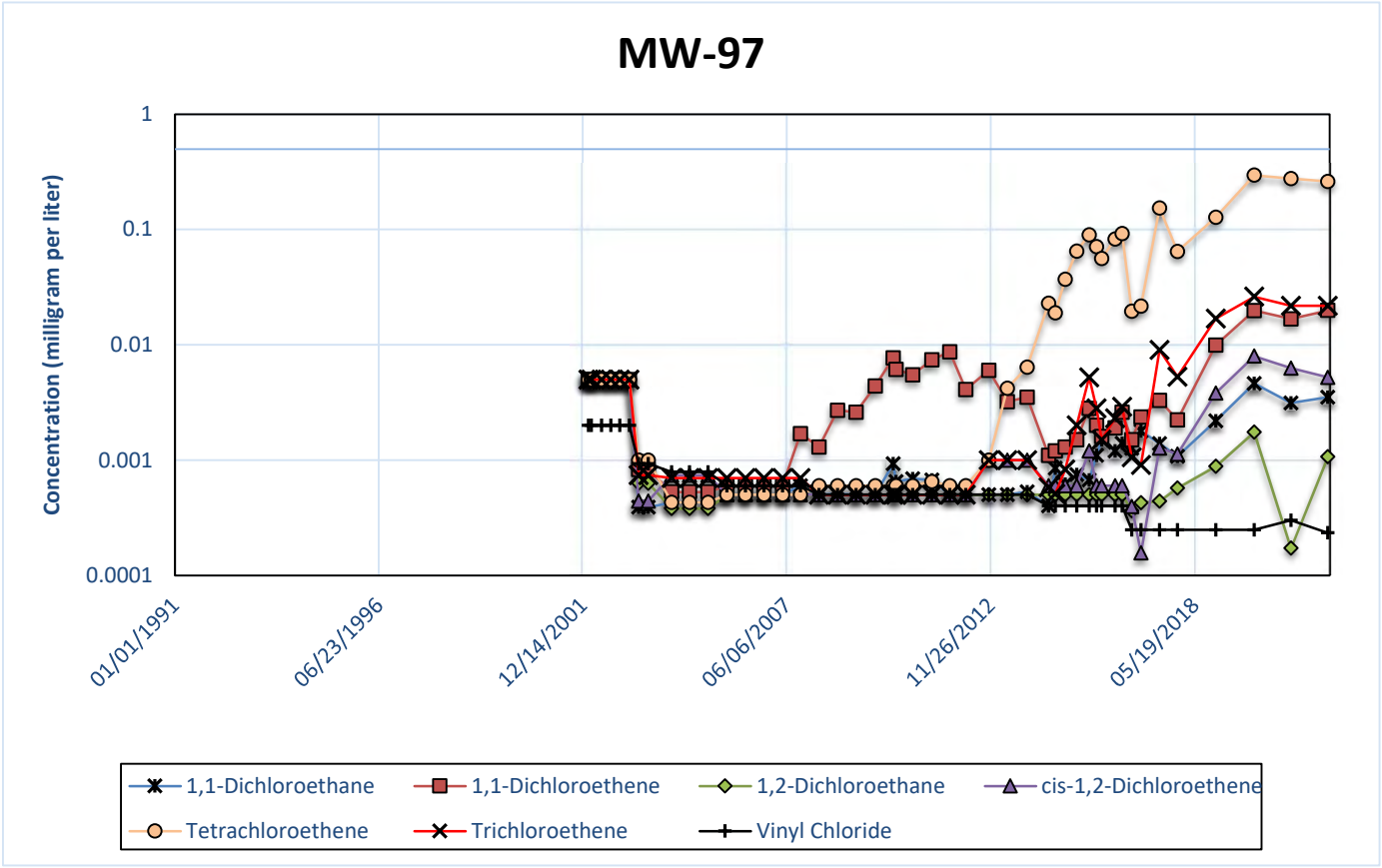


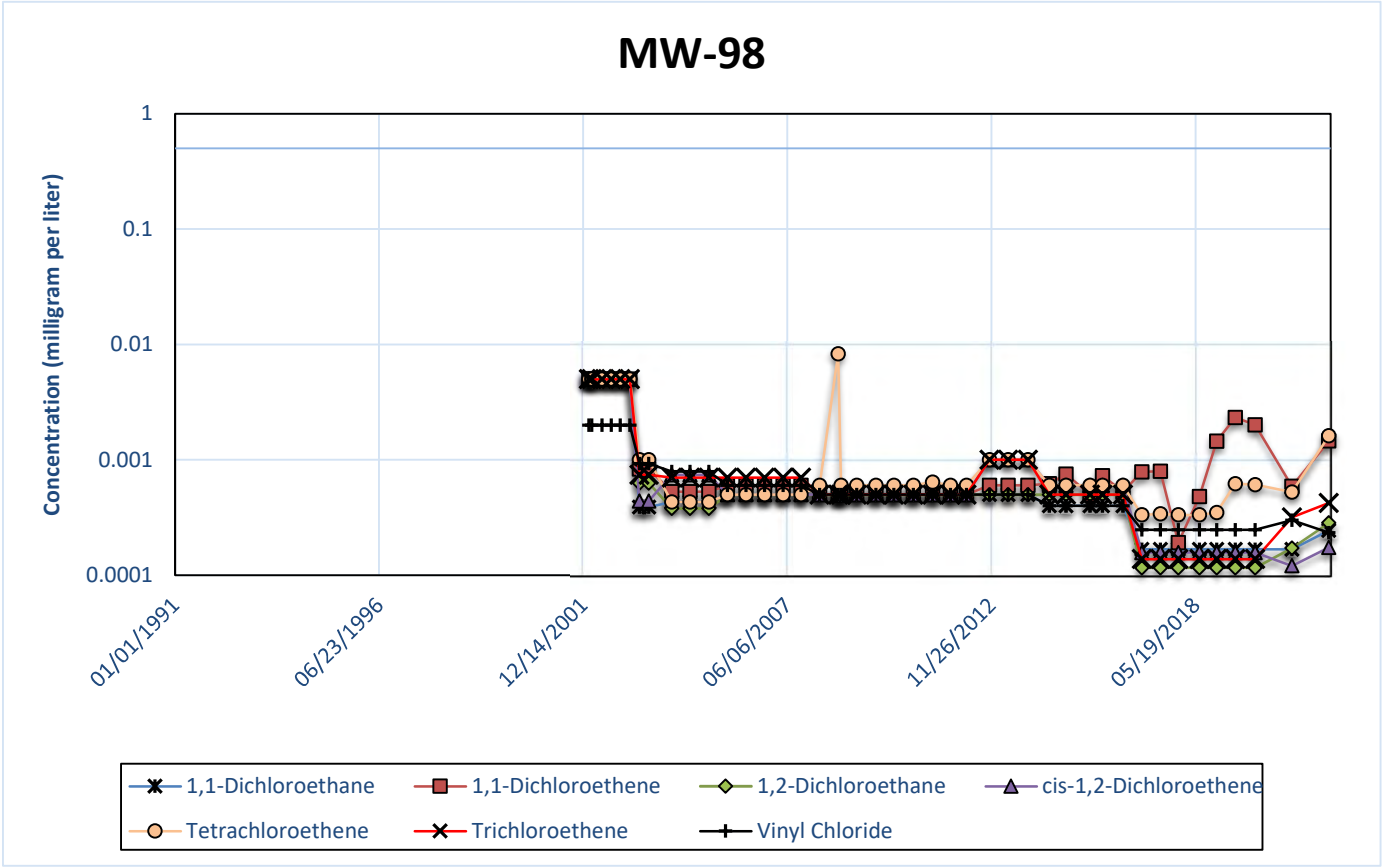
Appendix D
Concentration versus Time Graphs





Appendix D
Concentration versus Time Graphs





Appendix E
Historical Data

Appendix E. Historical Data

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-01	10/24/1991	< 0.005	**0.34**	< 0.005	--	< 0.005	< 0.005	< 0.01
MW-01	12/04/1995	< 0.0047	**0.0469**	< 0.0028	--	**0.0023**	< 0.0041	< 0.005
MW-01	01/30/1996	< 0.0047	**0.0466**	< 0.0028	--	< 0.005	< 0.0041	< 0.002
MW-01	06/21/1996	< 0.0047	**0.0329**	< 0.0028	--	< 0.005	< 0.0041	< 0.01
MW-01	01/23/1997	< 0.005	**0.03**	< 0.005	--	< 0.005	< 0.005	< 0.005
MW-01	06/08/1998	--	**0.016**	--	--	--	--	--
MW-01	05/14/1999	**0.007**	**0.039**	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
MW-01	04/11/2000	**0.003 J**	**0.033**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	06/09/2000	**0.003 J**	**0.027**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	09/13/2000	< 0.005	**0.027**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	12/07/2000	< 0.005	**0.03**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	03/20/2001	< 0.005	**0.033**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	06/20/2001	**0.0082**	**0.028**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	09/19/2001	< 0.005	**0.031**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	12/05/2001	< 0.005	**0.036**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	03/05/2002	< 0.005	**0.067**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	06/19/2002	**0.0088**	**0.19**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	09/17/2002	**0.008**	**0.17**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	12/10/2002	**0.0091**	**0.16**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-01	03/17/2003	**0.01**	**0.12 JL**	< 0.005	< 0.005 UJL	< 0.005 UJL	< 0.005 UJL	< 0.002
MW-01	06/16/2003	**0.012**	**0.12 JL**	< 0.00063 UJ	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-01	09/15/2003	**0.014**	**0.13**	< 0.00063	**0.0013 J**	< 0.00074	< 0.001	**0.005**
MW-01	04/29/2004	--	**0.13**	--	< 0.00074	< 0.0007	< 0.00043	**0.0055**
MW-01	10/26/2005	--	**0.1**	--	**0.0012 J**	< 0.0007	< 0.0005	**0.0072**
MW-01	04/26/2006	--	**0.14**	--	**0.0011 J**	< 0.0007	< 0.0005	**0.01**
MW-01	10/25/2006	--	**0.13**	--	**0.0012 J**	< 0.0007	< 0.0005	**0.0036**
MW-01	10/16/2007	--	**0.015**	--	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-01	04/16/2008	--	**0.0085**	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-01	10/17/2008	--	< 0.0005 J	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-01	04/16/2009	--	**0.0015 J**	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-01	10/20/2009	--	< 0.0005	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-01	04/15/2010	--	**0.0015 J**	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-01	10/19/2010	--	< 0.0005	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-01	04/25/2011	--	< 0.0005	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-01	10/20/2011	--	< 0.0005	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-01	03/27/2012	--	< 0.0005	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-01	11/06/2012	--	< 0.0006	--	< 0.001	< 0.001	< 0.001	< 0.0005
MW-01	05/08/2013	--	**0.0056**	--	< 0.001	< 0.001	< 0.001	< 0.0005
MW-01	11/26/2013	**0.0018 J**	**0.0061**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-01	06/26/2014	--	**0.0075**	--	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-01	11/19/2014	--	**0.0041 J**	--	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-01	11/23/2015	**0.0013 J**	**0.0047 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-01	12/08/2016	**0.000919 J**	**0.00284**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	**0.000351 J**
MW-01	11/29/2017	**0.00102**	**0.00313**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-01	12/13/2018	**0.00135**	**0.00541**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248 UJ
MW-01	12/19/2019	**0.00108**	**0.00356**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-01	12/16/2020	**0.00049 J**	**0.00159**	< 0.000172	< 0.000121	< 0.000317	< 0.000189	< 0.0003
MW-01	12/14/2021	**0.000584 J**	**0.00164**	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-15R	09/15/2003	**0.0082**	**0.06**	< 0.00063	**0.0047 J**	**0.0067**	**0.0082**	< 0.00093
MW-15R	04/27/2004	**0.014**	**0.091**	< 0.00038	**0.0077**	**0.012**	**0.011**	< 0.00079
MW-15R	07/22/2004	**0.037**	**0.19**	< 0.00038	**0.019**	**0.029**	**0.026**	**0.0038**
MW-15R	10/27/2004	**0.025**	**0.15**	< 0.00038	**0.014**	**0.024**	**0.02**	< 0.00079
MW-15R	04/26/2005	**0.0087**	**0.06**	< 0.00038	**0.0061**	**0.0092**	**0.0097**	< 0.00079
MW-15R	10/25/2005	**0.016**	**0.081**	**0.0007 J**	**0.0095**	**0.017**	**0.016**	**0.0027**
MW-15R	04/25/2006	**0.016**	**0.081**	< 0.0005	**0.0076**	**0.013**	**0.016**	< 0.0006
MW-15R	10/25/2006	**0.013**	**0.039**	< 0.0005	**0.0084**	**0.0057**	**0.017**	< 0.0006

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-15R	04/25/2007	**0.023**	**0.063**	< 0.0005	**0.015**	**0.0063**	**0.021**	< 0.0006
MW-15R	10/16/2007	**0.029**	**0.058**	< 0.0005	**0.019**	**0.0098**	**0.029**	< 0.0006
MW-15R	04/15/2008	**0.021**	**0.037**	< 0.0005	**0.014**	**0.0062**	**0.015**	< 0.0005
MW-15R	10/16/2008	**0.0078**	**0.02**	< 0.0005	**0.0064**	**0.0039 J**	**0.012**	< 0.0005
MW-15R	04/13/2009	< 0.0005	**0.0019 J**	< 0.0005	**0.00077 J**	< 0.0005	**0.00077 J**	< 0.0005
MW-15R	10/21/2009	< 0.0005	**0.0018 J**	< 0.0005	**0.00066 J**	< 0.0005	< 0.0006	< 0.0005
MW-15R	04/15/2010	**0.0076**	**0.022**	< 0.0005	**0.0054**	**0.0036 J**	**0.015**	< 0.0005
MW-15R	10/19/2010	**0.003 J**	**0.011**	< 0.0005	**0.0015 J**	**0.0011 J**	**0.0053**	< 0.0005
MW-15R	04/27/2011	< 0.0005	**0.0012 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-15R	10/18/2011	**0.00055 J**	**0.00078 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-15R	03/27/2012	**0.0019 J**	**0.0084**	< 0.0005	< 0.0005	< 0.0005	**0.0022 J**	< 0.0005
MW-15R	11/08/2012	**0.0051**	**0.028**	**0.001 J**	< 0.001	**0.0016 J**	**0.008**	< 0.0005
MW-15R	05/06/2013	**0.0075**	**0.041**	**0.001 J**	< 0.001	**0.0015 J**	**0.0081**	< 0.0005
MW-15R	11/26/2013	**0.0039 J**	**0.022**	< 0.0005	< 0.001	**0.001 J**	**0.0038 J**	< 0.0005
MW-15R	06/19/2014	**0.0076 JL**	**0.036**	**0.00074 J**	< 0.0006	**0.0011 J**	**0.0039 J**	< 0.0004
MW-15R	11/20/2014	**0.0034 J**	**0.018**	**0.00082 J**	< 0.0006	**0.0018 J**	**0.0066**	< 0.0004
MW-15R	11/20/2015	< 0.0004	**0.0058**	< 0.0005	< 0.0006	**0.0006 J**	**0.0028 J**	< 0.0004
MW-15R	11/29/2017	< 0.000168	**0.000454 J**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-15R	12/13/2018	**0.000353 J**	**0.00488**	< 0.000116	< 0.000157	**0.000193 J**	< 0.000333	< 0.000248 UJ
MW-15R	12/18/2019	**0.00234**	**0.0164**	< 0.000116	< 0.000157	**0.000304 J**	< 0.000333	**0.00071 J**
MW-15R	12/16/2020	**0.00156**	**0.0165 JL**	< 0.000285	**0.00023 J**	< 0.000424	< 0.0005	< 0.000234 UJL
MW-15R	12/14/2021	**0.00303**	**0.0403**	< 0.000285	< 0.000174	< 0.000424	< 0.0005	**0.00205**
MW-16R	09/15/2003	**0.033**	**0.031**	< 0.00063	**0.0068**	**0.015**	**0.011**	**0.003**
MW-16R	04/29/2004	**0.025**	**0.071**	< 0.00038	< 0.00074	**0.0071**	< 0.00043	< 0.00079
MW-16R	07/22/2004	**0.041**	**0.12**	< 0.00038	< 0.00074	**0.011**	**0.01**	< 0.00079
MW-16R	10/27/2004	**0.074**	**0.56**	**0.0016 J**	**0.0076**	**0.0063**	**0.016**	< 0.00079
MW-16R	04/27/2005	**0.021**	**0.094**	< 0.00038	**0.003 J**	**0.0052**	**0.0041 J**	< 0.00079
MW-16R	10/25/2005	**0.016**	**0.053**	< 0.0005	**0.0025 J**	**0.0042 J**	**0.0035 J**	< 0.0006
MW-16R	04/25/2006	**0.029**	**0.16**	< 0.0005	**0.005 J**	**0.004 J**	**0.0048 J**	< 0.0006
MW-16R	10/25/2006	**0.026**	**0.095**	**0.00066 J**	**0.0054**	**0.006**	**0.004 J**	< 0.0006
MW-16R	04/25/2007	**0.028**	**0.062**	< 0.0005	**0.01**	**0.01**	**0.0048 J**	< 0.0006
MW-16R	10/16/2007	**0.0048 J**	**0.0062**	< 0.0005	**0.025**	**0.015**	**0.0077**	**0.0023**
MW-16R	04/15/2008	**0.049**	**0.16**	**0.0014 J**	**0.21**	**0.096**	**0.055**	**0.015**
MW-16R	10/16/2008	**0.035**	**0.12**	**0.00069 J**	**0.16**	**0.097**	**0.042**	**0.016**
MW-16R	04/13/2009	**0.013**	**0.034**	< 0.0005	**0.047**	**0.02**	**0.0075**	**0.0037**
MW-16R	10/23/2009	**0.027**	**0.051**	**0.00061 J**	**0.023**	**0.0078**	**0.0028 J**	**0.0057**
MW-16R	04/16/2010	**0.023**	**0.048**	**0.00063 J**	**0.019**	**0.0068**	**0.0026 J**	**0.0046**
MW-16R	03/27/2012	**0.012**	**0.012**	< 0.0005	**0.0051**	< 0.0005	< 0.0006	**0.0013 J**
MW-16R	11/08/2012	**0.0071**	**0.006**	< 0.0005	**0.0027 J**	< 0.001	< 0.001	< 0.0005
MW-16R	05/03/2013	**0.0033 J**	**0.0018 J**	< 0.0005	**0.001 J**	< 0.001	< 0.001	< 0.0005
MW-16R	11/26/2013	**0.0017 J**	**0.00084 J**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-16R	06/20/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004 UJ
MW-16R	11/20/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-16R	11/23/2015	**0.00057 J**	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-16R	11/29/2017	**0.0231**	**0.0614**	**0.00135**	**0.013**	**0.0101**	**0.00526**	**0.00234**
MW-16R	12/13/2018	**0.0157**	**0.0331**	**0.000835 J**	**0.00689**	**0.00873**	**0.00447**	**0.00423**
MW-16R	12/18/2019	**0.0181**	**0.0293**	**0.000873 J**	**0.00815**	**0.0126**	**0.0161**	**0.00387**
MW-16R	12/16/2020	**0.0163**	**0.017**	**0.00068 J**	**0.0155**	**0.0104**	**0.015**	**0.00729**
MW-17R	09/15/2003	**0.0016 J**	**0.1**	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-17R	10/13/2003	**0.0018 J**	**0.12**	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-17R	12/09/2003	< 0.00039	**0.083**	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-17R	04/27/2004	< 0.00043	**0.0039 J**	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-17R	10/27/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-17R	04/26/2005	**0.014**	**0.071**	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-17R	10/25/2005	**0.0052**	**0.024**	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-17R	04/25/2006	**0.0022 J**	**0.011**	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-17R	10/25/2006	**0.001 J**	**0.0048 J**	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-17R	04/25/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-17R	10/17/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-17R	11/14/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-17R	04/13/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-17R	10/22/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-17R	04/14/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-17R	10/19/2010	**0.0011 J**	**0.0011 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-17R	04/27/2011	**0.00068 J**	**0.00068 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-17R	10/18/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-17R	03/27/2012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-17R	11/06/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-17R	05/06/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-17R	11/26/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-17R	06/20/2014	< 0.0004 R	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-17R	11/20/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-17R	11/20/2015	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-17R	12/06/2016	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-17R	11/29/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-17R	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248 UJ
MW-17R	12/19/2019	< 0.000168	< 0.000192	< 0.000116	**0.000984 J**	**0.000735 J**	**0.000598 J**	< 0.000248
MW-17R	12/16/2020	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-17R	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-50R	04/21/2011	--	**0.34**	--	**0.048**	**0.025**	**0.0067**	**0.61**
MW-50R	10/18/2011	--	**0.016**	--	**0.0021 J**	**0.00089 J**	< 0.0006	**0.03**
MW-50R	03/27/2012	--	**0.3**	--	**0.038**	**0.023**	**0.0063**	**0.24**
MW-50R	11/06/2012	--	**0.069**	--	**0.0078**	**0.015**	**0.0068**	**0.027**
MW-50R	05/08/2013	--	**0.17**	--	**0.021**	**0.02**	**0.01**	**0.13**
MW-50R	12/05/2013	--	**0.14**	--	**0.026**	**0.03**	**0.012**	**0.11**
MW-50R	06/26/2014	--	**0.19**	--	**0.036**	**0.046**	**0.011**	**0.12**
MW-50R	11/19/2014	--	**0.049**	--	**0.0093**	**0.019**	**0.0075**	**0.032**
MW-50R	11/23/2015	**0.52**	**0.085**	**0.0037 J**	**0.037**	**0.066**	**0.016**	**0.085**
MW-50R	12/06/2016	**0.215**	**0.0103**	**0.00161**	**0.00917**	**0.0171**	**0.00423**	**0.027**
MW-50R	11/28/2017	**0.0562**	**0.00262**	**0.000651 J**	**0.0026**	**0.0064**	< 0.000333	**0.00227**
MW-50R	12/13/2018	**1.25**	**0.00543**	**0.00114**	**0.0104**	**0.0192**	**0.000798 J**	**0.0306 J**
MW-50R	12/18/2019	**0.0399**	< 0.000192	< 0.000116	**0.000319 J**	**0.000573 J**	< 0.000333	**0.000963 J**
MW-50R	12/16/2020	**0.412 JL**	< 0.000216	**0.00261**	**0.00877**	**0.0112**	**0.00058 J**	< 0.000234
MW-50R	12/14/2021	**0.00622 J**	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-65	02/09/2001	**0.12**	**0.025**	< 0.005	**0.02**	< 0.005	< 0.005	< 0.002
MW-65	03/20/2001	**0.2**	**0.041**	< 0.005	**0.027**	< 0.005	< 0.005	< 0.002
MW-65	06/20/2001	**0.16**	**0.031**	< 0.005	**0.018**	< 0.005	< 0.005	< 0.002
MW-65	09/19/2001	**0.13**	**0.03**	< 0.005	**0.018**	< 0.005	< 0.005	< 0.002
MW-65	12/05/2001	**0.094**	**0.027**	< 0.005	**0.013**	< 0.005	< 0.005	**0.0026**
MW-65	03/07/2002	**0.093**	**0.025**	< 0.005	**0.012**	< 0.005	< 0.005	**0.0028**
MW-65	06/19/2002	**0.094**	**0.028**	< 0.005	**0.0099**	< 0.005	< 0.005	**0.0033**
MW-65	09/18/2002	**0.083**	**0.023**	< 0.005	**0.01**	< 0.005	< 0.005	**0.0038**
MW-65	12/11/2002	**0.069**	**0.016**	< 0.005	**0.011**	< 0.005	< 0.005	**0.0031**
MW-65	03/19/2003	**0.072**	**0.017**	< 0.005	**0.011**	< 0.005	< 0.005	**0.0046 JH**
MW-65	06/19/2003	**0.088**	**0.016**	< 0.00063	**0.0091**	< 0.00074	< 0.001	**0.0052**
MW-65	09/16/2003	**0.086**	**0.015**	< 0.00063	**0.0093**	< 0.00074	< 0.001	**0.0052**
MW-65	04/26/2004	--	**0.011**	--	**0.0057**	< 0.0007	< 0.00043	**0.0039**
MW-65	10/26/2004	--	**0.0091**	--	**0.0066**	< 0.0007	< 0.00043	**0.0041**
MW-65	04/25/2005	--	**0.0086**	--	**0.0055**	< 0.0007	< 0.00043	< 0.00079
MW-65	10/26/2005	--	< 0.0006	--	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-65	04/26/2006	--	**0.0077**	--	**0.0046 J**	< 0.0007	< 0.0005	**0.0038**
MW-65	10/25/2006	--	**0.0064**	--	**0.0053**	< 0.0007	< 0.0005	**0.0029**

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	4.9	0.007	0.005	0.07	0.005	0.005	0.002
MW-65	04/25/2007	--	0.0082	--	0.0066	< 0.0007	< 0.0005	< 0.0006
MW-65	10/18/2007	--	0.0047 J	--	0.0034 J	< 0.0007	< 0.0005	0.0026
MW-65	04/17/2008	--	0.0038 J	--	0.0025 J	< 0.0005	< 0.0006	< 0.0005
MW-65	10/13/2008	--	0.0025 J	--	0.0021 J	< 0.0005	< 0.0006	0.0024
MW-65	04/13/2009	--	0.0038 J	--	0.0029 J	< 0.0005	< 0.0006	0.0023
MW-65	10/21/2009	--	0.0025 J	--	0.0027 J	< 0.0005	< 0.0006	0.0023
MW-65	04/15/2010	--	0.0035 J	--	0.0026 J	< 0.0005	< 0.0006	0.0036
MW-65	10/19/2010	--	0.0014 J	--	0.001 J	< 0.0005	< 0.0006	0.0019 J
MW-65	04/25/2011	--	0.00088 J	--	0.0011 J	< 0.0005	< 0.0006	0.0015 J
MW-65	10/19/2011	--	0.0015 J	--	0.0022 J	< 0.0005	< 0.0006	0.0019 J
MW-65	03/27/2012	--	0.0023 J	--	0.0031 J	< 0.0005	< 0.0006	0.0024
MW-65	11/08/2012	--	0.0017 J	--	< 0.001	< 0.001	< 0.001	0.0014 J
MW-65	05/07/2013	--	0.0023 J	--	0.0027 J	< 0.001	< 0.001	0.0011 J
MW-65	11/19/2013	0.023	0.0023 J	< 0.0005	0.0043 J	< 0.001	< 0.001	0.0021
MW-65	06/25/2014	--	0.0029 J	--	0.004 J	< 0.0005	< 0.0006	0.0021
MW-65	11/17/2014	--	0.0029 J	--	0.0049 J	0.00053 J	< 0.0006	0.0019 J
MW-65	07/20/2015	0.035	0.006	< 0.0005	< 0.0006	< 0.0005	< 0.0006	0.0013 J
MW-65	11/23/2015	0.02	0.0042 J	< 0.0005	0.0043 J	0.00062 J	< 0.0006	0.0013 J
MW-65	06/06/2016	0.017	0.055	< 0.0005	0.0049 J	0.0027 J	0.011	0.00096 J
MW-65	12/06/2016	0.009	0.00359	< 0.000116	0.00154	0.000326 J	0.000804 J	0.000667 J
MW-65	11/28/2017	0.00682	0.00363 J	0.000217 J	0.00156	0.000371 J	0.000541 J	0.000355 J
MW-65	12/13/2018	0.00462	0.000642 J	< 0.000116	0.000544 J	< 0.000138	< 0.000333	< 0.000248 UJ
MW-65	12/19/2019	0.00665	0.00669 J	< 0.000116	0.00261	0.000729 J	0.000656 J	0.00151 J
MW-65	12/16/2020	0.00557	0.00661	< 0.000172	0.00209	0.000725 J	0.000534 J	0.000588 J
MW-65	12/14/2021	0.00592	0.00906	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-70	02/20/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-70	03/20/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-70	06/18/2001	0.0081	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-70	09/17/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-70	12/03/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-70	03/04/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-70	06/18/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-70	09/17/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-70	12/10/2002	< 0.005	< 0.005	< 0.005	0.0076	< 0.005	< 0.005	< 0.002
MW-70	03/17/2003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-70	06/17/2003	0.0029 J	0.0015 J	< 0.00063	0.0043 J	< 0.00074	< 0.001	< 0.00093
MW-70	09/15/2003	0.0041 J	0.0023 J	< 0.00063	0.0082	0.0018 J	< 0.001	< 0.00093
MW-70	04/27/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-70	10/26/2004	0.011	0.015	< 0.00038	0.0082	0.0018 J	< 0.00043	< 0.00079
MW-70	12/10/2004	0.011	0.0094	< 0.00038	0.0074	< 0.0007	< 0.00043	< 0.00079
MW-70	01/26/2005	0.0087	0.0074	< 0.00038	0.0078	0.0017 J	< 0.00043	< 0.00079
MW-70	04/28/2005	0.011	0.0067	< 0.00038	0.012	0.0021 J	< 0.00043	0.00093 J
MW-70	07/19/2005	0.013	0.0059	< 0.0005	0.011	0.0016 J	< 0.0005	< 0.0006
MW-70	10/26/2005	0.011	0.0035 J	< 0.0005	0.0073	0.0012 J	< 0.0005	< 0.0006
MW-70	01/17/2006	0.011	0.0032 J	< 0.0005	0.0065	0.0011 J	< 0.0005	< 0.0006
MW-70	04/25/2006	0.0079	< 0.0006	< 0.0005	0.0047 J	< 0.0007	< 0.0005	< 0.0006
MW-70	07/18/2006	0.011	0.0029 J	< 0.0005	0.0063	0.0012 J	< 0.0005	< 0.0006
MW-70	10/26/2006	0.009	0.0015 J	< 0.0005	0.0057	0.0013 J	< 0.0005	< 0.0006
MW-70	02/05/2007	0.0059	< 0.0006	< 0.0005	0.0032 J	< 0.0007	0.007	< 0.0006
MW-70	02/16/2007	0.0057	< 0.0006	< 0.0005	0.0033 J	< 0.0007	< 0.0005	< 0.0006
MW-70	04/24/2007	0.0075	< 0.0006	< 0.0005	0.0055	0.0016 J	< 0.0005	< 0.0006
MW-70	07/31/2007	0.01	0.00088 J	< 0.0005	0.018	0.0058	0.00069 J	0.0015 J
MW-70	08/28/2007	--	--	--	--	0.0064	--	--
MW-70	10/17/2007	0.014	0.0026 J	< 0.0005	0.032	0.01	0.0012 J	0.0025
MW-70	11/28/2007	0.012	0.0034 J	< 0.0005	0.035	0.014	0.0014 J	0.0017 J
MW-70	01/22/2008	0.021	0.0072	< 0.0005	0.053	0.015	0.0013 J	0.0031

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-70	04/15/2008	**0.019**	**0.0087**	< 0.0005	**0.056**	**0.017**	**0.0015 J**	**0.002 J**
MW-70	07/14/2008	**0.03**	**0.015**	< 0.0005	**0.09**	**0.027**	**0.0023 J**	**0.0041**
MW-70	10/14/2008	**0.036**	**0.025**	**0.00051 J**	**0.1**	**0.038**	**0.0024 J**	**0.0052**
MW-70	04/15/2009	**0.035**	**0.026**	< 0.0005	**0.14**	**0.047**	**0.001 J**	**0.0051**
MW-70	10/23/2009	**0.051**	**0.075**	**0.00058 J**	**0.26**	**0.17**	**0.0017 J**	**0.014**
MW-70	04/14/2010	**0.026**	**0.056**	< 0.0005	**0.2**	**0.11**	**0.0019 J**	**0.0054**
MW-70	10/19/2010	**0.032**	**0.086**	< 0.0005	**0.19**	**0.12**	**0.0027 J**	**0.011**
MW-70	04/28/2011	**0.031**	**0.1**	< 0.0005	**0.16**	**0.11**	**0.0049 J**	**0.0098**
MW-70	10/18/2011	**0.025**	**0.071**	< 0.0005	**0.078**	**0.048**	**0.0031 J**	**0.0053**
MW-70	03/27/2012	**0.056**	**0.15**	**0.0011 J**	**0.061**	**0.037**	**0.01**	**0.0066**
MW-70	11/09/2012	**0.075**	**0.19**	**0.0017 J**	**0.044**	**0.038**	**0.029**	**0.006**
MW-70	05/03/2013	**0.076**	**0.17**	**0.0024 J**	**0.033**	**0.032**	**0.038**	**0.0059**
MW-70	11/21/2013	**0.093**	**0.19**	**0.0032 J**	**0.036**	**0.031**	**0.035**	**0.0061**
MW-70	06/17/2014	**0.081**	**0.15**	**0.0027 J**	**0.026**	**0.024**	**0.032**	**0.0039**
MW-70	11/20/2014	**0.075**	**0.15**	**0.0016 J**	**0.029**	**0.024**	**0.034**	**0.0033**
MW-70	11/20/2015	**0.0073**	**0.013**	< 0.0005	**0.0058**	**0.0031 J**	**0.0041 J**	< 0.0004
MW-70	12/07/2016	**0.0261**	**0.0454**	**0.00116**	**0.0335**	**0.0165**	**0.0278**	**0.00131 J**
MW-70	11/29/2017	**0.0135**	**0.0234**	< 0.000116	**0.0153**	**0.00717**	**0.0113**	< 0.000248
MW-70	12/13/2018	**0.003**	**0.00416**	< 0.000116	**0.0034**	**0.00108**	**0.0019**	< 0.000248
MW-70	12/19/2019	**0.00286**	**0.00744**	< 0.000116	**0.00255**	**0.0011**	**0.00134**	**0.0012 J**
MW-70	12/16/2020	< 0.000245	**0.00685**	< 0.000285	**0.0029**	**0.00073 J**	**0.0007 J**	< 0.000189
MW-70	12/14/2021	**0.000919 J**	**0.00145**	< 0.000285	**0.00115**	**0.000429 J**	< 0.0005	< 0.000234
MW-71	02/20/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-71	03/20/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-71	06/19/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-71	09/18/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-71	12/03/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-71	03/05/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-71	06/18/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-71	09/17/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-71	12/10/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-71	03/19/2003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-71	06/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-71	09/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-71	04/28/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-71	10/26/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-71	04/28/2005	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-71	10/25/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-71	04/27/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-71	10/25/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-71	04/24/2007	< 0.0005	**0.0013 J**	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-71	10/17/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-71	04/15/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-71	10/15/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-71	04/14/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-71	10/22/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006 UJ	< 0.0005
MW-71	04/14/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-71	10/20/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-71	04/26/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-71	10/18/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-71	03/28/2012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-71	11/07/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-71	05/08/2013	< 0.0005	**0.0029 J**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-71	11/21/2013	< 0.0005	**0.0018 J**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-71	06/24/2014	**0.00074 J**	**0.0082**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-71	08/21/2014	**0.00067 J**	**0.0077**	< 0.0005	< 0.0006	**0.00051 J**	< 0.0006	< 0.0004

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	4.9	0.007	0.005	0.07	0.005	0.005	0.002
MW-71	11/24/2014	**0.00079 J**	**0.01**	< 0.0005	< 0.0006	**0.00055 J**	< 0.0006	< 0.0004
MW-71	03/19/2015	**0.00099 J**	**0.014**	< 0.0005	< 0.0006	**0.00073 J**	< 0.0006	< 0.0004
MW-71	07/20/2015	< 0.0004	**0.025**	< 0.0005	< 0.0006	**0.0011 J**	< 0.0006	< 0.0004
MW-71	09/30/2015	**0.00045 J**	**0.0055**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-71	11/23/2015	< 0.0004	**0.0029 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-71	03/31/2016	< 0.0004	**0.0038 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-71	06/06/2016	< 0.0004	**0.0015 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-71	12/07/2016	< 0.000168	**0.000699 J**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-71	11/29/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-71	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-71	12/19/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-71	12/16/2020	< 0.000245	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000189
MW-71	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-74	06/18/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-74	09/18/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-74	12/03/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-74	03/05/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-74	06/19/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-74	09/17/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-74	12/11/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-74	03/18/2003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-74	06/18/2003	< 0.00039	**0.0045 J**	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-74	09/16/2003	< 0.00039	**0.0052**	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-74	04/27/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-74	10/27/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-74	04/26/2005	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-74	10/27/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-74	04/24/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-74	10/24/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-74	04/25/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-74	10/17/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-74	04/16/2008	< 0.0005	**0.00062 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	10/15/2008	< 0.0005	**0.0034 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	04/13/2009	< 0.0005	**0.0039 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	10/22/2009	< 0.0005	**0.02**	< 0.0005	< 0.0005	< 0.0005	< 0.0006 UJ	< 0.0005
MW-74	11/11/2009	< 0.0005	**0.022**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	02/12/2010	**0.00067 J**	**0.018**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	04/14/2010	< 0.0005	**0.016**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	08/10/2010	< 0.0005	**0.0077**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	10/19/2010	< 0.0005	**0.0045 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	02/11/2011	< 0.0005	**0.006**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	04/27/2011	< 0.0005	**0.006**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	08/23/2011	**0.0023 J**	**0.0066**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-74	10/20/2011	**0.0049 J**	**0.008**	< 0.0005	**0.0008 J**	< 0.0005	< 0.0006	< 0.0005
MW-74	02/06/2012	**0.014**	**0.015**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	**0.0013 J**
MW-74	03/27/2012	**0.024**	**0.017**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	**0.0022**
MW-74	08/21/2012	**0.067**	**0.021**	< 0.0005	< 0.001	< 0.001	< 0.001	**0.0055**
MW-74	11/06/2012	**0.094**	**0.023**	< 0.0005	**0.0029 J**	< 0.001	< 0.001	**0.0049**
MW-74	02/20/2013	**0.084**	**0.019**	< 0.0005	< 0.001	< 0.001	< 0.001	**0.0045**
MW-74	05/06/2013	**0.089**	**0.019**	< 0.0005	**0.0021 J**	< 0.001	< 0.001	**0.0048**
MW-74	08/30/2013	**0.088**	**0.018**	< 0.0005	**0.0019 J**	< 0.001	< 0.001	**0.0056**
MW-74	11/27/2013	**0.086**	**0.015**	< 0.0005	**0.0015 J**	< 0.001	< 0.001	**0.0051**
MW-74	01/30/2014	**0.079**	**0.014**	< 0.0005	**0.0018 J**	< 0.0005	< 0.0006	**0.0049**
MW-74	06/20/2014	**0.079 JL**	**0.012**	< 0.0005	**0.003 J**	**0.00068 J**	< 0.0006	**0.0065**
MW-74	08/21/2014	**0.052**	**0.011**	< 0.0005	**0.0048 J**	**0.0013 J**	< 0.0006	**0.0044**
MW-74	11/21/2014	**0.043**	**0.0067**	< 0.0005	**0.0024 J**	**0.00063 J**	**0.00067 J**	**0.0029**

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	4.9	0.007	0.005	0.07	0.005	0.005	0.002
MW-74	03/19/2015	0.039	0.0073	< 0.0005	0.0025 J	0.00056 J	< 0.0006	0.0034
MW-74	07/20/2015	0.033	0.016	< 0.0005	0.0085	0.0014 J	< 0.0006	0.0019 J
MW-74	09/30/2015	0.021	0.011	< 0.0005	0.0062	0.001 J	0.00084 J	0.0019 J
MW-74	11/20/2015	0.021	0.009	< 0.0005	0.0048 J	0.00072 J	< 0.0006	0.0017 J
MW-74	03/31/2016	0.015	0.011	< 0.0005	0.0056	0.0013 J	0.0015 J	0.00092 J
MW-74	06/06/2016	0.017	0.016	< 0.0005	0.0087	0.002 J	0.0028 J	0.0013 J
MW-74	09/08/2016	0.0261	0.0334	0.000223 J	0.0124	0.00288	0.00457	0.00296
MW-74	12/08/2016	0.0165	0.0224	0.000157 J	0.00782	0.00257	0.00577	0.00237
MW-74	06/08/2017	0.0246	0.0339	0.00027 J	0.00672	0.00232	0.00549	0.00182 J
MW-74	11/29/2017	0.0159	0.017	0.000419 J	0.00296	0.000932 J	0.00126	0.00104 J
MW-74	12/13/2018	0.036	0.0868	0.000909 J	0.0167	0.0565	0.0865	0.00818 J
MW-74	12/19/2019	0.0124	0.0182	0.000191 J	0.0167	0.0383	0.0514	0.00455
MW-74	12/16/2020	0.0063	0.0114	< 0.000285	0.0129	0.0211	0.0386	0.0043
MW-74	12/14/2021	< 0.000244	0.00338	< 0.000285	0.0416	0.0088	0.00172	0.0182
MW-76	02/21/2001	< 0.005	0.027	< 0.005	0.016	0.041	0.54	< 0.002
MW-76	03/21/2001	< 0.005	0.036	< 0.005	0.021	0.062	0.49	< 0.002
MW-76	06/20/2001	0.0081	0.026	< 0.005	0.017	0.046	0.49	< 0.002
MW-76	09/20/2001	< 0.005	0.03	< 0.005	0.023	0.067	0.64	< 0.002
MW-76	12/05/2001	< 0.005	0.031	< 0.005	0.02	0.055	0.43	< 0.002
MW-76	03/07/2002	< 0.005	0.022	< 0.005	0.018	0.038	0.36	< 0.002
MW-76	06/19/2002	< 0.005	0.017	< 0.005	0.018	0.03	0.31	< 0.002
MW-76	09/19/2002	< 0.005	0.015	< 0.005	0.015	0.035	0.31	< 0.002
MW-76	12/11/2002	< 0.005	0.031	< 0.005	0.037	0.087	0.66	< 0.002
MW-76	03/20/2003	< 0.005	0.012 JL	< 0.005	0.013	0.019 JL	0.12 JL	< 0.002
MW-76	06/19/2003	< 0.00039	0.0098	< 0.00063	0.011	0.021	0.1	< 0.00093
MW-76	09/17/2003	0.0017 J	0.013	< 0.00063	0.014	0.025	0.13	< 0.00093
MW-76	04/29/2004	< 0.00043	0.01	< 0.00038	0.01	0.017	0.046	< 0.00079
MW-76	10/27/2004	0.003 J	0.013	0.0011 J	0.018	0.023	0.04	0.0022
MW-76	04/27/2005	0.0028 J	0.015	< 0.00038	0.019	0.028	0.049	< 0.00079
MW-76	10/26/2005	0.0016 J	0.0068	0.00056 J	0.012	0.016	0.023	< 0.0006
MW-76	04/25/2006	< 0.0005	0.0049 J	< 0.0005	0.0077	0.0079	0.011	< 0.0006
MW-76	10/25/2006	0.00085 J	< 0.0006	< 0.0005	0.0062	0.0063	0.0058	< 0.0006
MW-76	04/24/2007	< 0.0005	< 0.0006	< 0.0005	0.0017 J	0.0021 J	0.0028 J	< 0.0006
MW-76	10/16/2007	0.002 J	0.0027 J	0.0016 J	0.014	0.015	0.0087	< 0.0006
MW-76	04/15/2008	0.00085 J	0.00091 J	0.00069 J	0.005 J	0.0042 J	0.0042 J	< 0.0005
MW-76	10/15/2008	0.00052 J	< 0.0005	< 0.0005	0.0015 J	0.0011 J	0.0033 J	< 0.0005
MW-76	04/15/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0021 J	< 0.0005
MW-76	10/22/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0015 J	< 0.0005
MW-76	04/14/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-76	10/21/2010	< 0.0005	< 0.0005	0.0042 J	< 0.0005	< 0.0005	0.0016 J	< 0.0005
MW-76	04/27/2011	< 0.0005	0.002 J	< 0.0005	< 0.0005	< 0.0005	0.0011 J	< 0.0005
MW-76	10/19/2011	0.0036 J	0.011	< 0.0005	0.0011 J	< 0.0005	0.0008 J	< 0.0005
MW-76	03/28/2012	0.0026 J	0.01	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-76	11/06/2012	0.0038 J	0.016	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-76	05/08/2013	0.0045 J	0.016	< 0.0005	0.0012 J	< 0.001	< 0.001	< 0.0005
MW-76	11/27/2013	< 0.0005	0.014	< 0.0005	0.0015 J	< 0.001	< 0.001	< 0.0005
MW-76	06/19/2014	0.0045 J	0.01	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-76	11/17/2014	0.0084	0.018	< 0.0005	0.0011 J	0.00069 J	< 0.0006	< 0.0004
MW-76	11/23/2015	0.0085	0.014	< 0.0005	0.0016 J	0.0011 J	0.001 J	< 0.0004
MW-76	12/08/2016	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	0.00055 J	< 0.000248
MW-76	11/30/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	0.000758 J	< 0.000248
MW-76	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	0.000686 J	< 0.000248
MW-76	12/20/2019	< 0.000168	0.000319 J	< 0.000116	< 0.000157	0.000202	0.000944	< 0.000248
MW-76	12/16/2020	< 0.000245 UJ	< 0.000216 UJ	< 0.000285	< 0.000174 UJ	< 0.000424	0.00054 J	< 0.000189 UJ
MW-76	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	0.000577 J	< 0.000234
MW-77	06/19/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-77	09/18/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-77	12/04/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-77	03/04/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-77	06/17/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-77	09/17/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-77	12/10/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-77	03/19/2003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-77	06/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-77	09/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-77	04/28/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-77	10/26/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-77	04/27/2005	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-77	10/26/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-77	04/27/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-77	10/27/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-77	04/24/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-77	10/18/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-77	04/15/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-77	10/13/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-77	04/14/2009	< 0.0005	< 0.0005 UJ	< 0.0005	< 0.0005	< 0.0005 UJ	< 0.0006 UJ	< 0.0005 UJ
MW-77	08/06/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-77	10/23/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-77	04/14/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-77	10/20/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-77	04/28/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-77	10/18/2011	< 0.0005	< 0.0005	< 0.0005	**0.00092 J**	< 0.0005	< 0.0006	< 0.0005
MW-77	03/28/2012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-77	11/06/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-77	05/07/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-77	11/21/2013	**0.0058**	**0.026**	< 0.0005	**0.011**	**0.0089**	< 0.001	< 0.0005
MW-77	06/17/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-77	11/24/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-77	11/20/2015	**0.02**	**0.049**	**0.00074 J**	**0.0089**	**0.0089**	**0.0053**	**0.00061 J**
MW-77	03/31/2016	**0.0015 J**	**0.0049 J**	< 0.0005	**0.00098 J**	**0.0014 J**	**0.0022 J**	< 0.0004
MW-77	12/08/2016	**0.00674**	**0.0177**	**0.000305 J**	**0.00537**	**0.00459**	**0.0065**	**0.000272 J**
MW-77	11/30/2017	**0.00802**	**0.0287**	< 0.000116	**0.00574**	**0.0041**	**0.00352**	< 0.000248
MW-77	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-77	12/19/2019	< 0.000168	**0.00232**	< 0.000116	**0.000693 J**	< 0.000138	**0.000427 J**	< 0.000248
MW-77	12/16/2020	**0.00186 J**	< 0.000216 UJ	< 0.000285	**0.00539 J**	**0.00258**	**0.00135**	< 0.000189
MW-77	12/14/2021	**0.00133**	**0.00518**	< 0.000285	**0.00163**	**0.0015 J**	**0.000878 J**	< 0.000234
MW-83	06/20/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-83	09/18/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-83	12/03/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-83	03/06/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-83	06/19/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-83	09/17/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-83	12/09/2002	< 0.005	**0.007**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-83	03/17/2003	< 0.005	**0.013**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-83	06/17/2003	< 0.00039	**0.02**	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-83	09/18/2003	**0.0019 J**	**0.026**	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-83	12/09/2003	< 0.00039	**0.029**	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-83	04/29/2004	< 0.00043	**0.023**	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-83	07/22/2004	< 0.00043	**0.011**	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-83	10/27/2004	**0.0034 J**	**0.033**	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-83	04/27/2005	**0.15**	**1.5**	**0.004 J**	**0.0034 J**	**0.0054**	**0.0036 J**	**0.018**
MW-83	07/27/2005	**0.027**	**0.23**	< 0.0005	**0.00052 J**	**0.00086 J**	**0.0014 J**	**0.0044**

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	4.9	0.007	0.005	0.07	0.005	0.005	0.002
MW-83	04/24/2007	0.16	0.76	< 0.0005	0.0035 J	0.0036 J	0.0031 J	0.0064
MW-83	10/16/2007	0.092	0.43	0.0018 J	0.0035 J	0.002 J	0.0014 J	0.004
MW-83	04/16/2008	0.095	0.26	0.0021 J	0.0052	0.0015 J	0.00088 J	0.0086
MW-83	10/13/2008	0.064	0.2	0.0015 J	0.0042 J	0.0018 J	0.0011 J	0.0066
MW-83	04/14/2009	0.033	0.11	0.00091 J	0.0024 J	0.0017 J	0.00092 J	0.0027 J
MW-83	10/23/2009	0.012	0.056	< 0.0005	0.0018 J	0.002 J	0.001 J	0.0016 J
MW-83	04/14/2010	0.0058	0.034	< 0.0005	0.0016 J	0.0025 J	0.0027 J	< 0.0005
MW-83	10/19/2010	0.0044 J	0.023	< 0.0005	0.0016 J	0.0024 J	0.0035 J	0.0017 J
MW-83	04/26/2011	0.0076	0.022	< 0.0005	0.0042 J	0.0071	0.013	0.0043
MW-83	10/18/2011	0.02	0.038	< 0.0005	0.0085	0.018	0.076	0.0048
MW-83	03/28/2012	0.035	0.064	0.00071 J	0.022	0.05	0.22	0.0068
MW-83	11/07/2012	0.022	0.043	0.00062 J	0.023	0.047	0.29	0.004
MW-83	05/08/2013	0.018	0.038	0.00082 J	0.021	0.041	0.22	0.0038
MW-83	11/27/2013	0.012	0.031	0.00086 J	0.022	0.031	0.2	0.0039
MW-83	06/23/2014	0.015	0.06	0.0021 J	0.052	0.043	0.21	0.0099
MW-83	11/20/2014	0.018	0.089	0.0024 J	0.071	0.05	0.34	0.015
MW-83	12/15/2015	0.012	0.029	0.008	0.066	0.042	0.19	0.0076
MW-83	12/06/2016	0.0112	0.0327	0.00499	0.0482	0.0267	0.178	0.00733
MW-83	11/30/2017	0.0179	0.033	0.00954	0.0459	0.021	0.0544	0.00909
MW-83	12/13/2018	0.0148	0.0261	0.00424	0.0318	0.0117	0.0444	0.00809
MW-83	12/20/2019	0.0179	0.0574	0.00261	0.0282	0.0106	0.0403	0.00581
MW-83	12/16/2020	0.0213	0.0851	0.0042	0.031	0.0133	0.0746	< 0.000189
MW-83	12/14/2021	0.00815	0.0339	0.00174	0.0115	0.00701	0.0409	0.00222
MW-88	06/18/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-88	09/19/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-88	12/03/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-88	03/06/2002	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-88	06/19/2002	< 0.005	0.0076	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-88	09/17/2002	< 0.005	0.015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-88	12/11/2002	< 0.005	0.021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-88	03/19/2003	< 0.005	0.026 JL	< 0.005	< 0.005 UJL	< 0.005 UJL	< 0.005 UJL	< 0.002
MW-88	06/17/2003	0.003 J	0.044	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-88	09/18/2003	0.003 J	0.048	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-88	12/09/2003	< 0.00039	0.023	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-88	05/03/2004	< 0.00043	0.013	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-88	10/27/2005	< 0.0005	0.0079	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-88	04/27/2006	< 0.0005	0.0079	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-88	10/27/2006	0.0012 J	0.015	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-88	03/27/2007	0.0018 J	0.022	< 0.0005	< 0.0005	< 0.0007	0.00059 J	< 0.0006
MW-88	05/03/2011	< 0.0005	0.0022 J	< 0.0005	< 0.0005	0.00062 J	0.0017 J	< 0.0005
MW-88	05/06/2013	0.0016 J	0.0062	< 0.0005	0.0047 J	0.014	0.13	< 0.0005
MW-88	11/20/2013	0.0031 J	0.015	0.0007 J	0.012	0.028	0.26	0.0014 J
MW-88	06/19/2014	0.0036 J	0.021	0.0011 J	0.016	0.033	0.25	0.0018 JL
MW-88	11/24/2014	0.0051	0.031	0.0022 J	0.024	0.054	0.49	0.0017 J
MW-88	12/04/2015	0.0028 J	0.012	< 0.0005	0.0093	0.018	0.16	< 0.0004
MW-88	12/09/2016	0.00241	0.0115	0.000993 J	0.00909	0.0207	0.198	0.000411 J
MW-88	11/29/2017	0.00375	0.0199	< 0.000116	0.00527	0.0155	0.0267	< 0.000248
MW-88	12/13/2018	0.0047	0.0165	< 0.000116	0.0026	0.00557	0.0304	< 0.000248
MW-88	12/20/2019	0.00645	0.0241	0.000295 J	0.00487	0.00849	0.0311	< 0.000248
MW-88	12/16/2020	0.00752	0.0244	< 0.000285	0.00622	0.00679	0.0253	< 0.000189
MW-88	12/14/2021	0.00391	0.0197	< 0.000285	0.00186	0.00331 J	0.0163	< 0.000234
MW-89	06/18/2001	0.0082	0.0073	< 0.005	0.012	0.08	< 0.005	< 0.002
MW-89	09/19/2001	< 0.005	0.011	< 0.005	0.015	0.086	< 0.005	< 0.002
MW-89	12/04/2001	< 0.005	0.013	< 0.005	0.015	0.1	< 0.005	< 0.002
MW-89	03/06/2002	< 0.005	0.014	< 0.005	0.017	0.096	< 0.005	< 0.002
MW-89	06/20/2002	< 0.005	0.012	< 0.005	0.015	0.088	< 0.005	< 0.002

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	4.9	0.007	0.005	0.07	0.005	0.005	0.002
MW-89	09/19/2002	< 0.005	< 0.005	< 0.005	0.005	0.023	< 0.005	< 0.002
MW-89	12/12/2002	< 0.005	0.012	< 0.005	0.014	0.062	< 0.005	< 0.002
MW-89	03/19/2003	< 0.005	0.015 JL	< 0.005	0.015 JL	0.079 JL	< 0.005 UJL	< 0.002
MW-89	06/17/2003	0.0032 J	0.015	< 0.00063	0.016	0.092	< 0.001	< 0.00093
MW-89	09/17/2003	0.0026 J	0.015	< 0.00063	0.017	0.082	< 0.001	< 0.00093
MW-89	05/05/2004	< 0.00043	0.014	< 0.00038	0.012	0.087	< 0.00043	< 0.00079
MW-89	10/27/2004	0.0023 J	0.011	< 0.00038	0.013	0.06	< 0.00043	< 0.00079
MW-89	04/29/2005	0.0019 J	0.0079	< 0.00038	0.01	0.045	< 0.00043	< 0.00079
MW-89	10/25/2005	0.0026 J	0.01	< 0.0005	0.01	0.056	< 0.0005	< 0.0006
MW-89	04/26/2006	0.0035 J	0.017	< 0.0005	0.013	0.072	< 0.0005	< 0.0006
MW-89	10/25/2006	0.0033 J	0.017	< 0.0005	0.011	0.059	< 0.0005	< 0.0006
MW-89	04/24/2007	0.0044 J	0.027	< 0.0005	0.015	0.059	< 0.0005	< 0.0006
MW-89	10/19/2007	0.0063	0.031	0.00084 J	0.016	0.081	0.00086 J	< 0.0006
MW-89	04/16/2008	0.0058	0.026	0.00073 J	0.0099	0.062	0.0027 J	< 0.0005
MW-89	10/13/2008	0.0053	0.023	0.00065 J	0.0083	0.042	< 0.0006	< 0.0005
MW-89	04/16/2009	0.0064	0.03	0.00071 J	0.0084	0.046	0.00068 J	< 0.0005
MW-89	10/22/2009	0.0065	0.031	0.00075 J	0.0081	0.041	0.0013 UJ	< 0.0005
MW-89	04/14/2010	0.0089	0.049	0.00072 J	0.009	0.044	0.0014 J	< 0.0005
MW-89	10/21/2010	0.0085	0.042	0.0011 J	0.0052	0.026	0.0012 J	< 0.0005
MW-89	04/28/2011	0.0058	0.021	0.00087 J	0.0027 J	0.016	< 0.0006	< 0.0005
MW-89	11/01/2011	0.0058	0.017	< 0.0005	< 0.0005	0.012	< 0.0006	< 0.0005
MW-89	03/28/2012	0.0071	0.022	0.0011 J	0.0026 J	0.011	< 0.0006	< 0.0005
MW-89	11/06/2012	0.004 J	0.016	0.00072 J	< 0.001	0.0076	< 0.001	< 0.0005
MW-89	05/06/2013	0.0043 J	0.02	0.00064 J	0.0013 J	0.007	< 0.001	< 0.0005
MW-89	11/20/2013	0.0057	0.023	0.00075 J	0.0015 J	0.0067	< 0.001	< 0.0005
MW-89	06/20/2014	0.0071	0.036	0.0008 J	0.00099 J	0.0057	< 0.0006	< 0.0004
MW-89	11/19/2014	< 0.0004	0.026	0.00064 J	0.0009 J	0.0041 J	0.001 J	< 0.0004
MW-89	11/23/2015	0.0036 J	0.032	< 0.0005	< 0.0006	0.0029 J	< 0.0006	< 0.0004
MW-89	12/08/2016	0.00535	0.0592	0.000719 J	0.000577 J	0.00364	0.000439 J	< 0.000248
MW-89	11/29/2017	0.00814	0.122	0.00145	0.000929 J	0.00785	< 0.000333	< 0.000248
MW-89	12/13/2018	0.00683 J	0.155 J	0.00232	0.000585 J	0.00422	0.000375 J	< 0.000248
MW-89	12/20/2019	0.00486	0.169	0.00406	0.00181	0.00607	0.000782	0.0119
MW-89	12/16/2020	0.00889	0.212	0.00549	0.00342 J	0.013	0.00113	< 0.000189
MW-89	12/14/2021	0.00335	0.0892	0.00134	0.000901 J	0.00477 J	0.000568 J	0.00746
MW-90	06/20/2001	< 0.005	< 0.005	< 0.005	< 0.005	0.023	1.4	< 0.002
MW-90	09/20/2001	< 0.005	< 0.005	< 0.005	< 0.005	0.019	0.95	< 0.002
MW-90	12/05/2001	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.98	< 0.002
MW-90	03/07/2002	< 0.005	< 0.005	< 0.005	< 0.005	0.021	1.5	< 0.002
MW-90	06/20/2002	< 0.005	< 0.005	< 0.005	< 0.005	0.016	0.91	< 0.002
MW-90	09/17/2002	< 0.005	< 0.005	< 0.005	< 0.005	0.012	0.86	< 0.002
MW-90	12/12/2002	< 0.005	< 0.005	< 0.005	< 0.005	0.011	0.68	< 0.002
MW-90	03/20/2003	< 0.005	< 0.005	< 0.005	< 0.005	0.016	0.8	< 0.002
MW-90	06/18/2003	< 0.00039	< 0.00083	< 0.00063	0.0038 J	0.013	0.9	< 0.00093
MW-90	09/18/2003	< 0.00039	0.0011 J	< 0.00063	0.0045 J	0.012	0.56	< 0.00093
MW-90	05/05/2004	< 0.00043	< 0.00053	< 0.00038	0.0084	0.011	0.46	< 0.00079
MW-90	07/22/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	0.31	< 0.00079
MW-90	10/27/2004	< 0.00043	< 0.00053	< 0.00038	0.0029 J	0.0066	0.3	< 0.00079
MW-90	04/27/2005	< 0.00043	0.0076	< 0.00038	0.0032 J	0.0066	0.32	< 0.00079
MW-90	10/25/2005	< 0.0005	0.0053	< 0.0005	0.0038 J	0.0096	0.47	< 0.0006
MW-90	04/25/2006	< 0.0005	0.0082	< 0.0005	0.0035 J	0.0091	0.42	< 0.0006
MW-90	10/24/2006	< 0.0005	0.011	< 0.0005	0.0048 J	0.013	0.44	< 0.0006
MW-90	03/28/2007	< 0.0005	0.0079	< 0.0005	0.0037 J	0.011	0.38	< 0.0006
MW-90	04/25/2007	< 0.0005	0.011	< 0.0005	0.0048 J	0.012	0.37	< 0.0006
MW-90	10/16/2007	< 0.0005	0.013	< 0.0005	0.0048 J	0.018	0.5	< 0.0006
MW-90	10/16/2008	< 0.0005	0.01	< 0.0005	0.004 J	0.024	0.56	< 0.0005
MW-90	04/13/2009	< 0.0005	0.0066	< 0.0005	0.0032 J	0.021	0.28	< 0.0005

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	4.9	0.007	0.005	0.07	0.005	0.005	0.002
MW-90	10/23/2009	< 0.0005	0.0068	< 0.0005	0.0037 J	0.025	0.37	< 0.0005
MW-90	04/13/2010	< 0.0005	0.0063	< 0.0005	0.0041 J	0.033	0.5	< 0.0005
MW-90	10/22/2010	0.00098 J	0.015	< 0.0005	0.0068	0.049	0.46	< 0.0005
MW-90	04/29/2011	0.0016 J	0.013	0.00066 J	0.0068	0.04	0.49	< 0.0005
MW-90	11/01/2011	0.0028 J	0.011	0.001 J	0.006	0.027	0.32	< 0.0005
MW-90	03/28/2012	0.013	0.091	0.002 J	0.01	0.03	0.36	< 0.0005
MW-90	11/07/2012	0.0089	0.055	0.0015 J	0.004 J	0.013	0.11	< 0.0005
MW-90	05/06/2013	0.0054	0.028	0.00065 J	0.002 J	0.0062	0.06	< 0.0005
MW-90	11/20/2013	0.01	0.045	0.00072 J	0.0031 J	0.018	0.06	< 0.0005
MW-90	06/19/2014	0.022 JL	0.09	0.00089 J	0.0051	0.017	0.07	0.0011 J
MW-90	11/24/2014	0.014	0.057	0.00051 J	0.007	0.018	0.063	0.00047 J
MW-90	12/04/2015	0.012	0.052	< 0.0005	0.0077	0.02	0.076	< 0.0004
MW-90	12/09/2016	0.00717	0.0216	0.000183 J	0.00448	0.0109	0.0522	< 0.000248
MW-90	11/29/2017	0.0151	0.051	< 0.000116	0.00669	0.0158	0.0436	< 0.000248
MW-90	12/13/2018	0.0196	0.0366	< 0.000116	0.002	0.00463	0.0296	< 0.000248
MW-90	12/23/2019	0.024	0.0481	0.000304 J	0.0018	0.00312	0.0179	< 0.000248
MW-90	12/16/2020	0.0315	0.0727	< 0.000285	< 0.000174	0.00344	0.0182	< 0.000189
MW-90	12/14/2021	0.0191	0.0454	< 0.000285	0.00134	0.00293 J	0.0213	< 0.000234
MW-92	06/18/2001	< 0.005	< 0.005	< 0.005	< 0.005	0.016	1.1	< 0.002
MW-92	09/20/2001	< 0.005	< 0.005	< 0.005	< 0.005	0.018	1.6	< 0.002
MW-92	12/05/2001	< 0.005	< 0.005	< 0.005	< 0.005	0.014	0.91	< 0.002
MW-92	03/07/2002	< 0.005	< 0.005	< 0.005	< 0.005	0.014	1.4	< 0.002
MW-92	06/20/2002	< 0.005	< 0.005	< 0.005	< 0.005	0.013	1.2	< 0.002
MW-92	09/17/2002	< 0.005	< 0.005	< 0.005	< 0.005	0.012	1.1	< 0.002
MW-92	12/12/2002	< 0.005	< 0.005	< 0.005	< 0.005	0.0087	0.84	< 0.002
MW-92	03/20/2003	< 0.005	< 0.005	< 0.005	< 0.005	0.013	1.3	< 0.002
MW-92	06/18/2003	< 0.00039	< 0.00083	< 0.00063	0.0036 J	0.0074	0.93	< 0.00093
MW-92	09/18/2003	< 0.00039	< 0.00083	< 0.00063	0.0071	0.0059	0.61	< 0.00093
MW-92	05/05/2004	< 0.00043	< 0.00053	< 0.00038	0.0042 J	0.0062	0.76	< 0.00079
MW-92	10/28/2004	< 0.00043	< 0.00053	< 0.00038	0.0024 J	0.0038 J	1.1	< 0.00079
MW-92	04/29/2005	< 0.00043	< 0.00053	< 0.00038	0.0031 J	0.0043 J	0.69	< 0.00079
MW-92	10/27/2005	< 0.0005	< 0.0006	< 0.0005	0.0035 J	0.0048 J	0.65	< 0.0006
MW-92	04/26/2006	< 0.0005	< 0.0006	< 0.0005	0.0053	0.0061	0.85	< 0.0006
MW-92	10/24/2006	< 0.0005	< 0.0006	< 0.0005	0.0045 J	0.0042 J	0.58	< 0.0006
MW-92	04/27/2007	< 0.0005	< 0.0006	< 0.0005	0.0039 J	0.005 J	0.62	< 0.0006
MW-92	10/18/2007	< 0.0005	< 0.0006	< 0.0005	0.0028 J	0.0034 J	0.42	< 0.0006
MW-92	04/16/2008	< 0.0005	< 0.0005	< 0.0005	0.0037 J	0.0037 J	0.45	< 0.0005
MW-92	10/15/2008	< 0.0005	< 0.0005	< 0.0005	0.0025 J	0.0032 J	0.69	< 0.0005
MW-92	04/13/2009	< 0.0005	< 0.0005	< 0.0005	0.002 J	0.0012 J	0.032	< 0.0005
MW-92	10/23/2009	< 0.0005	< 0.0005	< 0.0005	0.0013 J	0.0024 J	0.22	< 0.0005
MW-92	04/13/2010	< 0.0005	< 0.0005	< 0.0005	0.001 J	0.0029 J	0.29	< 0.0005
MW-92	10/25/2010	< 0.0005	0.00072 J	< 0.0005	0.0018 J	0.0039 J	0.29	< 0.0005
MW-92	04/29/2011	< 0.0005	0.004 J	< 0.0005	0.001 J	0.007	0.3	< 0.0005
MW-92	11/01/2011	< 0.0005	0.0047 J	< 0.0005	< 0.0005	< 0.0005	0.19	< 0.0005
MW-92	03/28/2012	< 0.0005	0.0035 J	< 0.0005	< 0.0005	0.0065	0.31	< 0.0005
MW-92	11/07/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	0.0042 J	0.16	< 0.0005
MW-92	05/07/2013	< 0.0005	0.0016 J	< 0.0005	0.0011 J	0.0057	0.19	< 0.0005
MW-92	11/19/2013	< 0.0005	0.0034 J	< 0.0005	0.0017 J	0.01	0.22	< 0.0005
MW-92	06/17/2014	< 0.0004	0.0029 J	< 0.0005	0.0013 J	0.01	0.2	< 0.0004
MW-92	11/18/2014	0.00073 J	0.004 J	< 0.0005	0.0017 J	0.012	0.26	< 0.0004
MW-92	12/03/2015	< 0.0004	0.00077 J	< 0.0005	< 0.0006	0.0021 J	0.044	< 0.0004
MW-92	12/09/2016	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	0.00468	< 0.000248
MW-92	11/29/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	0.00155	< 0.000248
MW-92	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	0.00083 J	< 0.000248
MW-92	12/23/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	0.0026	< 0.000248
MW-92	12/17/2020	< 0.000245	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000189

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-92	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	**0.000922 J**	< 0.000234
MW-93	06/18/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-93	09/19/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-93	12/03/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-93	03/05/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-93	06/17/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-93	09/16/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-93	12/10/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-93	03/18/2003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-93	06/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-93	09/18/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	**0.002 J**	< 0.00093
MW-93	05/03/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-93	10/27/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	**0.01**	< 0.00079
MW-93	12/10/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	**0.016**	< 0.00079
MW-93	01/26/2005	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	**0.019**	< 0.00079
MW-93	04/27/2005	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	**0.039**	< 0.00079
MW-93	07/19/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	**0.061**	< 0.0006
MW-93	09/16/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	**0.12**	< 0.0006
MW-93	10/27/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	**0.079**	< 0.0006
MW-93	11/22/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	**0.09**	< 0.0006
MW-93	01/17/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	**0.087**	< 0.0006
MW-93	04/26/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	**0.14**	< 0.0006
MW-93	07/18/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	**0.1**	< 0.0006
MW-93	10/24/2006	< 0.0005	< 0.0006	< 0.0005	**0.0007 J**	< 0.0007	**0.13**	< 0.0006
MW-93	02/05/2007	< 0.0005	< 0.0006	< 0.0005	**0.00092 J**	**0.0013 J**	**0.17**	< 0.0006
MW-93	04/25/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	**0.15**	< 0.0006
MW-93	08/06/2007	< 0.0005	< 0.0006	< 0.0005	**0.00073 J**	< 0.0007	**0.08**	< 0.0006
MW-93	10/18/2007	< 0.0005	< 0.0006	< 0.0005	**0.00073 J**	**0.00078 J**	**0.12**	< 0.0006
MW-93	01/21/2008	< 0.0005	< 0.0006	< 0.0005	**0.00071 J**	< 0.0007	**0.1**	< 0.0006
MW-93	11/19/2013	< 0.0005	**0.002 J**	< 0.0005	< 0.001	< 0.001	**0.02**	< 0.0005
MW-93	06/17/2014	< 0.0004	**0.0035 J**	< 0.0005	< 0.0006	**0.0033 J**	**0.015**	< 0.0004
MW-93	11/18/2014	< 0.0004	**0.0024 J**	< 0.0005	< 0.0006	< 0.0005	**0.019**	< 0.0004
MW-93	12/03/2015	< 0.0004	**0.002 J**	< 0.0005	**0.0077**	**0.0034 J**	**0.0061**	< 0.0004
MW-93R	06/08/2017	**0.000225 J**	**0.00221**	< 0.000116	**0.00028 J**	**0.00105**	**0.0633**	< 0.000248
MW-93R	11/29/2017	< 0.000168	**0.00106**	< 0.000116	< 0.000157	**0.000295 J**	**0.02**	< 0.000248
MW-93R	06/27/2018	< 0.000168	**0.00158**	< 0.000116	**0.000236 J**	**0.000787 J**	**0.0367**	< 0.000248
MW-93R	12/13/2018	**0.000193 J**	**0.00146**	< 0.000116	< 0.000157	**0.000721 J**	**0.0487**	< 0.000248
MW-93R	06/12/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	**0.0172**	< 0.000248
MW-93R	12/23/2019	**0.000248 J**	**0.00191**	< 0.000116	**0.000417 J**	**0.0019**	**0.0884**	< 0.000248
MW-93R	12/17/2020	< 0.000245	**0.00359**	< 0.000285	< 0.000174	**0.00303**	**0.097 J**	< 0.000189
MW-93R	12/15/2021	**0.00221**	**0.0098**	< 0.000285	**0.000885 J**	**0.00596**	**0.11 JH**	< 0.000234
MW-97	02/08/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-97	03/07/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-97	06/18/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-97	09/16/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-97	12/11/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-97	03/17/2003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-97	06/16/2003	< 0.00039	< 0.00083 UJL	< 0.00063 UJ	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-97	09/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-97	05/03/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-97	10/26/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-97	04/27/2005	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-97	10/28/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-97	04/27/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-97	10/27/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-97	04/26/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	4.9	0.007	0.005	0.07	0.005	0.005	0.002
MW-97	10/18/2007	**0.0006 J**	**0.0017 J**	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-97	04/17/2008	< 0.0005	**0.0013 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-97	10/15/2008	**0.00051 J**	**0.0027 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-97	04/16/2009	< 0.0005	**0.0026 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-97	10/22/2009	< 0.0005	**0.0044 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-97	04/15/2010	**0.00093 J**	**0.0077 JL**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-97	05/14/2010	**0.00065 J**	**0.0061**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-97	10/22/2010	**0.00069 J**	**0.0055**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-97	04/29/2011	**0.00067 J**	**0.0074**	< 0.0005	< 0.0005	< 0.0005	**0.00065 J**	< 0.0005
MW-97	10/21/2011	< 0.0005	**0.0087**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-97	03/27/2012	< 0.0005	**0.0041 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-97	11/08/2012	< 0.0005	**0.006**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-97	05/08/2013	< 0.0005	**0.0032 J**	< 0.0005	< 0.001	< 0.001	**0.0042 J**	< 0.0005
MW-97	11/19/2013	**0.00053 J**	**0.0035 J**	< 0.0005	< 0.001	< 0.001	**0.0064**	< 0.0005
MW-97	06/18/2014	< 0.0004	**0.0011 J**	< 0.0005	< 0.0006	**0.00058 J**	**0.023**	< 0.0004
MW-97	08/21/2014	**0.00085 J**	**0.0012 J**	< 0.0005	< 0.0006	**0.00051 J**	**0.019**	< 0.0004
MW-97	11/25/2014	**0.00062 J**	**0.0013 J**	< 0.0005	< 0.0006	**0.00083 J**	**0.037**	< 0.0004
MW-97	03/19/2015	**0.00075 J**	**0.0015 J**	< 0.0005	< 0.0006	**0.002 J**	**0.065**	< 0.0004
MW-97	07/21/2015	**0.00067 J**	**0.0028 J**	< 0.0005	**0.0012 J**	**0.0052**	**0.09**	< 0.0004
MW-97	09/30/2015	**0.0011 J**	**0.002 J**	< 0.0005	< 0.0006	**0.0028 J**	**0.071**	< 0.0004
MW-97	11/19/2015	**0.0015 J**	**0.0016 J**	< 0.0005	< 0.0006	**0.0015 J**	**0.056**	< 0.0004
MW-97	03/30/2016	**0.0012 J**	**0.0019 J**	< 0.0005	< 0.0006	**0.0023 J**	**0.083**	< 0.0004
MW-97	06/07/2016	**0.0014 J**	**0.0026 J**	< 0.0005	< 0.0006	**0.0029 J**	**0.092**	< 0.0004
MW-97	09/08/2016	**0.00126**	**0.0015**	**0.000363 J**	**0.000395 J**	**0.00106**	**0.0196**	< 0.000248
MW-97	12/09/2016	**0.00178**	**0.00236**	**0.000428 J**	< 0.000157	**0.000909 J**	**0.0217**	< 0.000248
MW-97	06/08/2017	**0.00139**	**0.0033**	**0.00044 J**	**0.00127**	**0.00905**	**0.154**	< 0.000248
MW-97	11/29/2017	**0.00108**	**0.00223**	**0.000571 J**	**0.00113**	**0.00528**	**0.0647 J**	< 0.000248
MW-97	12/13/2018	**0.00219**	**0.00991**	**0.000885 J**	**0.00382**	**0.0169**	**0.128**	< 0.000248 UJ
MW-97	12/23/2019	**0.00462**	**0.0198**	**0.00175**	**0.00798**	**0.0262**	**0.296**	< 0.000248
MW-97	12/17/2020	**0.00312**	**0.0168**	< 0.000172	**0.00627**	**0.0218**	**0.277**	< 0.0003
MW-97	12/14/2021	**0.00352**	**0.0199**	**0.00107**	**0.00523**	**0.0218**	**0.261**	< 0.000234
MW-98	02/08/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-98	03/07/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-98	06/18/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-98	09/17/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-98	12/11/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-98	03/17/2003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-98	06/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-98	09/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-98	04/29/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-98	10/26/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-98	04/28/2005	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-98	10/28/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-98	04/27/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-98	10/27/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-98	04/26/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-98	10/19/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-98	04/16/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-98	10/16/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.0083**	< 0.0005
MW-98	11/14/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-98	04/16/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-98	10/22/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006 UJ	< 0.0005
MW-98	04/15/2010	< 0.0005	< 0.0005 UJ	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-98	10/22/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-98	04/29/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00064 J**	< 0.0005
MW-98	10/21/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-98	03/27/2012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-98	11/08/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-98	05/07/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-98	11/19/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-98	06/18/2014	< 0.0004	**0.00062 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-98	11/25/2014	< 0.0004	**0.00075 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-98	07/21/2015	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-98	11/19/2015	< 0.0004	**0.00073 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-98	06/07/2016	< 0.0004	**0.00053 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-98	12/09/2016	< 0.000168	**0.000787 J**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-98	06/08/2017	< 0.000168	**0.000798 J**	< 0.000116	< 0.000157	< 0.000138	**0.00034 J**	< 0.000248
MW-98	11/29/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-98	06/27/2018	< 0.000168	**0.000481 J**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-98	12/13/2018	< 0.000168	**0.00145**	< 0.000116	< 0.000157	< 0.000138	**0.00035 J**	< 0.000248 UJ
MW-98	06/12/2019	< 0.000168	**0.00232**	< 0.000116	< 0.000157	< 0.000138	**0.00062 J**	< 0.000248
MW-98	12/23/2019	< 0.000168	**0.00201**	< 0.000116	< 0.000157	< 0.000138	**0.000608 J**	< 0.000248
MW-98	12/17/2020	< 0.000168	**0.000589 J**	< 0.000172	< 0.000121	< 0.000317	**0.000524 J**	< 0.0003
MW-98	12/14/2021	< 0.000244	**0.00146**	< 0.000285	< 0.000174	< 0.000424	**0.00162**	< 0.000234
MW-100	06/18/2002	**0.053**	**0.11**	< 0.005	**0.026**	**0.021**	**0.019**	**0.0057**
MW-100	09/18/2002	**0.027**	**0.057**	< 0.005	**0.012**	**0.0099**	**0.0067**	**0.0029**
MW-100	12/10/2002	**0.053**	**0.096**	< 0.005	**0.024**	**0.015**	**0.011**	**0.0049**
MW-100	03/19/2003	**0.03**	**0.056**	< 0.005	**0.0099**	< 0.005	< 0.005	< 0.002
MW-100	06/19/2003	**0.041**	**0.071**	< 0.00063	**0.0048 J**	**0.0041 J**	**0.0029 J**	< 0.00093
MW-100	09/17/2003	**0.059**	**0.1**	< 0.00063	**0.014**	**0.0086**	**0.0066**	**0.0026**
MW-100	04/28/2004	**0.027**	**0.041**	< 0.00038	**0.0046 J**	< 0.0007	< 0.00043	< 0.00079
MW-100	10/26/2004	**0.047**	**0.06**	< 0.00038	**0.0064**	**0.0026 J**	**0.0013 J**	< 0.00079
MW-100	04/25/2005	**0.024**	**0.035**	< 0.00038	**0.0012 J**	**0.00088 J**	< 0.00043	< 0.00079
MW-100	10/27/2005	**0.018**	**0.025**	< 0.0005	**0.0016 J**	**0.001 J**	< 0.0005	< 0.0006
MW-100	04/27/2006	**0.026**	**0.03**	< 0.0005	**0.0081**	**0.0015 J**	< 0.0005	< 0.0006
MW-100	10/26/2006	**0.01**	**0.016**	< 0.0005	**0.0071**	**0.0011 J**	< 0.0005	< 0.0006
MW-100	04/26/2007	**0.013**	**0.014**	< 0.0005	**0.015**	**0.0019 J**	< 0.0005	< 0.0006
MW-100	10/18/2007	**0.0019 J**	**0.0013 J**	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-100	04/17/2008	**0.00057 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-100	10/13/2008	**0.00094 J**	**0.0036 J**	< 0.0005	**0.00082 J**	< 0.0005	< 0.0006	< 0.0005
MW-100	04/15/2009	**0.0012 J**	**0.0044 J**	< 0.0005	**0.0014 J**	< 0.0005	**0.0028 J**	< 0.0005
MW-100	10/23/2009	**0.0013 J**	**0.0011 J**	< 0.0005	< 0.0005	< 0.0005	**0.0023 J**	**0.0006 J**
MW-100	04/14/2010	**0.0062**	**0.0056**	< 0.0005	**0.0024 J**	**0.0036 J**	**0.069**	< 0.0005
MW-100	05/14/2010	**0.0014 J**	**0.0019 J**	< 0.0005	**0.00068 J**	**0.0015 J**	**0.028**	< 0.0005
MW-100	10/20/2010	**0.0047 J**	**0.012**	< 0.0005	**0.0022 J**	**0.0039 J**	**0.044**	**0.00092 J**
MW-100	04/28/2011	**0.0078**	**0.026**	< 0.0005	**0.0038 J**	**0.0058**	**0.071**	< 0.0005
MW-100	10/18/2011	**0.0013 J**	**0.00091 J**	< 0.0005	**0.00053 J**	**0.0008 J**	**0.0052**	< 0.0005
MW-100	03/27/2012	**0.02**	**0.057**	< 0.0005	**0.0051**	**0.0079**	**0.082**	**0.0019 J**
MW-100	11/07/2012	**0.0033 J**	**0.0046 J**	< 0.0005	< 0.001	< 0.001	**0.0078**	< 0.0005
MW-100	05/06/2013	**0.0042 J**	**0.0056**	< 0.0005	**0.0037 J**	**0.0021 J**	**0.0038 J**	< 0.0005
MW-100	11/21/2013	**0.0024 J**	**0.0019 J**	< 0.0005	**0.0028 J**	**0.0015 J**	**0.0012 J**	< 0.0005
MW-100	06/17/2014	**0.0017 J**	**0.0038 J**	< 0.0005	**0.0039 J**	**0.0018 J**	**0.00062 J**	**0.00043 J**
MW-100	11/24/2014	**0.0025 J**	**0.01**	< 0.0005	**0.0044 J**	**0.0018 J**	**0.0012 J**	**0.00062 J**
MW-100	11/20/2015	**0.0045 J**	**0.021**	< 0.0005	**0.0037 J**	**0.0014 J**	**0.002 J**	**0.00081 J**
MW-100	12/07/2016	**0.00338**	**0.008**	< 0.000116	**0.00423**	**0.00121**	**0.000483 J**	**0.00137 J**
MW-100	11/29/2017	**0.000758 J**	**0.00116**	< 0.000116	**0.000507 J**	**0.000224 J**	< 0.000333	< 0.000248
MW-100	12/13/2018	**0.00183**	**0.00268**	< 0.000116	**0.00273**	**0.000835 J**	**0.000373 J**	**0.000615 J**
MW-100	12/19/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-100	12/16/2020	< 0.000245	< 0.000216	< 0.000285	< 0.000174	< 0.000424	**0.00141**	< 0.000189
MW-100	12/14/2021	< 0.000244	< 0.000216	< 0.000285	**0.000211 J**	< 0.000424	< 0.0005	< 0.000234
MW-106	11/13/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.051**	< 0.002
MW-106	12/12/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.061**	< 0.002

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-106	03/19/2003	< 0.005	< 0.005 UJL	< 0.005	< 0.005 UJL	< 0.005 UJL	**0.034 JL**	< 0.002
MW-106	06/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	**0.14**	< 0.00093
MW-106	09/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	**0.0019 J**	**0.12**	< 0.00093
MW-106	04/27/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	**0.3**	< 0.00079
MW-106	10/26/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	**0.0048 J**	**0.4**	< 0.00079
MW-106	04/28/2005	< 0.00043	< 0.00053	< 0.00038	< 0.00074	**0.0065**	**0.58**	< 0.00079
MW-106	10/27/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	**0.0047 J**	**0.38**	< 0.0006
MW-106	04/24/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	**0.0046 J**	**0.51**	< 0.0006
MW-106	10/23/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	**0.0052**	**0.42**	< 0.0006
MW-106	04/23/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	**0.0043 J**	**0.34**	< 0.0006
MW-106	10/17/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	**0.0011 J**	**0.19**	< 0.0006
MW-106	04/15/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.0015 J**	**0.19**	< 0.0005
MW-106	10/14/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00093 J**	**0.071**	< 0.0005
MW-106	04/15/2009	< 0.0005	< 0.0005	< 0.0005	**0.0055**	**0.0023 J**	**0.2**	< 0.0005
MW-106	10/23/2009	< 0.0005	< 0.0005	< 0.0005	**0.0015 J**	**0.0024 J**	**0.32**	< 0.0005
MW-106	04/14/2010	< 0.0005	< 0.0005	< 0.0005	**0.0025 J**	**0.004 J**	**0.66**	< 0.0005
MW-106	10/26/2010	< 0.0005	< 0.0005	< 0.0005	**0.0014 J**	**0.003 J**	**0.37**	< 0.0005
MW-106	04/29/2011	< 0.0005	< 0.0005	< 0.0005	**0.001 J**	**0.0023 J**	**0.33**	< 0.0005
MW-106	11/01/2011	< 0.0005	< 0.0005	**0.003 J**	< 0.0005	**0.0034 J**	**0.3**	< 0.0005
MW-106	03/28/2012	< 0.0005	< 0.0005	< 0.0005	**0.0028 J**	**0.0024 J**	**0.2**	< 0.0005
MW-106	11/08/2012	< 0.0005	< 0.0006	< 0.0005	**0.0018 J**	**0.0088**	**0.25**	< 0.0005
MW-106	05/07/2013	< 0.0005	**0.0018 J**	< 0.0005	**0.0012 J**	**0.004 J**	**0.23**	< 0.0005
MW-106	11/19/2013	< 0.0005	**0.001 J**	< 0.0005	**0.0018 J**	**0.0085**	**0.34**	< 0.0005
MW-106	06/19/2014	< 0.0004	**0.0023 J**	< 0.0005	**0.13**	**0.028**	**0.0033 J**	< 0.0004
MW-106	11/17/2014	< 0.0004	**0.0012 J**	< 0.0005	**0.0014 J**	**0.0064**	**0.19**	< 0.0004
MW-106	07/21/2015	< 0.0004	**0.0039 J**	< 0.0005	**0.0017 J**	**0.0039 J**	**0.14**	< 0.0004
MW-106	12/03/2015	< 0.0004	**0.00068 J**	< 0.0005	< 0.0006	**0.0054**	**0.22**	< 0.0004
MW-106	06/07/2016	< 0.0004	**0.00068 J**	< 0.0005	**0.0011 J**	**0.0033 J**	**0.19**	< 0.0004
MW-106	12/09/2016	< 0.000168	**0.000986 J**	< 0.000116	**0.000969 J**	**0.00315**	**0.203**	< 0.000248
MW-106	11/29/2017	< 0.000168	< 0.000192	< 0.000116	**0.00896**	**0.00132**	**0.000669 J**	< 0.000248
MW-106	12/13/2018	< 0.000168	**0.000193 J**	< 0.000116	**0.00111**	**0.00121**	**0.013**	< 0.000248 UJ
MW-106	12/23/2019	**0.00025 J**	**0.000756 J**	< 0.000116	**0.0229**	**0.00112**	< 0.000333	**0.00908**
MW-106	12/17/2020	< 0.000244	< 0.000216	< 0.000285	**0.00071 J**	< 0.000424	**0.00058 J**	< 0.000234
MW-106	12/14/2021	**0.00164**	< 0.000216	< 0.000285	**0.00648**	< 0.000424	< 0.000500	**0.0118**
MW-108	03/19/2003	**0.07**	**0.39 JL**	< 0.005	< 0.005	**0.011**	< 0.005	**0.013 JH**
MW-108	06/19/2003	**0.092**	**0.54 J**	< 0.00063	< 0.00044	**0.0095**	< 0.001	**0.014 J**
MW-108	09/16/2003	**0.056**	**0.47**	< 0.00063	**0.0013 J**	**0.0074**	< 0.001	**0.0083**
MW-108	04/28/2004	--	**0.35**	--	< 0.00074	< 0.0007	< 0.00043	**0.0045**
MW-108	10/26/2004	--	**0.12**	--	< 0.00074	< 0.0007	< 0.00043	**0.0019 J**
MW-108	04/26/2005	--	**0.12**	--	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-108	10/24/2005	--	**0.11**	--	< 0.0005	**0.00087 J**	< 0.0005	**0.0016 J**
MW-108	04/24/2006	--	**0.071**	--	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-108	10/23/2006	--	**0.12**	--	**0.0013 J**	**0.0045 J**	< 0.0005	**0.01**
MW-108	04/25/2007	--	**0.2**	--	**0.0039 J**	**0.0071**	< 0.0005	**0.047**
MW-108	10/18/2007	--	**0.31**	--	**0.0079**	**0.022**	**0.00092 J**	**0.053**
MW-108	04/15/2008	--	**0.17**	--	**0.0035 J**	**0.0082**	< 0.0006	**0.029**
MW-108	10/14/2008	--	**0.35**	--	**0.009**	**0.018**	**0.0007 J**	**0.057**
MW-108	04/14/2009	--	**0.29**	--	**0.011**	**0.023**	**0.0015 JL**	**0.052**
MW-108	10/19/2009	--	**0.2 JL**	--	**0.0055 J**	**0.0098**	**0.0013 J**	**0.027 JL**
MW-108	04/12/2010	--	**0.3 JL**	--	**0.01**	**0.017**	**0.0029 J**	**0.064**
MW-108	10/21/2010	--	**0.66**	--	**0.011**	**0.017**	**0.0048 J**	**0.073**
MW-108	04/25/2011	--	**0.54**	--	**0.015**	**0.019**	**0.0032 J**	**0.084**
MW-108	10/19/2011	--	**1.3**	--	**0.015**	**0.028**	**0.017**	**0.068**
MW-108	03/29/2012	--	**1.2**	--	**0.014**	**0.027**	**0.023**	**0.058**
MW-108	11/07/2012	--	**0.4**	--	**0.0049 J**	**0.0078**	**0.0054**	**0.015**
MW-108	05/07/2013	--	**0.45**	--	**0.0055**	**0.0097**	**0.0064**	**0.01**

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	4.9	0.007	0.005	0.07	0.005	0.005	0.002
MW-108	11/20/2013	--	0.3	--	0.0037 J	0.013	0.0031 J	0.0084
MW-108	06/25/2014	--	0.23	--	0.011	0.04	0.0011 J	0.0031
MW-108	11/19/2014	--	0.17	--	0.007	0.026	0.0017 J	0.0068
MW-108	11/24/2015	0.009	0.07	< 0.0005	0.0034 J	0.015	0.0017 J	0.0014 J
MW-108	12/08/2016	0.174	0.105	0.0103	0.122	0.418	0.00447 J	0.0221
MW-108	11/29/2017	0.014	0.0724	0.00128	0.014	0.0384	< 0.000333	0.00083 J
MW-108	12/13/2018	0.00653	0.0485	0.000347 J	0.00504	0.0171	< 0.000333	< 0.000248 UJ
MW-108	12/19/2019	0.00684	0.0434	< 0.000116	0.00481	0.0128	< 0.000333	0.00144 J
MW-108	12/16/2020	0.00262	0.0231	< 0.000172	0.00208	0.00541	< 0.000189	0.000386 J
MW-108	12/14/2021	< 0.000244	0.0552	< 0.000285	0.00711	0.0172	< 0.0005	< 0.000234
MW-109	03/20/2003	0.029	0.043	< 0.005	0.093	0.015	0.041 JL	0.0031
MW-109	06/19/2003	0.039	0.083	0.0015 J	0.15	0.02	0.049	0.0043
MW-109	09/16/2003	0.045	0.087	0.0017 J	0.12	0.022	0.048	0.0042
MW-109	04/28/2004	--	0.13	--	0.28	0.032	0.054	0.0076
MW-109	10/26/2004	--	0.14	--	0.086	0.031	0.036	0.0075
MW-109	04/26/2005	--	0.15	--	0.12	0.032	0.064	0.0047
MW-109	10/24/2005	--	0.2	--	0.14	0.071	0.16	0.0057
MW-109	04/24/2006	--	0.13	--	0.15	0.039	0.07	0.0043
MW-109	10/23/2006	--	0.17	--	0.24	0.055	0.088	0.0062
MW-109	04/25/2007	--	0.22	--	0.17	0.079	0.074	0.0092
MW-109	10/18/2007	--	0.18	--	0.19	0.11	0.063	0.0069
MW-109	04/15/2008	--	0.11	--	0.16	0.086	0.039	0.0063
MW-109	10/13/2008	--	0.16	--	0.18	0.041	0.031	0.0084
MW-109	04/14/2009	--	0.17	--	0.14	0.021	0.035 JL	0.0053
MW-109	10/21/2009	--	0.077	--	0.38	0.031	0.033	0.019
MW-109	04/12/2010	--	0.076 JL	--	0.13	0.011	0.018	0.011
MW-109	10/21/2010	--	0.1	--	0.4	0.032	0.024	0.042
MW-109	04/25/2011	--	0.067	--	0.17	0.017	0.01	0.026
MW-109	10/19/2011	--	0.039	--	0.082	0.0097	0.0093	0.007
MW-109	03/29/2012	--	0.049	--	0.2	0.019	0.01	0.017
MW-109	11/07/2012	--	0.037	--	0.17	0.016	0.007	0.018
MW-109	05/07/2013	--	0.037	--	0.19	0.017	0.01	0.014
MW-109	11/20/2013	--	0.028	--	0.14	0.012	0.0079	0.015
MW-109	06/25/2014	--	0.026	--	0.061	0.0067	0.013	0.013
MW-109	11/18/2014	--	0.07	--	0.15	0.012	0.027	0.032
MW-109	11/24/2015	0.2	0.11	< 0.0005	0.19	0.014	0.039	0.04
MW-109	12/07/2016	0.168	0.062	0.000586 J	0.141	0.00911	0.0344	0.0314
MW-109	11/29/2017	0.252	0.0904	0.00124	0.168	0.0115	0.0418	0.0327
MW-109	12/13/2018	0.471	0.173	0.00105	0.236	0.0158	0.0556	0.0998
MW-109	12/19/2019	0.235	0.0734	0.00049 J	0.125	0.00848	0.0364	0.0782
MW-109	12/16/2020	0.0801	0.032	< 0.000172	0.0465	0.0052	0.0172	0.0268
MW-109	12/14/2021	0.0815	0.0346	< 0.000285	0.0397	0.00497 J	0.019	0.0163
MW-110	03/18/2003	0.086 JH	0.15 J	< 0.005	0.27 JL	0.17	0.096 J	0.031 J
MW-110	06/19/2003	0.041	0.065 J	< 0.00063	0.29	0.16	0.074	0.02 J
MW-110	09/16/2003	0.05	0.095	< 0.00063	0.37	0.18	0.11	0.023
MW-110	04/28/2004	--	0.1	--	0.29	0.14	0.059	0.028
MW-110	10/26/2004	--	0.15	--	0.036	0.014	0.0065	0.0097
MW-110	04/26/2005	--	0.11	--	0.019	0.0095	0.0024 J	0.0054
MW-110	10/24/2005	--	0.094	--	0.027	0.012	0.0045 J	0.0069
MW-110	04/24/2006	--	0.084	--	0.065	0.019	0.0099	0.016
MW-110	10/23/2006	--	0.19	--	0.028	0.0079	0.0051	0.0067
MW-110	04/25/2007	--	0.88	--	0.044	0.008	0.015	0.011
MW-110	10/18/2007	--	0.67	--	0.038	0.008	0.011	0.0096
MW-110	04/15/2008	--	0.25	--	0.039	0.0076	0.006	0.015
MW-110	10/13/2008	--	0.2	--	0.034	0.0055	0.0034 J	0.013
MW-110	04/14/2009	--	0.081	--	0.025	0.0047 J	0.0018 JL	0.014

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	4.9	0.007	0.005	0.07	0.005	0.005	0.002
MW-110	10/21/2009	--	0.066	--	0.017 J	0.0031 J	0.0014 J	0.011
MW-110	04/13/2010	--	0.065	--	0.025	0.004 J	0.0021 J	0.012
MW-110	10/21/2010	--	0.044	--	0.017	0.0024 J	0.0011 J	0.018
MW-110	04/25/2011	--	0.048	--	0.035	0.0052	0.0015 J	0.028
MW-110	10/19/2011	--	0.034	--	0.022	0.0041 J	0.0025 J	0.011
MW-110	03/29/2012	--	0.018	--	0.017	0.004 J	0.0017 J	0.01
MW-110	11/07/2012	--	0.024	--	0.026	0.0065	0.0033 J	0.0049
MW-110	05/07/2013	--	0.019	--	0.03	0.0085	0.0031 J	0.0041
MW-110	11/20/2013	--	0.011	--	0.032	0.008	0.0021 J	0.0044
MW-110	06/25/2014	--	0.0065	--	0.026	0.0073	0.0013 J	0.0044
MW-110	11/18/2014	--	0.0042 J	--	0.018	0.0041 J	< 0.0006	0.0038
MW-110	11/24/2015	0.0066	0.0045 J	< 0.0005	0.022	0.0031 J	0.00062 J	0.0039
MW-110	12/07/2016	0.0112	0.022	0.000325 J	0.0505	0.0065	0.00368	0.00952
MW-110	11/29/2017	0.00206	0.00222	0.000308 J	0.00714	0.0012	< 0.000333	0.000969 J
MW-110	12/13/2018	0.0267	0.0349	0.000378 J	0.136	0.0884	0.0134	0.0276 J
MW-110	12/19/2019	0.0117	0.0173	< 0.000116	0.00681	0.00113	< 0.000333	0.00474
MW-110	12/16/2020	0.00487	0.00441	< 0.000172	0.00322	0.000402 J	< 0.000189	0.00118
MW-110	12/14/2021	0.00277	0.00311	< 0.000285	0.00142	< 0.000424	< 0.0005	0.000372 J
MW-111	03/19/2003	0.014	0.013	< 0.005	0.18	< 0.005	< 0.005	0.011 JH
MW-111	06/19/2003	0.017	0.014 J	< 0.00063	0.32	< 0.00074	< 0.001	0.019 J
MW-111	09/16/2003	0.011	0.0072	< 0.00063	0.19	< 0.00074	< 0.001	0.012
MW-111	04/28/2004	--	0.0081	--	0.16	< 0.0007	< 0.00043	0.013
MW-111	10/26/2004	--	0.16	--	0.07	0.0023 J	0.0029 J	0.0049
MW-111	04/26/2005	--	0.023	--	0.062	0.00075 J	< 0.00043	0.007
MW-111	10/24/2005	--	0.0086	--	0.034	< 0.0007	< 0.0005	< 0.0006
MW-111	04/24/2006	--	0.0055	--	0.038	< 0.0007	< 0.0005	0.0047
MW-111	10/23/2006	--	0.0043 J	--	0.075	0.0017 J	0.0012 J	0.0093
MW-111	04/25/2007	--	< 0.0006	--	0.037	< 0.0007	< 0.0005	0.011
MW-111	10/18/2007	--	0.04	--	0.018	< 0.0007	< 0.0005	0.0065
MW-111	04/17/2008	--	0.01	--	0.0033 J	< 0.0005	< 0.0006	0.0026
MW-111	10/13/2008	--	< 0.0005	--	0.0085	0.0016 J	< 0.0006	0.0022
MW-111	04/14/2009	--	< 0.0005	--	0.014	0.02	0.0092 JL	0.0024
MW-111	10/23/2009	--	0.013	--	0.018	0.022	0.0082	0.008
MW-111	04/14/2010	--	0.0014 J	--	0.0089	0.032	0.085	0.0032
MW-111	10/21/2010	--	< 0.0005	--	0.0013 J	0.0046 J	0.016	< 0.0005
MW-111	04/25/2011	--	< 0.0005	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-111	10/19/2011	--	< 0.0005	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-111	03/29/2012	--	< 0.0005	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-111	11/08/2012	--	< 0.0006	--	< 0.001	< 0.001	< 0.001	< 0.0005
MW-111	05/07/2013	--	< 0.0006	--	< 0.001	< 0.001	< 0.001	< 0.0005
MW-111	12/05/2013	--	< 0.0006	--	< 0.001	< 0.001	< 0.001	< 0.0005
MW-111	06/26/2014	--	0.0089	--	< 0.0006	0.00091 J	0.0071	0.00072 J
MW-111	11/18/2014	--	0.034	--	0.0024 J	0.0065	0.083	0.0031
MW-111	11/24/2015	0.008	0.035	< 0.0005	0.0016 J	0.0034 J	0.053	0.0029
MW-111	12/08/2016	0.0144	0.0265	0.000166 J	0.00968	0.0159	0.291	0.00399
MW-111	11/29/2017	0.000305 J	0.00081 J	< 0.000116	0.000406 J	0.00122	0.00757	< 0.000248
MW-111	12/13/2018	0.000711 J	0.00206	< 0.000116	0.000515 J	0.00096 J	0.00516	< 0.000248 UJ
MW-111	12/19/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	0.000548 J	0.0027	< 0.000248
MW-111	12/16/2020	0.0237	0.0305	< 0.000172	0.00303	0.00352	0.0209	0.0027
MW-111	12/15/2021	0.799	0.547	0.0036	0.00466	0.00719	0.0196	0.0941
MW-112	03/19/2003	0.12	0.15	< 0.005	1.1	0.043	0.31	< 0.002
MW-112	06/19/2003	0.13	0.16 J	< 0.00063	1.4	0.073	0.53	< 0.00093
MW-112	09/17/2003	0.066	0.13	< 0.00063	0.89	0.092	0.76	< 0.00093
MW-112	04/28/2004	--	0.065	--	0.42	0.031	0.15	< 0.00079
MW-112	10/26/2004	--	0.18	--	0.91	0.025	0.18	< 0.00079
MW-112	04/26/2005	--	0.13	--	0.86	0.047	0.3	0.085

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-112	10/25/2005	--	**0.058**	--	**0.6**	**0.043**	**0.27**	< 0.0006
MW-112	04/24/2006	--	**0.023**	--	**0.25**	**0.026**	**0.17**	< 0.0006
MW-112	10/24/2006	--	**0.06**	--	**0.39**	**0.075**	**0.2**	< 0.0006
MW-112	04/25/2007	--	**0.066**	--	**0.22**	**0.038**	**0.03**	**0.13**
MW-112	10/18/2007	--	**0.037**	--	**0.15**	**0.024**	**0.045**	< 0.0006
MW-112	04/15/2008	--	**0.012**	--	**0.067**	**0.013**	**0.017**	< 0.0005
MW-112	10/13/2008	--	**0.0049 J**	--	**0.016**	**0.0022 J**	**0.0032 J**	**0.0027**
MW-112	04/13/2009	--	**0.071**	--	**0.039**	**0.0035 J**	**0.00086 J**	< 0.0005
MW-112	10/23/2009	--	**0.021**	--	**0.078**	< 0.0005	< 0.0006	< 0.0005
MW-112	04/14/2010	--	**0.031**	--	**0.068**	**0.0027 J**	< 0.0006	< 0.0005
MW-112	10/21/2010	--	**0.056**	--	**0.072**	**0.003 J**	< 0.0006	**0.03**
MW-112	04/25/2011	--	**0.089**	--	**0.054**	**0.0039 J**	< 0.0006	**0.051**
MW-112	10/19/2011	--	**0.051**	--	**0.067**	**0.0029 J**	< 0.0006	< 0.0005
MW-112	03/29/2012	--	**0.041**	--	**0.049**	**0.0018 J**	< 0.0006	< 0.0005
MW-112	11/08/2012	--	**0.034**	--	**0.098**	**0.0014 J**	< 0.001	< 0.0005
MW-112	05/07/2013	--	**0.063**	--	**0.055**	**0.0016 J**	< 0.001	< 0.0005
MW-112	11/26/2013	**0.059**	**0.08**	**0.0087**	**0.048**	**0.0024 J**	< 0.001	< 0.0005
MW-112	06/25/2014	--	**0.087**	--	**0.045**	**0.002 J**	**0.00064 J**	< 0.0004
MW-112	11/18/2014	--	**0.18**	--	**0.036**	**0.0025 J**	**0.002 J**	**0.056**
MW-112	11/24/2015	**0.028**	**0.026**	**0.0029 J**	**0.031**	**0.0013 J**	< 0.0006	**0.012**
MW-112	12/09/2016	**0.0674**	**0.0343**	**0.00814**	**0.0419**	**0.003**	**0.000345 J**	**0.0269**
MW-112	11/29/2017	**0.0582**	**0.0402**	**0.0141**	**0.00315**	**0.00133**	< 0.000333	**0.0143**
MW-112	12/13/2018	**0.0257**	**0.0181**	**0.00154**	**0.00379**	**0.00116**	< 0.000333	**0.0106**
MW-112	12/19/2019	**0.0225**	**0.0226**	**0.00312**	**0.00124**	**0.000601 J**	< 0.000333	**0.0182**
MW-112	12/16/2020	**0.0211**	**0.032**	**0.00669**	**0.000433 J**	**0.00109**	< 0.000189	**0.016**
MW-112	12/14/2021	**0.0225**	**0.0291**	**0.00282**	**0.000379 J**	< 0.000424	< 0.0005	**0.00511**
MW-113	03/20/2003	**0.024**	**0.049 JL**	< 0.005	< 0.005 UJL	< 0.005 UJL	< 0.005 UJL	**0.013**
MW-113	06/19/2003	**0.034**	**0.047**	< 0.00063	< 0.00044	< 0.00074	< 0.001	**0.012**
MW-113	09/16/2003	**0.033**	**0.061**	< 0.00063	**0.0015 J**	< 0.00074	< 0.001	**0.015**
MW-113	04/29/2004	--	**0.02**	--	< 0.00074	< 0.0007	< 0.00043	**0.005**
MW-113	10/26/2004	--	**0.015**	--	< 0.00074	< 0.0007	< 0.00043	**0.0034**
MW-113	04/26/2005	--	< 0.00053	--	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-113	10/25/2005	--	< 0.0006	--	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-113	04/24/2006	--	< 0.0006	--	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-113	10/24/2006	--	< 0.0006	--	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-113	04/25/2007	--	< 0.0006	--	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-113	10/18/2007	--	< 0.0006	--	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-113	04/15/2008	--	**0.00097 J**	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-113	10/13/2008	--	< 0.0005	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-113	04/13/2009	--	**0.00086 J**	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-113	10/23/2009	--	**0.0017 J**	--	< 0.0005	< 0.0005	< 0.0006	**0.00072 J**
MW-113	04/14/2010	--	**0.0072**	--	< 0.0005	< 0.0005	< 0.0006	**0.0023**
MW-113	05/14/2010	--	**0.0087**	--	< 0.0005	< 0.0005	< 0.0006	**0.0025**
MW-113	10/21/2010	--	**0.011**	--	< 0.0005	< 0.0005	< 0.0006	**0.0045**
MW-113	04/25/2011	--	**0.0067**	--	< 0.0005	< 0.0005	< 0.0006	**0.0025**
MW-113	10/19/2011	--	**0.0036 J**	--	< 0.0005	< 0.0005	< 0.0006	**0.0016 J**
MW-113	03/29/2012	--	**0.0026 J**	--	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-113	11/08/2012	--	**0.0023 J**	--	< 0.001	< 0.001	< 0.001	< 0.0005
MW-113	05/07/2013	--	**0.0018 J**	--	< 0.001	< 0.001	< 0.001	< 0.0005
MW-113	11/19/2013	**0.031**	**0.0017 J**	< 0.0005	< 0.001	< 0.001	< 0.001	**0.00073 J**
MW-113	06/25/2014	--	**0.0013 J**	--	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-113	11/17/2014	--	**0.00087 J**	--	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-113	11/24/2015	**0.019**	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-113	12/06/2016	**0.0186**	**0.000476 J**	< 0.000116	**0.000211 J**	< 0.000138	< 0.000333	**0.000336 J**
MW-113	11/28/2017	**0.0151**	**0.00136**	< 0.000116	**0.000483 J**	< 0.000138	< 0.000333	< 0.000248
MW-113	12/13/2018	**0.000607 J**	**0.000226 J**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-113	12/19/2019	**0.00772**	**0.00398**	< 0.000116	**0.000359 J**	< 0.000138	< 0.000333	**0.000478 J**
MW-113	12/16/2020	**0.0162**	**0.0219**	**0.000474 J**	**0.00147**	**0.001**	**0.00108**	**0.00127**
MW-113	12/14/2021	**0.00973**	**0.0175**	< 0.000285	**0.00288**	**0.00728**	**0.0121**	**0.000751 J**
MW-121	06/19/2003	< 0.00039	**0.061**	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-121	09/17/2003	< 0.00039	**0.081**	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-121	04/27/2004	< 0.00043	**0.078**	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-121	10/28/2004	< 0.00043	**0.11**	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-121	04/28/2005	< 0.00043	**0.13**	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-121	10/26/2005	< 0.0005	**0.09**	**0.00072 J**	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-121	04/26/2006	< 0.0005	**0.055**	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-121	10/26/2006	< 0.0005	**0.087**	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-121	04/26/2007	< 0.0005	**0.11**	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-121	10/16/2007	< 0.0005	**0.079**	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-121	04/17/2008	< 0.0005	**0.088**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-121	10/16/2008	< 0.0005	**0.066**	< 0.0005	< 0.0005	**0.00076 J**	< 0.0006	< 0.0005
MW-121	04/14/2009	< 0.0005	**0.09**	< 0.0005	< 0.0005	< 0.0005	< 0.0006 UJ	< 0.0005 UJ
MW-121	10/19/2009	< 0.0005 UJ	**0.095 JL**	**0.00061 J**	< 0.0005	**0.0012 J**	< 0.0006	< 0.0005 UJ
MW-121	04/14/2010	< 0.0005	**0.062**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-121	10/19/2010	< 0.0005	**0.02**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-121	04/27/2011	< 0.0005	**0.031**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-121	10/19/2011	< 0.0005	**0.025**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-121	03/28/2012	< 0.0005	**0.014**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-121	11/06/2012	< 0.0005	**0.0041 J**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-121	05/06/2013	< 0.0005	**0.0025 J**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-121	12/05/2013	< 0.0005	**0.0035 J**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-121	06/20/2014	< 0.0004	**0.015**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-121	11/24/2014	< 0.0004	**0.01**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-121	11/23/2015	**0.0011 J**	**0.042**	< 0.0005	< 0.0006	**0.001 J**	< 0.0006	< 0.0004
MW-121	06/06/2016	< 0.0004	**0.0053**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-121	01/26/2017	< 0.000168	**0.00409**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-121	11/29/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-121	12/13/2018	**0.0019**	**0.0284**	**0.000306 J**	**0.000237 J**	**0.00124**	< 0.000333	< 0.000248
MW-121	12/19/2019	< 0.000168	**0.00206**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-121	12/16/2020	< 0.000245	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000189
MW-121	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-122	06/19/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	< 0.00074	< 0.001	< 0.00093
MW-122	09/17/2003	< 0.00039	< 0.00083	< 0.00063	< 0.00044	**0.0017 J**	< 0.001	< 0.00093
MW-122	04/27/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-122	10/28/2004	< 0.00043	< 0.00053	< 0.00038	< 0.00074	< 0.0007	< 0.00043	< 0.00079
MW-122	04/28/2005	< 0.00043	< 0.00053	< 0.00038	< 0.00074	**0.00097 J**	< 0.00043	< 0.00079
MW-122	10/26/2005	< 0.0005	< 0.0006	< 0.0005	< 0.0005	**0.00098 J**	< 0.0005	< 0.0006
MW-122	04/26/2006	< 0.0005	< 0.0006	< 0.0005	< 0.0005	**0.0014 J**	< 0.0005	< 0.0006
MW-122	10/27/2006	**0.00058 J**	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-122	04/26/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-122	10/18/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	**0.00074 J**	< 0.0005	< 0.0006
MW-122	04/17/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.0016 J**	< 0.0006	< 0.0005
MW-122	10/13/2008	< 0.0005	< 0.0005	< 0.0005	**0.00052 J**	**0.0029 J**	< 0.0006	< 0.0005
MW-122	04/14/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.0017 J**	< 0.0006 UJ	< 0.0005 UJ
MW-122	10/20/2009	< 0.0005	< 0.0005	< 0.0005	**0.00082 J**	**0.0048 J**	< 0.0006	< 0.0005
MW-122	04/13/2010	< 0.0005	**0.0012 J**	< 0.0005	**0.00094 J**	**0.0057**	< 0.0006	< 0.0005
MW-122	08/10/2010	< 0.0005	**0.0016 J**	< 0.0005	**0.0006 J**	**0.0043 J**	< 0.0006	< 0.0005
MW-122	10/21/2010	< 0.0005	**0.0036 J**	< 0.0005	**0.002 J**	**0.0092**	< 0.0006	< 0.0005
MW-122	04/28/2011	< 0.0005	**0.0031 J**	< 0.0005	**0.0019 J**	**0.0094**	< 0.0006	< 0.0005
MW-122	08/22/2011	< 0.0005	**0.0054**	< 0.0005	**0.0029 J**	**0.014**	< 0.0006	< 0.0005
MW-122	10/19/2011	< 0.0005	**0.0048 J**	< 0.0005	**0.0025 J**	**0.013**	< 0.0006	< 0.0005
MW-122	02/06/2012	< 0.0005	**0.0058**	< 0.0005	< 0.0005	**0.011**	< 0.0006	< 0.0005

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-122	03/29/2012	< 0.0005	**0.0041 J**	< 0.0005	**0.0017 J**	**0.0091**	< 0.0006	< 0.0005
MW-122	08/21/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	**0.0014 J**	< 0.001	< 0.0005
MW-122	11/08/2012	< 0.0005	**0.0044 J**	< 0.0005	**0.0016 J**	**0.0082**	< 0.001	< 0.0005
MW-122	02/20/2013	< 0.0005	**0.004 J**	< 0.0005	< 0.001	**0.0081**	< 0.001	< 0.0005
MW-122	05/06/2013	**0.00066 J**	**0.006**	< 0.0005	**0.0025 J**	**0.011**	< 0.001	< 0.0005
MW-122	08/30/2013	< 0.0005	**0.0042 J**	< 0.0005	**0.002 J**	**0.0064**	< 0.001	< 0.0005
MW-122	11/20/2013	**0.0034 J**	**0.0058**	**0.00054 J**	**0.0014 J**	**0.0014 J**	**0.0018 J**	< 0.0005
MW-122	01/29/2014	**0.00067 J**	**0.0058**	< 0.0005	**0.0025 J**	**0.0095**	< 0.0006	< 0.0004
MW-122	06/20/2014	< 0.0004	**0.004 J**	< 0.0005	**0.0011 J**	**0.0062**	< 0.0006	< 0.0004
MW-122	08/21/2014	< 0.0004	**0.0025 J**	< 0.0005	**0.0011 J**	**0.0041 J**	< 0.0006	< 0.0004
MW-122	11/24/2014	< 0.0004	**0.00085 J**	< 0.0005	< 0.0006	**0.0012 J**	< 0.0006	< 0.0004
MW-122	03/19/2015	**0.0012 J**	**0.0073**	< 0.0005	**0.0015 J**	**0.006**	< 0.0006	< 0.0004
MW-122	07/21/2015	**0.00059 J**	**0.0026 J**	< 0.0005	< 0.0006	**0.0021 J**	< 0.0006	< 0.0004
MW-122	12/15/2015	**0.0015 J**	**0.0078**	< 0.0005	**0.0013 J**	**0.0057**	**0.00083 J**	< 0.0004
MW-122	12/08/2016	**0.000622 J**	**0.00405**	< 0.000116	**0.000617 J**	**0.00303**	**0.000432 J**	< 0.000248
MW-122	11/29/2017	**0.00143**	**0.009**	< 0.000116	**0.000529 J**	**0.00231**	< 0.000333	< 0.000248
MW-122	12/13/2018	**0.000368 J**	**0.00201**	< 0.000116	< 0.000157	**0.00024 J**	< 0.000333	< 0.000248
MW-122	12/19/2019	< 0.000168	**0.00258**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-122	12/16/2020	**0.00129**	**0.00742**	< 0.000285	< 0.000174	**0.0005 J**	**0.00124**	< 0.000189
MW-122	12/14/2021	**0.00227**	**0.0258**	< 0.000285	**0.000254 J**	**0.00104 J**	**0.00122**	< 0.000234
MW-145	05/22/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-145	04/15/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-145	10/13/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-145	04/13/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-145	10/23/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-145	04/13/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-145	10/21/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-145	04/27/2011	**0.00065 J**	**0.0019 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-145	10/21/2011	**0.0053**	**0.0026 J**	< 0.0005	**0.0016 J**	< 0.0005	< 0.0006	< 0.0005
MW-145	03/28/2012	**0.011**	**0.0091**	< 0.0005	**0.0049 J**	< 0.0005	**0.0023 J**	**0.001 J**
MW-145	04/13/2012	**0.01**	**0.0073**	< 0.0005	**0.0049 J**	**0.0011 J**	**0.0025 J**	< 0.0005
MW-145	11/07/2012	**0.0011 J**	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-145	02/20/2013	**0.0022 J**	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-145	05/08/2013	**0.003 J**	**0.0019 J**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-145	08/30/2013	**0.0038 J**	**0.0026 J**	< 0.0005	**0.0012 J**	< 0.001	< 0.001	**0.00056 J**
MW-145	11/20/2013	**0.0031 J**	**0.002 J**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-145	01/29/2014	**0.007**	**0.0053**	< 0.0005	**0.0008 J**	< 0.0005	< 0.0006	**0.00062 J**
MW-145	06/25/2014	**0.0043 J**	**0.0034 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	**0.0005 J**
MW-145	08/21/2014	**0.013**	**0.009**	< 0.0005	**0.0011 J**	< 0.0005	< 0.0006	**0.0013 J**
MW-145	11/19/2014	**0.014**	**0.0084**	< 0.0005	**0.001 J**	< 0.0005	< 0.0006	**0.0017 J**
MW-145	03/19/2015	**0.015**	**0.011**	< 0.0005	**0.0018 J**	**0.00072 J**	**0.00082 J**	**0.0021**
MW-145	07/20/2015	**0.012**	**0.0096**	< 0.0005	**0.0022 J**	< 0.0005	< 0.0006	**0.0012 J**
MW-145	09/30/2015	**0.0077**	**0.007**	< 0.0005	**0.002 J**	**0.00057 J**	**0.0015 J**	**0.00092 J**
MW-145	12/04/2015	**0.0046 J**	< 0.0005	< 0.0005	**0.0033 J**	**0.00076 J**	**0.0018 J**	**0.00075 J**
MW-145	03/31/2016	**0.0015 J**	**0.0023 J**	< 0.0005	**0.0022 J**	< 0.0005	**0.0013 J**	< 0.0004
MW-145	06/07/2016	**0.0015 J**	**0.0023 J**	< 0.0005	**0.0031 J**	< 0.0005	**0.001 J**	< 0.0004
MW-145	09/08/2016	**0.0033**	**0.00591**	< 0.000116	**0.0111**	**0.00105**	**0.00179**	**0.00147 J**
MW-145	12/06/2016	**0.00173**	**0.00384**	< 0.000116	**0.0104**	**0.000729 J**	**0.00207**	**0.00125 J**
MW-145	06/08/2017	**0.000192 J**	**0.000361 J**	< 0.000116	**0.000561 J**	< 0.000138	< 0.000333	< 0.000248
MW-145	11/29/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-145	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-145	12/20/2019	< 0.00168	< 0.00192	< 0.00116	< 0.00157	< 0.00138	< 0.00333	< 0.00248
MW-145	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-146	05/22/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	**0.0011 J**	< 0.0005	< 0.0006
MW-146	08/01/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-146	10/16/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-146	04/15/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-146	10/13/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-146	04/13/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-146	10/23/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-146	04/13/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-146	10/21/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-146	04/27/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-146	10/19/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-146	03/28/2012	**0.0068**	**0.0091**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-146	04/13/2012	**0.0091**	**0.011**	< 0.0005	**0.003 J**	< 0.0005	< 0.0006	< 0.0005
MW-146	08/21/2012	**0.018**	**0.02**	< 0.0005	**0.0059**	< 0.001	< 0.001	< 0.0005
MW-146	11/07/2012	**0.019**	**0.021**	< 0.0005	**0.0058**	< 0.001	< 0.001	< 0.0005
MW-146	02/20/2013	**0.015**	**0.022**	< 0.0005	**0.0049 J**	< 0.001	< 0.001	< 0.0005
MW-146	05/08/2013	**0.02**	**0.031**	< 0.0005	**0.0054**	< 0.001	< 0.001	< 0.0005
MW-146	08/30/2013	**0.031**	**0.051**	< 0.0005	**0.0071**	< 0.001	< 0.001	**0.0011 J**
MW-146	11/20/2013	**0.032**	**0.049**	< 0.0005	**0.0055**	< 0.001	< 0.001	**0.0013 J**
MW-146	01/29/2014	**0.022**	**0.035**	< 0.0005	**0.0035 J**	< 0.0005	< 0.0006	**0.0012 J**
MW-146	06/25/2014	**0.023**	**0.037**	< 0.0005	**0.0022 J**	< 0.0005	< 0.0006	**0.0015 J**
MW-146	08/21/2014	**0.022**	**0.039**	< 0.0005	**0.0023 J**	< 0.0005	< 0.0006	**0.0017 J**
MW-146	11/19/2014	**0.02**	**0.039**	< 0.0005	**0.0017 J**	< 0.0005	< 0.0006	**0.0021**
MW-146	03/19/2015	**0.02**	**0.045**	< 0.0005	**0.0015 J**	< 0.0005	< 0.0006	**0.0024**
MW-146	07/20/2015	**0.024**	**0.049**	< 0.0005	**0.0017 J**	< 0.0005	< 0.0006	**0.0015 J**
MW-146	09/30/2015	**0.014**	**0.032**	< 0.0005	**0.00092 J**	< 0.0005	< 0.0006	**0.0011 J**
MW-146	11/23/2015	**0.012**	**0.03**	< 0.0005	**0.00063 J**	< 0.0005	< 0.0006	**0.001 J**
MW-146	03/31/2016	**0.015**	**0.035**	< 0.0005	**0.00097 J**	< 0.0005	**0.00077 J**	**0.0011 J**
MW-146	06/06/2016	**0.012**	**0.03**	< 0.0005	< 0.0006	< 0.0005	**0.00073 J**	**0.00079 J**
MW-146	09/08/2016	**0.00504**	**0.0421**	< 0.000116	**0.00122**	**0.00111**	**0.0018**	**0.000545 J**
MW-146	12/06/2016	**0.00336**	**0.0185**	< 0.000116	**0.00105**	**0.00161**	**0.00459**	**0.000526 J**
MW-146	06/08/2017	**0.000349 J**	**0.00299**	< 0.000116	**0.000288 J**	**0.000685 J**	**0.00157**	< 0.000248
MW-146	11/29/2017	**0.000919 J**	**0.00397**	< 0.000116	**0.00334**	**0.00308**	**0.00543**	< 0.000248
MW-146	12/13/2018	**0.00179**	**0.00361**	< 0.000116	**0.00984**	**0.00237**	**0.0141**	**0.00328**
MW-146	12/19/2019	**0.00068 J**	**0.00122**	< 0.000116	**0.000976 J**	**0.000387 J**	**0.00106**	**0.000285 J**
MW-146	12/16/2020	< 0.000245	< 0.000216	< 0.000285	**0.00197**	< 0.000424	< 0.0005	< 0.000189
MW-146	12/20/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-147	05/22/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	**0.0012 J**	< 0.0005	< 0.0006
MW-147	08/02/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-147	11/28/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-147	04/17/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-147	10/18/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-147	03/28/2012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-147	11/07/2012	< 0.0005	**0.0063**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-147	05/08/2013	**0.00084 J**	**0.032**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-147	06/20/2013	< 0.0005	**0.036**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-147	11/27/2013	**0.0017 J**	**0.035**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-147	01/29/2014	**0.0017 J**	**0.035**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-147	06/24/2014	**0.0033 J**	**0.026**	< 0.0005	**0.0007 J**	**0.00086 J**	**0.0048 J**	< 0.0004
MW-147	08/21/2014	**0.0035 J**	**0.023**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-147	11/20/2014	**0.0051**	**0.018**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-147	03/19/2015	**0.007**	**0.017**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	**0.00071 J**
MW-147	07/20/2015	**0.0067**	**0.014**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	**0.00061 J**
MW-147	09/30/2015	**0.0051**	**0.011**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-147	11/23/2015	**0.0047 J**	**0.0091**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	**0.00049 J**
MW-147	03/30/2016	**0.0031 J**	**0.0062**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-147	06/06/2016	**0.0025 J**	**0.0048 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-147	09/08/2016	**0.00739**	**0.0133**	**0.000178 J**	**0.00155**	**0.000696 J**	**0.000894 J**	**0.0012 J**
MW-147	12/06/2016	**0.0105**	**0.0146**	**0.000208 J**	**0.00388**	**0.00232**	**0.00629**	**0.00228**

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-147	06/08/2017	**0.00173**	**0.00185**	< 0.000116	**0.000452 J**	**0.00039 J**	**0.000615 J**	< 0.000248
MW-147	11/29/2017	**0.0108**	**0.013**	< 0.000116	**0.0225**	**0.0306**	**0.041**	**0.00397**
MW-147	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	**0.000475 J**	< 0.000248
MW-147	12/19/2019	**0.000354 J**	**0.000742 J**	< 0.000116	**0.000948 J**	**0.000553 J**	**0.00178**	< 0.000248
MW-147	12/16/2020	**0.00638**	**0.00918**	< 0.000285	**0.0169**	**0.00464**	**0.014**	< 0.000189
MW-147	12/14/2021	**0.00075 J**	**0.00164**	< 0.000285	**0.00233**	**0.00111 J**	**0.00304**	< 0.000234
MW-160	11/07/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-160	05/07/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-160	11/19/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-160	06/26/2014	**0.00087 J**	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-160	11/19/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-160	07/20/2015	< 0.0004	**0.0011 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-160	12/04/2015	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-160	06/07/2016	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-160	12/08/2016	**0.000199 J**	**0.000619 J**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-160	06/08/2017	**0.00219**	**0.0108**	< 0.000116	**0.000254 J**	< 0.000138	< 0.000333	**0.000312 J**
MW-160	11/29/2017	**0.000623 J**	**0.00495**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-160	12/13/2018	< 0.000168	**0.000389 J**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-160	12/20/2019	< 0.00168	**0.00303 J**	< 0.00116	< 0.00157	< 0.00138	< 0.00333	< 0.00248
MW-160	12/16/2020	< 0.000245	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000189
MW-160	12/20/2021	**0.00103**	**0.00235**	< 0.000285	**0.00287**	**0.00169 J**	**0.00276**	< 0.000234
MW-161	11/07/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	**0.004 J**	< 0.001	< 0.0005
MW-161	05/06/2013	< 0.0005	**0.0014 J**	< 0.0005	< 0.001	**0.0035 J**	< 0.001	< 0.0005
MW-161	11/19/2013	< 0.0005	**0.00098 J**	< 0.0005	< 0.001	**0.0013 J**	< 0.001	< 0.0005
MW-161	06/26/2014	**0.0007 J**	**0.0022 J**	< 0.0005	< 0.0006	**0.0013 J**	< 0.0006	< 0.0004
MW-161	11/19/2014	< 0.0004	**0.00081 J**	< 0.0005	< 0.0006	**0.00065 J**	< 0.0006	< 0.0004
MW-161	07/20/2015	**0.00066 J**	**0.0014 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-161	12/04/2015	**0.00057 J**	**0.0016 J**	< 0.0005	< 0.0006	**0.00092 J**	< 0.0006	< 0.0004
MW-161	06/06/2016	< 0.0004	**0.0011 J**	< 0.0005	< 0.0006	**0.00083 J**	< 0.0006	< 0.0004
MW-161	12/08/2016	**0.000347 J**	**0.00402**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-161	06/08/2017	< 0.000168	**0.00412**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-161	11/29/2017	**0.000864 J**	**0.0189**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-161	12/13/2018	< 0.000168	**0.000764 J**	< 0.000116	< 0.000157	< 0.000138	**0.000612 J**	< 0.000248
MW-161	12/20/2019	**0.00464**	**0.0178**	< 0.000116	**0.00026**	**0.000182**	< 0.000333	< 0.000248
MW-161	12/16/2020	**0.0201**	**0.0871**	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000189
MW-161	12/14/2021	**0.0111**	**0.0482**	< 0.000285	**0.00137**	**0.000726 J**	**0.00147**	< 0.000234
MW-162	11/07/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-162	05/08/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-162	11/19/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-162	06/24/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-162	11/20/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-162	07/20/2015	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-162	12/04/2015	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-162	06/06/2016	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-162	12/07/2016	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-162	11/30/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-162	06/27/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-162	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-162	06/12/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-162	12/19/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-162	12/16/2020	< 0.000245	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000189
MW-162	12/20/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-163	11/07/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-163	05/06/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-163	11/19/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-163	06/23/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-163	11/20/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-163	07/20/2015	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-163	12/04/2015	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-163	06/06/2016	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-163	12/07/2016	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-163	06/08/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-163	11/30/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-163	06/27/2018	< 0.000168	**0.000429 J**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-163	12/13/2018	< 0.000168	**0.000209 J**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-163	06/12/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-163	12/19/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-163	12/20/2021	**0.0148**	**0.0168**	< 0.000285	**0.00148**	**0.000683 J**	**0.000835 J**	**0.0011 J**
MW-168	12/04/2007	< 0.0005	< 0.0006	< 0.0005	< 0.0005	< 0.0007	< 0.0005	< 0.0006
MW-168	04/17/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-168	10/14/2008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-168	04/16/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-168	10/22/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-168	04/15/2010	< 0.0005	< 0.0005 UJ	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-168	10/22/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-168	05/02/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-168	10/20/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-168	03/27/2012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-168	11/08/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-168	05/07/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-168	11/19/2013	< 0.0005	**0.0018 J**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-168	06/18/2014	< 0.0004	**0.00077 J**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-168	11/25/2014	**0.0059**	**0.029**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-168	12/22/2014	**0.0045 J**	**0.023**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-168	03/19/2015	**0.022**	**0.12**	< 0.0005	< 0.0006	**0.0005 J**	< 0.0006	**0.00064 J**
MW-168	07/21/2015	**0.042**	**0.16**	**0.00077 J**	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-168	10/01/2015	**0.027**	**0.13**	**0.00077 J**	**0.00075 J**	< 0.0005	**0.00094 J**	< 0.0004
MW-168	11/19/2015	**0.021**	**0.092**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-168	03/30/2016	**0.0072**	**0.043**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-168	06/07/2016	**0.0019 J**	**0.0076**	< 0.0005	< 0.0006	**0.0013 J**	**0.0038 J**	< 0.0004
MW-168	09/08/2016	**0.0416**	**0.106**	**0.000775 J**	**0.00099 J**	**0.000549 J**	**0.000473 J**	< 0.000248
MW-168	12/08/2016	**0.0193**	**0.0562**	**0.000452 J**	**0.000578 J**	**0.000384 J**	< 0.000333	< 0.000248
MW-168	06/08/2017	**0.00993**	**0.045**	**0.000281 J**	**0.000476 J**	**0.000516 J**	**0.000631 J**	< 0.000248
MW-168	11/30/2017	**0.00507**	**0.0231**	**0.000386 J**	**0.00049 J**	**0.000626 J**	**0.00164**	< 0.000248
MW-168	12/13/2018	**0.00669**	**0.0321**	**0.000177 J**	**0.00164**	**0.00434**	**0.0191**	< 0.000248 UJ
MW-168	12/23/2019	**0.00209**	**0.00736**	< 0.000116	**0.00241**	**0.00496**	**0.0376**	< 0.000248
MW-168	12/17/2020	**0.00328**	**0.0105**	**0.000732 J**	**0.005**	**0.0102**	**0.0669**	< 0.0003
MW-168	12/14/2021	**0.00282**	**0.00983**	**0.000794 J**	**0.00638**	**0.0138**	**0.0952**	**0.000252 J**
MW-173	03/05/2009	**0.0022 J**	**0.024**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	04/16/2009	**0.0026 J**	**0.026**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	08/07/2009	**0.0037 J**	**0.021**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	10/23/2009	**0.0047 J**	**0.032**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	02/12/2010	**0.0039 J**	**0.035**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	04/16/2010	**0.0025 J**	**0.023**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	08/10/2010	< 0.0005	**0.00063 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	10/22/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	05/02/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	08/22/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	10/20/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	02/06/2012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	03/27/2012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0006	< 0.0005
MW-173	11/08/2012	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005

Appendix E. Historical Data

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

MW ID	Sample Date	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	cis-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Tetrachloroethene mg/L	Vinyl Chloride mg/L
	cPCL	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
MW-173	05/08/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-173	11/18/2013	< 0.0005	< 0.0006	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005
MW-173	06/18/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-173	11/25/2014	< 0.0004	< 0.0005	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-173	07/21/2015	**0.092**	**0.24**	**0.0019 J**	**0.0028 J**	**0.0013 J**	< 0.0006	**0.0022**
MW-173	11/19/2015	**0.011**	**0.065**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-173	06/07/2016	**0.0082**	**0.032**	< 0.0005	< 0.0006	< 0.0005	< 0.0006	< 0.0004
MW-173	09/08/2016	**0.108**	**0.208**	**0.00175**	**0.00153**	**0.000786 J**	**0.000632 J**	**0.00069 J**
MW-173	12/08/2016	**0.00574**	**0.0227**	**0.000203 JH**	< 0.000157	**0.000144 J**	< 0.000333	< 0.000248
MW-173	06/08/2017	< 0.000168	**0.000696 J**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-173	11/29/2017	**0.000483 J**	**0.00176**	**0.000215 J**	**0.000371 J**	**0.000715 J**	**0.00291**	< 0.000248
MW-173	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	**0.00154**	< 0.000248 UJ
MW-173	12/23/2019	**0.00218**	**0.0114**	**0.000327 J**	**0.00648**	**0.0161**	**0.128**	**0.00134 J**
MW-173	12/17/2020	< 0.000244	**0.00328**	< 0.000285	**0.00194**	**0.00371**	**0.012**	< 0.000234
MW-178	05/02/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248 UJ
MW-178	06/08/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-178	11/29/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-178	06/27/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-178	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248 UJ
MW-178	06/12/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-178	12/19/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-178	12/16/2020	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-178	12/14/2021	< 0.000244	< 0.000216	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-179	11/30/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-179	06/27/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-179	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-179	06/12/2019	< 0.000168	**0.000406 J**	< 0.000116	< 0.000157	< 0.000138	**0.000563 J**	< 0.000248
MW-179	12/23/2019	< 0.000168	**0.00115**	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-179	12/17/2020	**0.00029 J**	**0.00351**	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-179	12/15/2021	< 0.000244	**0.00433**	< 0.000285	< 0.000174	< 0.000424	< 0.0005	< 0.000234
MW-180	11/30/2017	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-180	06/27/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-180	12/13/2018	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	< 0.000333	< 0.000248
MW-180	06/12/2019	< 0.000168	< 0.000192	< 0.000116	< 0.000157	< 0.000138	**0.000491 J**	< 0.000248

Notes:

Bold values indicate a detected concentration.

Bold and shaded values exceed the cPCL.

< = nondetected result less than the sample detection limit

-- = not analyzed

cPCL = critical protective concentration level

ID = identification

J = estimated concentration

JH = estimated concentration, biased high

JL = estimated concentration, biased low

mg/L = milligrams per liter

Appendix F
Well Plugging Reports

STATE OF TEXAS PLUGGING REPORT for Tracking #214641

Owner:	**Cameron International, Inc.**	Owner Well #:	**EW-1**
Address:	**121 Industrial Blvd. Sugar Land, TX 77478**	Grid #:	**65-13-7**
Well Location:	**Stablewood & Memorial Houston, TX**	Latitude:	**29° 46' 21" N**
		Longitude:	**095° 27' 46" W**
Well County:	**Harris**	Elevation:	**No Data**

Well Type: **Monitor**

Drilling Information

Company: **Best Drilling Services, Inc.** Date Drilled: **9/29/2009**

Driller: **Lawrence H Tobola** License Number: **3026**

Well Report Tracking #205937

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**10.25**	**0**	**52**

Plugging Information

Date Plugged: **11/29/2021** Plugger: **Alfredo Palacios**

Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:

Dia (in.)	*Top (ft.)*	*Bottom (ft.)*
6	**2**	**52**

Plug(s) Placed in Well:

Top (ft.)	*Bottom (ft.)*	*Description (number of sacks & material)*
0	**52**	**CEMENT BENTONITE GROUT 3 Bags/Sacks**

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the reports(s) being returned for completion and resubmittal.

Company Information: **BEST DRILLING SERVICES, INC.**

P.O. BOX 70822
Houston, TX 77270

Driller Name: **Alfredo Palacios** License Number: **5036**

Comments: **No Data**

STATE OF TEXAS PLUGGING REPORT for Tracking #214642

Owner:	**Cameron International Inc.**	Owner Well #:	**EW-2**
Address:	**121 Industrial Boulevard Sugar Land, TX 77478**	Grid #:	**65-13-7**
Well Location:	**Stablewood & Memorial Houston, TX**	Latitude:	**29° 46' 21" N**
		Longitude:	**095° 27' 46" W**
Well County:	**Harris**	Elevation:	**No Data**

Well Type: **Monitor**

Drilling Information

Company: **Best Drilling Services, Inc.** Date Drilled: **9/23/2009**

Driller: **Lawrence H Tobola** License Number: **3026**

Well Report Tracking #205938

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**10.25**	**0**	**52**

Plugging Information

Date Plugged: **11/29/2021** Plugger: **Alfredo Palacios**

Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:

Dia (in.)	*Top (ft.)*	*Bottom (ft.)*
6	**2**	**52**

Plug(s) Placed in Well:

Top (ft.)	*Bottom (ft.)*	*Description (number of sacks & material)*
0	**52**	**CEMENT BENTONITE GROUT 3 Bags/Sacks**

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the reports(s) being returned for completion and resubmittal.

Company Information: **BEST DRILLING SERVICES, INC.**

P.O. BOX 70822
Houston, TX 77270

Driller Name: **Alfredo Palacios** License Number: **5036**

Comments: **No Data**

STATE OF TEXAS PLUGGING REPORT for Tracking #214643

Owner:	**Cameron International, Inc.**	Owner Well #:	**EW-3**
Address:	**121 Industrial Boulevard Sugar Land, TX 77478**	Grid #:	**65-13-7**
Well Location:	**Stablewood & Memorial Houston, TX**	Latitude:	**29° 46' 21" N**
		Longitude:	**095° 27' 46" W**
Well County:	**Harris**	Elevation:	**No Data**

Well Type: **Monitor**

Drilling Information

Company: **Best Drilling Services, Inc.** Date Drilled: **7/25/2009**

Driller: **Lawrence H Tobola** License Number: **3026**

Well Report Tracking #205941

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**10.25**	**0**	**52**

Plugging Information

Date Plugged: **11/29/2021** Plugger: **Alfredo Palacios**

Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:

Dia (in.)	*Top (ft.)*	*Bottom (ft.)*
6	**2**	**52**

Plug(s) Placed in Well:

Top (ft.)	*Bottom (ft.)*	*Description (number of sacks & material)*
0	**52**	**CEMENT BENTONITE GROUT 3 Bags/Sacks**

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the reports(s) being returned for completion and resubmittal.

Company Information: **BEST DRILLING SERVICES, INC.**

P.O. BOX 70822
Houston, TX 77270

Driller Name: **Alfredo Palacios** License Number: **5036**

Comments: **No Data**

STATE OF TEXAS PLUGGING REPORT for Tracking #214644

Owner:	**Cameron International, Inc.**	Owner Well #:	**EW-4**
Address:	**121 Industrial Boulevard Sugar Land, TX 77478**	Grid #:	**65-13-7**
Well Location:	**Stablewood & Memorial Houston, TX**	Latitude:	**29° 46' 21" N**
		Longitude:	**095° 27' 46" W**
Well County:	**Harris**	Elevation:	**No Data**

Well Type: **Monitor**

Drilling Information

Company: **Best Drilling Services, Inc.** Date Drilled: **9/24/2009**

Driller: **Lawrence H Tobola** License Number: **3026**

Well Report Tracking #205942

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**10.25**	**0**	**52**

Plugging Information

Date Plugged: **11/30/2021** Plugger: **Alfredo Palacios**

Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:

Dia (in.)	*Top (ft.)*	*Bottom (ft.)*
6	**2**	**52**

Plug(s) Placed in Well:

Top (ft.)	*Bottom (ft.)*	*Description (number of sacks & material)*
0	**52**	**CEMENT BENTONITE GROUT 3 Bags/Sacks**

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the reports(s) being returned for completion and resubmittal.

Company Information: **BEST DRILLING SERVICES, INC.**

P.O. BOX 70822
Houston, TX 77270

Driller Name: **Alfredo Palacios** License Number: **5036**

Comments: **No Data**

STATE OF TEXAS PLUGGING REPORT for Tracking #214662

Owner:	**Cameron International Inc.**	Owner Well #:	**EW-5**
Address:	**121 Industrial Blvd. Sugar Land, TX 77478**	Grid #:	**65-13-7**
Well Location:	**Stablewood & Memorial Houston, TX**	Latitude:	**29° 46' 15" N**
		Longitude:	**095° 27' 46" W**
Well County:	**Harris**	Elevation:	**No Data**

Well Type: **Monitor**

Drilling Information

Company: **Best Drilling Services, Inc.** Date Drilled: **9/28/2009**

Driller: **Lawrence H Tobola** License Number: **3026**

Well Report Tracking #205971

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**12.25**	**0**	**52**

Plugging Information

Date Plugged: **11/30/2021** Plugger: **Alfredo Palacios**

Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:

Dia (in.)	*Top (ft.)*	*Bottom (ft.)*
6	**2**	**52**

Plug(s) Placed in Well:

Top (ft.)	*Bottom (ft.)*	*Description (number of sacks & material)*
0	**52**	**CEMENT BENTONITE GROUT 3 Bags/Sacks**

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the reports(s) being returned for completion and resubmittal.

Company Information: **BEST DRILLING SERVICES, INC.**

P.O. BOX 70822
Houston, TX 77270

Driller Name: **Alfredo Palacios** License Number: **5036**

Comments: **No Data**

STATE OF TEXAS PLUGGING REPORT for Tracking #214645

Owner:	**Cameron International Inc.**	Owner Well #:	**MW-173**
Address:	**121 Industrial Boulevard Sugar Land, TX 77478**	Grid #:	**65-13-7**
Well Location:	**8725 Memorial Dr. Houston, TX 77027**	Latitude:	**29° 46' 17" N**
		Longitude:	**095° 27' 44" W**
Well County:	**Harris**	Elevation:	**No Data**

Well Type: **Monitor**

Drilling Information

Company: **Best Drilling Services, Inc.** Date Drilled: **3/4/2009**

Driller: **Alfredo Palacios** License Number: **5036**

Well Report Tracking #170532

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**8**	**0**	**40**

Plugging Information

Date Plugged: **11/30/2021** Plugger: **Alfredo Palacios**

Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:

Dia (in.)	*Top (ft.)*	*Bottom (ft.)*
2	**10**	**40**

Plug(s) Placed in Well:

Top (ft.)	*Bottom (ft.)*	*Description (number of sacks & material)*
0	**40**	**CEMENT BENTONITE GROUT 3 Bags/Sacks**

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the reports(s) being returned for completion and resubmittal.

Company Information: **BEST DRILLING SERVICES, INC.**

P.O. BOX 70822
Houston, TX 77270

Driller Name: **Alfredo Palacios** License Number: **5036**

Comments: **No Data**

STATE OF TEXAS PLUGGING REPORT for Tracking #214663

Owner:	**Cameron International, Inc.**	Owner Well #:	**P-3**
Address:	**121 Industrial Blvd. Sugar Land, TX 77478**	Grid #:	**65-13-7**
Well Location:	**8802 Stable Crest Blvd. Houston, TX 77024**	Latitude:	**29° 46' 15" N**
		Longitude:	**095° 27' 46" W**
Well County:	**Harris**	Elevation:	**No Data**

Well Type: **Monitor**

Drilling Information

Company: **Best Drilling Services, Inc.** Date Drilled: **9/1/2009**

Driller: **Alfredo Palacios** License Number: **5036**

Well Report Tracking #196083

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**8**	**0**	**39**

Plugging Information

Date Plugged: **11/30/2021** Plugger: **Alfredo Palacios**

Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:

Dia (in.)	*Top (ft.)*	*Bottom (ft.)*
0	**0**	**0**

Plug(s) Placed in Well:

Top (ft.)	*Bottom (ft.)*	*Description (number of sacks & material)*
0	**39**	**CEMENT BENTONITE GROUT 3 Bags/Sacks**

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the reports(s) being returned for completion and resubmittal.

Company Information: **BEST DRILLING SERVICES, INC.**

P.O. BOX 70822
Houston, TX 77270

Driller Name: **Alfredo Palacios** License Number: **5036**

Comments: **No Data**

STATE OF TEXAS PLUGGING REPORT for Tracking #214647

Owner:	**Cameron International, Inc.**	Owner Well #:	**P-4**
Address:	**121 Industrial Boulevard Sugar Land, TX 77478**	Grid #:	**65-13-7**
Well Location:	**8802 Stable Crest Blvd. Houston, TX 77024**	Latitude:	**29° 46' 15" N**
		Longitude:	**095° 27' 46" W**
Well County:	**Harris**	Elevation:	**No Data**

Well Type: **Test Well**

Drilling Information

Company: **Best Drilling Services, Inc.** Date Drilled: **9/2/2009**

Driller: **Alfredo Palacios** License Number: **5036**

Well Report Tracking #196091

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**8**	**0**	**40**

Plugging Information

Date Plugged: **11/30/2021** Plugger: **Alfredo Palacios**

Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:

Dia (in.)	*Top (ft.)*	*Bottom (ft.)*
2	**10**	**40**

Plug(s) Placed in Well:

Top (ft.)	*Bottom (ft.)*	*Description (number of sacks & material)*
0	**40**	**CEMENT BENTONITE GROUT 2 Bags/Sacks**

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the reports(s) being returned for completion and resubmittal.

Company Information: **BEST DRILLING SERVICES, INC.**

P.O. BOX 70822
Houston, TX 77270

Driller Name: **Alfredo Palacios** License Number: **5036**

Comments: **No Data**

STATE OF TEXAS PLUGGING REPORT for Tracking #214658

Owner:	**Cameron International, Inc.**	Owner Well #:	**P-5**
Address:	**121 Industrial Blvd Sugar Land, TX 77478**	Grid #:	**65-13-7**
Well Location:	**8802 Stable Crest Blvd. Houston, TX 77024**	Latitude:	**29° 46' 15" N**
		Longitude:	**095° 27' 46" W**
Well County:	**Harris**	Elevation:	**No Data**

Well Type: **Monitor**

Drilling Information

Company: **Best Drilling Services, Inc.** Date Drilled: **8/31/2009**

Driller: **Alfredo Palacios** License Number: **5036**

Well Report Tracking #196079

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**8**	**0**	**39**

Plugging Information

Date Plugged: **11/30/2021** Plugger: **Alfredo Palacios**

Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:

Dia (in.)	*Top (ft.)*	*Bottom (ft.)*
2	**0**	**39**

Plug(s) Placed in Well:

Top (ft.)	*Bottom (ft.)*	*Description (number of sacks & material)*
0	**39**	**CEMENT BENTONITE GROUT 3 Bags/Sacks**

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the reports(s) being returned for completion and resubmittal.

Company Information: **BEST DRILLING SERVICES, INC.**

P.O. BOX 70822
Houston, TX 77270

Driller Name: **Alfredo Palacios** License Number: **5036**

Comments: **No Data**

Appendix G
Mann-Kendall Trend Evaluation Results (2015–2021)

Appendix G. Mann-Kendall Trend Evaluation Results (2015-2021)

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Well	Parameter	Total Samples	Detect Results	Detect Freq. (%)	Min Non-Detect (mg/L)	Min Detect (mg/L)	Max Non-Detect (mg/L)	Max Detect (mg/L)	Mean (mg/L)	Median (mg/L)	Std Dev. (mg/L)	CV	Last Result (mg/L)	Last Sample Date	MK Test Value (S)	MK p-value	Sen's Slope Estimator (mg/L/yr)	Mann-Kendall Result	Trend Analysis Result	Stability Based On CV	Min Sample Spacing (days)
MW-01	Tetrachloroethene	7	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.001)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	356
MW-15R	Tetrachloroethene	6	1	17	0.0010	0.0028	0.0010	0.0028	---	---	---	---	ND (0.001)	Dec-21	-5	0.235	---	76.5% (-)	No Trend	>50% ND	363
MW-16R	Tetrachloroethene	5	4	80	0.0050	0.0045	0.0050	0.0161	0.0091	0.0053	0.0053	0.587	0.0150	Dec-20	6	0.117	---	88.3% (+)	No Trend	Stable	364
MW-17R	Tetrachloroethene	7	1	14	0.0010	0.0006	0.0050	0.0006	---	---	---	---	ND (0.001)	Dec-21	2	0.443	---	55.7% (+)	No Trend	>50% ND	358
MW-50R	Tetrachloroethene	7	4	57	0.0010	0.0006	0.0010	0.0160	0.0034	0.0010	0.0053	1.57	ND (0.001)	Dec-21	-12	0.052	---	94.8% (-)	No Trend	Not Stable	357
MW-65	Tetrachloroethene	9	5	56	0.0010	0.0005	0.0050	0.0110	0.0019	0.0010	0.0032	1.67	ND (0.001)	Dec-21	0	0.540	---	46% (+)	No Trend	Not Stable	126
MW-70	Tetrachloroethene	7	6	86	0.0010	0.0007	0.0010	0.0278	0.0068	0.0019	0.0092	1.35	ND (0.001)	Dec-21	-17	0.005	-0.0007	99.5% (sig -)	Decreasing	---	357
MW-71	Tetrachloroethene	12	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.001)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	54
MW-74	Tetrachloroethene	14	11	79	0.0050	0.0008	0.0050	0.0865	0.0148	0.0050	0.0249	1.69	0.0017	Dec-21	54	0.002	0.0035	99.9% (sig +)	Increasing	---	51
MW-76	Tetrachloroethene	7	7	100	---	0.0005	---	0.0010	0.0007	0.0007	0.0002	0.261	0.0006	Dec-21	-7	0.191	---	80.9% (-)	No Trend	Stable	357
MW-77	Tetrachloroethene	8	7	88	0.0010	0.0004	0.0010	0.0065	0.0026	0.0018	0.0021	0.814	0.0009	Dec-21	-12	0.089	---	91.1% (-)	No Trend	Stable	132
MW-83	Tetrachloroethene	7	7	100	---	0.0403	---	0.190	0.0906	0.0544	0.0648	0.715	0.0505	Dec-21	-11	0.068	---	93.2% (-)	No Trend	Stable	357
MW-88	Tetrachloroethene	7	7	100	---	0.0163	---	0.198	0.0697	0.0304	0.0756	1.09	0.0163	Dec-21	-13	0.035	-0.0091	96.5% (sig -)	Decreasing	---	355
MW-89	Tetrachloroethene	7	5	71	0.0010	0.0004	0.0050	0.0011	0.0007	0.0008	0.0003	0.386	0.0008	Dec-21	12	0.052	---	94.8% (+)	No Trend	Stable	356
MW-90	Tetrachloroethene	7	7	100	---	0.0179	---	0.0760	0.0370	0.0296	0.0217	0.586	0.0213	Dec-21	-15	0.015	-0.0091	98.5% (sig -)	Decreasing	---	355
MW-92	Tetrachloroethene	7	6	86	0.0010	0.0008	0.0010	0.0440	0.0079	0.0016	0.0148	1.87	0.0009	Dec-21	-13	0.035	-0.0008	96.5% (sig -)	Decreasing	---	355
MW-93R	Tetrachloroethene	8	8	100	---	0.0184	---	0.110	0.0611	0.0586	0.0355	0.581	0.110	Dec-21	14	0.054	---	94.6% (+)	No Trend	Stable	169
MW-97	Tetrachloroethene	14	14	100	---	0.0196	---	0.296	0.124	0.0910	0.0915	0.736	0.261	Dec-21	47	0.005	0.0306	99.5% (sig +)	Increasing	---	50
MW-98	Tetrachloroethene	12	6	50	0.0010	0.0003	0.0050	0.0016	0.0006	0.0010	0.0004	0.608	0.0016	Dec-21	41	0.003	0.0001	99.8% (sig +)	Increasing	---	121
MW-100	Tetrachloroethene	7	4	57	0.0010	0.0004	0.0010	0.0020	0.0008	0.0010	0.0006	0.757	ND (0.001)	Dec-21	-8	0.155	---	84.5% (-)	No Trend	Stable	357
MW-106	Tetrachloroethene	9	7	78	0.0010	0.0006	0.0010	0.220	0.0854	0.0130	0.0942	1.10	ND (0.001)	Dec-21	-23	0.009	-0.0330	99.1% (sig -)	Decreasing	---	135
MW-108	Tetrachloroethene	7	2	29	0.0010	0.0017	0.0010	0.0045	---	---	---	---	ND (0.001)	Dec-21	-9	0.119	---	88.1% (-)	No Trend	>50% ND	356
MW-109	Tetrachloroethene	7	7	100	---	0.0172	---	0.0556	0.0348	0.0364	0.0133	0.383	0.0190	Dec-21	-7	0.191	---	80.9% (-)	No Trend	Stable	357
MW-110	Tetrachloroethene	7	3	43	0.0010	0.0006	0.0010	0.0134	---	---	---	---	ND (0.001)	Dec-21	-7	0.191	---	80.9% (-)	No Trend	>50% ND	357
MW-111	Tetrachloroethene	7	7	100	---	0.0027	---	0.291	0.0571	0.0196	0.105	1.83	0.0196	Dec-21	-7	0.191	---	80.9% (-)	No Trend	Not Stable	356
MW-112	Tetrachloroethene	7	1	14	0.0010	0.0003	0.0050	0.0003	---	---	---	---	ND (0.001)	Dec-21	-4	0.334	---	66.6% (-)	No Trend	>50% ND	355
MW-113	Tetrachloroethene	7	2	29	0.0010	0.0011	0.0050	0.0129	---	---	---	---	0.0129	Dec-21	11	0.068	---	93.2% (+)	No Trend	>50% ND	357
MW-121	Tetrachloroethene	8	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.001)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	196
MW-122	Tetrachloroethene	9	4	44	0.0010	0.0004	0.0050	0.0012	---	---	---	---	0.0012	Dec-21	10	0.179	---	82.1% (+)	No Trend	>50% ND	124
MW-145	Tetrachloroethene	13	7	54	0.0010	0.0008	0.0100	0.0022	0.0012	0.0013	0.0005	0.382	ND (0.001)	Dec-21	-21	0.114	---	88.6% (-)	No Trend	Stable	65
MW-146	Tetrachloroethene	14	8	57	0.0010	0.0007	0.0050	0.0141	0.0027	0.0032	0.0035	1.31	ND (0.001)	Dec-21	28	0.071	---	92.9% (+)	No Trend	Not Stable	54
MW-147	Tetrachloroethene	14	8	57	0.0050	0.0005	0.0050	0.0410	0.0054	0.0050	0.0105	1.92	0.0030	Dec-21	52	0.002	0.0005	99.8% (sig +)	Increasing	---	54
MW-160	Tetrachloroethene	10	1	10	0.0010	0.0028	0.0100	0.0028	---	---	---	---	0.0028	Dec-21	9	0.242	---	75.8% (+)	No Trend	>50% ND	137
MW-161	Tetrachloroethene	10	2	20	0.0010	0.0006	0.0050	0.0015	---	---	---	---	0.0015	Dec-21	13	0.146	---	85.4% (+)	No Trend	>50% ND	137
MW-162	Tetrachloroethene	11	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.001)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	137
MW-163	Tetrachloroethene	11	1	9	0.0010	0.0008	0.0050	0.0008	---	---	---	---	0.0008	Dec-21	10	0.247	---	75.3% (+)	No Trend	>50% ND	137
MW-168	Tetrachloroethene	14	9	64	0.0010	0.0005	0.0050	0.0952	0.0166	0.0050	0.0286	1.73	0.0952	Dec-21	61	0.000	0.0057	100% (sig +)	Increasing	---	49
MW-178	Tetrachloroethene	9	0	0	0.0010	---	0.0010	---	---	---	---	---	ND (0.001)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	37
MW-179	Tetrachloroethene	7	1	14	0.0010	0.0006	0.0010	0.0006	---	---	---	---	ND (0.001)	Dec-21	0	0.563	---	43.7% (+)	No Trend	>50% ND	169
MW-01	Trichloroethene	7	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.005)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	356
MW-15R	Trichloroethene	6	3	50	0.0010	0.0002	0.0050	0.0006	0.0004	0.0008	0.0002	0.470	ND (0.005)	Dec-21	-6	0.186	---	81.4% (-)	No Trend	Stable	363
MW-16R	Trichloroethene	5	4	80	0.0050	0.0087	0.0050	0.0126	0.0094	0.0101	0.0025	0.268	0.0104	Dec-20	6	0.117	---	88.3% (+)	No Trend	Stable	364
MW-17R	Trichloroethene	7	1	14	0.0010	0.0007	0.0050	0.0007	---	---	---	---	ND (0.005)	Dec-21	2	0.443	---	55.7% (+)	No Trend	>50% ND	358
MW-50R	Trichloroethene	7	6	86	0.0050	0.0006	0.0050	0.0660	0.0173	0.0112	0.0210	1.22	ND (0.005)	Dec-21	-13	0.035	-0.0054	96.5% (sig -)	Decreasing	---	357
MW-65	Trichloroethene	9	6	67	0.0010	0.0003	0.0050	0.0027	0.0009	0.0010	0.0008	0.807	ND (0.005)	Dec-21	-1	0.500	---	50% (-)	No Trend	Stable	126
MW-70	Trichloroethene	7	7	100	---	0.0004	---	0.0165	0.0043	0.0011	0.0059	1.37	0.0004	Dec-21	-15	0.015	-0.0005	98.5% (sig -)	Decreasing	---	357
MW-71	Trichloroethene	12	2	17	0.0010	0.0007	0.0050	0.0011	---	---	---	---	ND (0.005)	Dec-21	-19	0.112	---	88.8% (-)	No Trend	>50% ND	54
MW-74	Trichloroethene	14	14	100	---	0.0006	---	0.0565	0.0100	0.0022	0.0171	1.71	0.0088	Dec-21	51	0.002	0.0013	99.8% (sig +)	Increasing	---	51
MW-76	Trichloroethene	7	2	29	0.0010	0.0002	0.0050	0.0011	---	---	---	---	ND (0.005)	Dec-21	-5	0.281	---	71.9% (-)	No Trend	>50% ND	357

Appendix G. Mann-Kendall Trend Evaluation Results (2015-2021)

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Well	Parameter	Total Samples	Detect Results	Detect Freq. (%)	Min Non-Detect (mg/L)	Min Detect (mg/L)	Max Non-Detect (mg/L)	Max Detect (mg/L)	Mean (mg/L)	Median (mg/L)	Std Dev. (mg/L)	CV	Last Result (mg/L)	Last Sample Date	MK Test Value (S)	MK p-value	Sen's Slope Estimator (mg/L/yr)	Mann-Kendall Result	Trend Analysis Result	Stability Based On CV	Min Sample Spacing (days)
MW-77	Trichloroethene	8	6	75	0.0010	0.0014	0.0010	0.0089	0.0033	0.0026	0.0025	0.774	0.0015	Dec-21	-11	0.114	---	88.6% (-)	No Trend	Stable	132
MW-83	Trichloroethene	7	7	100	---	0.0071	---	0.0420	0.0189	0.0133	0.0122	0.643	0.0071	Dec-21	-17	0.005	-0.0053	99.5% (sig -)	Decreasing	---	357
MW-88	Trichloroethene	7	7	100	---	0.0033	---	0.0207	0.0112	0.0085	0.0068	0.606	0.0033	Dec-21	-15	0.015	-0.0029	98.5% (sig -)	Decreasing	---	355
MW-89	Trichloroethene	7	7	100	---	0.0029	---	0.0136	0.0063	0.0059	0.0036	0.574	0.0059	Dec-21	11	0.068	---	93.2% (+)	No Trend	Stable	356
MW-90	Trichloroethene	7	7	100	---	0.0029	---	0.0200	0.0087	0.0046	0.0070	0.801	0.0029	Dec-21	-17	0.005	-0.0025	99.5% (sig -)	Decreasing	---	355
MW-92	Trichloroethene	7	1	14	0.0010	0.0021	0.0050	0.0021	---	---	---	---	ND (0.005)	Dec-21	-6	0.236	---	76.4% (-)	No Trend	>50% ND	355
MW-93R	Trichloroethene	8	8	100	---	0.0003	---	0.0060	0.0019	0.0011	0.0019	0.972	0.0060	Dec-21	20	0.007	0.0009	99.3% (sig +)	Increasing	---	169
MW-97	Trichloroethene	14	14	100	---	0.0009	---	0.0262	0.0087	0.0041	0.0090	1.03	0.0218	Dec-21	44	0.009	0.0033	99.2% (sig +)	Increasing	---	50
MW-98	Trichloroethene	12	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.005)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	121
MW-100	Trichloroethene	7	4	57	0.0010	0.0002	0.0050	0.0014	0.0008	0.0010	0.0004	0.566	ND (0.005)	Dec-21	-16	0.010	-0.0002	99% (sig -)	Decreasing	---	357
MW-106	Trichloroethene	9	7	78	0.0010	0.0011	0.0050	0.0054	0.0025	0.0032	0.0015	0.597	ND (0.005)	Dec-21	-33	0.000	-0.0007	100% (sig -)	Decreasing	---	135
MW-108	Trichloroethene	7	7	100	---	0.0054	---	0.418	0.0748	0.0171	0.152	2.03	0.0172	Dec-21	-7	0.191	---	80.9% (-)	No Trend	Not Stable	356
MW-109	Trichloroethene	7	7	100	---	0.0050	---	0.0158	0.0099	0.0091	0.0041	0.420	0.0050	Dec-21	-13	0.035	-0.0015	96.5% (sig -)	Decreasing	---	357
MW-110	Trichloroethene	7	6	86	0.0050	0.0004	0.0050	0.0884	0.0146	0.0031	0.0302	2.07	ND (0.005)	Dec-21	-13	0.035	-0.0005	96.5% (sig -)	Decreasing	---	357
MW-111	Trichloroethene	7	7	100	---	0.0005	---	0.0174	0.0049	0.0034	0.0060	1.22	0.0072	Dec-21	-1	0.500	---	50% (-)	No Trend	Not Stable	356
MW-112	Trichloroethene	7	6	86	0.0050	0.0006	0.0050	0.0030	0.0014	0.0013	0.0007	0.530	ND (0.005)	Dec-21	-15	0.015	-0.0003	98.5% (sig -)	Decreasing	---	355
MW-113	Trichloroethene	7	2	29	0.0010	0.0010	0.0050	0.0077	---	---	---	---	0.0077	Dec-21	11	0.068	---	93.2% (+)	No Trend	>50% ND	357
MW-121	Trichloroethene	8	2	25	0.0010	0.0010	0.0050	0.0012	---	---	---	---	ND (0.005)	Dec-21	-5	0.317	---	68.3% (-)	No Trend	>50% ND	196
MW-122	Trichloroethene	9	8	89	0.0010	0.0002	0.0010	0.0060	0.0024	0.0021	0.0021	0.872	0.0010	Dec-21	-20	0.022	-0.0007	97.8% (sig -)	Decreasing	---	124
MW-145	Trichloroethene	13	5	38	0.0010	0.0006	0.0100	0.0011	---	---	---	---	ND (0.005)	Dec-21	-18	0.153	---	84.7% (-)	No Trend	>50% ND	65
MW-146	Trichloroethene	14	6	43	0.0010	0.0004	0.0050	0.0031	---	---	---	---	ND (0.005)	Dec-21	23	0.117	---	88.3% (+)	No Trend	>50% ND	54
MW-147	Trichloroethene	14	7	50	0.0010	0.0004	0.0050	0.0306	0.0035	0.0048	0.0076	2.15	0.0011	Dec-21	44	0.009	0.0002	99.2% (sig +)	Increasing	---	54
MW-160	Trichloroethene	10	1	10	0.0010	0.0017	0.0100	0.0017	---	---	---	---	0.0017	Dec-21	9	0.242	---	75.8% (+)	No Trend	>50% ND	137
MW-161	Trichloroethene	10	4	40	0.0010	0.0002	0.0050	0.0009	---	---	---	---	0.0007	Dec-21	-2	0.466	---	53.4% (-)	No Trend	>50% ND	137
MW-162	Trichloroethene	11	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.005)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	137
MW-163	Trichloroethene	11	1	9	0.0010	0.0007	0.0050	0.0007	---	---	---	---	0.0007	Dec-21	10	0.247	---	75.3% (+)	No Trend	>50% ND	137
MW-168	Trichloroethene	14	10	71	0.0050	0.0004	0.0050	0.0138	0.0031	0.0047	0.0040	1.29	0.0138	Dec-21	63	0.000	0.0011	100% (sig +)	Increasing	---	49
MW-178	Trichloroethene	9	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.005)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	37
MW-179	Trichloroethene	7	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.005)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	169
MW-01	1,1-Dichloroethene	7	7	100	---	0.0016	---	0.0054	0.0033	0.0031	0.0014	0.436	0.0016	Dec-21	-8	0.155	---	84.5% (-)	No Trend	Stable	356
MW-15R	1,1-Dichloroethene	6	6	100	---	0.0005	---	0.0403	0.0141	0.0111	0.0144	1.02	0.0403	Dec-21	11	0.028	0.0057	97.2% (sig +)	Increasing	---	363
MW-16R	1,1-Dichloroethene	5	4	80	0.0050	0.0170	0.0050	0.0634	0.0296	0.0293	0.0196	0.663	0.0170	Dec-20	-2	0.408	---	59.2% (-)	No Trend	Stable	364
MW-17R	1,1-Dichloroethene	7	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.001)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	358
MW-50R	1,1-Dichloroethene	7	4	57	0.0010	0.0026	0.0010	0.0850	0.0152	0.0026	0.0287	1.89	ND (0.001)	Dec-21	-16	0.010	-0.0025	99% (sig -)	Decreasing	---	357
MW-65	1,1-Dichloroethene	9	9	100	---	0.0006	---	0.0550	0.0113	0.0060	0.0167	1.48	0.0091	Dec-21	4	0.381	---	61.9% (+)	No Trend	Not Stable	126
MW-70	1,1-Dichloroethene	7	7	100	---	0.0015	---	0.0454	0.0145	0.0074	0.0154	1.06	0.0015	Dec-21	-13	0.035	-0.0030	96.5% (sig -)	Decreasing	---	357
MW-71	1,1-Dichloroethene	12	7	58	0.0010	0.0007	0.0010	0.0250	0.0047	0.0013	0.0071	1.50	ND (0.001)	Dec-21	-52	0.000	-0.0014	100% (sig -)	Decreasing	---	54
MW-74	1,1-Dichloroethene	14	14	100	---	0.0034	---	0.0868	0.0212	0.0160	0.0209	0.984	0.0034	Dec-21	23	0.117	---	88.3% (+)	No Trend	Stable	51
MW-76	1,1-Dichloroethene	7	2	29	0.0010	0.0003	0.0010	0.0140	---	---	---	---	ND (0.001)	Dec-21	-5	0.281	---	71.9% (-)	No Trend	>50% ND	357
MW-77	1,1-Dichloroethene	8	8	100	---	0.0005	---	0.0490	0.0155	0.0105	0.0166	1.07	0.0052	Dec-21	-8	0.199	---	80.1% (-)	No Trend	Not Stable	132
MW-83	1,1-Dichloroethene	7	7	100	---	0.0280	---	0.0851	0.0427	0.0330	0.0212	0.495	0.0340	Dec-21	11	0.068	---	93.2% (+)	No Trend	Stable	357
MW-88	1,1-Dichloroethene	7	7	100	---	0.0115	---	0.0244	0.0183	0.0197	0.0052	0.286	0.0197	Dec-21	11	0.068	---	93.2% (+)	No Trend	Stable	355
MW-89	1,1-Dichloroethene	7	7	100	---	0.0320	---	0.212	0.123	0.122	0.0626	0.509	0.112	Dec-21	13	0.035	0.0295	96.5% (sig +)	Increasing	---	356
MW-90	1,1-Dichloroethene	7	7	100	---	0.0216	---	0.0727	0.0468	0.0481	0.0156	0.333	0.0454	Dec-21	1	0.500	---	50% (+)	No Trend	Stable	355
MW-92	1,1-Dichloroethene	7	1	14	0.0010	0.0008	0.0010	0.0008	---	---	---	---	ND (0.001)	Dec-21	-6	0.236	---	76.4% (-)	No Trend	>50% ND	355
MW-93R	1,1-Dichloroethene	8	8	100	---	0.0011	---	0.0098	0.0030	0.0019	0.0029	0.976	0.0098	Dec-21	14	0.054	---	94.6% (+)	No Trend	Stable	169
MW-97	1,1-Dichloroethene	14	14	100	---	0.0015	---	0.0199	0.0064	0.0027	0.0071	1.11	0.0199	Dec-21	60	0.001	0.0025	99.9% (sig +)	Increasing	---	50
MW-98	1,1-Dichloroethene	12	10	83	0.0010	0.0005	0.0050	0.0023	0.0011	0.0009	0.0006	0.567	0.0015	Dec-21	29	0.027	0.0002	97.4% (sig +)	Increasing	---	121
MW-100	1,1-Dichloroethene	7	4	57	0.0010	0.0012	0.0010	0.0210	0.0051	0.0012	0.0069	1.35	ND (0.001)	Dec-21	-16	0.010	-0.0020	99% (sig -)	Decreasing	---	357

Appendix G. Mann-Kendall Trend Evaluation Results (2015-2021)

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

Well	Parameter	Total Samples	Detect Results	Detect Freq. (%)	Min Non-Detect (mg/L)	Min Detect (mg/L)	Max Non-Detect (mg/L)	Max Detect (mg/L)	Mean (mg/L)	Median (mg/L)	Std Dev. (mg/L)	CV	Last Result (mg/L)	Last Sample Date	MK Test Value (S)	MK p-value	Sen's Slope Estimator (mg/L/yr)	Mann-Kendall Result	Trend Analysis Result	Stability Based On CV	Min Sample Spacing (days)
MW-106	1,1-Dichloroethene	9	6	67	0.0010	0.0002	0.0010	0.0039	0.0010	0.0010	0.0010	1.03	ND (0.001)	Dec-21	-18	0.038	-0.0001	96.2% (sig -)	Decreasing	---	135
MW-108	1,1-Dichloroethene	7	7	100	---	0.0231	---	0.105	0.0597	0.0552	0.0260	0.437	0.0552	Dec-21	-11	0.068	---	93.2% (-)	No Trend	Stable	356
MW-109	1,1-Dichloroethene	7	7	100	---	0.0320	---	0.173	0.0822	0.0734	0.0489	0.595	0.0346	Dec-21	-9	0.119	---	88.1% (-)	No Trend	Stable	357
MW-110	1,1-Dichloroethene	7	7	100	---	0.0022	---	0.0349	0.0126	0.0045	0.0125	0.990	0.0031	Dec-21	-5	0.281	---	71.9% (-)	No Trend	Stable	357
MW-111	1,1-Dichloroethene	7	6	86	0.0010	0.0008	0.0010	0.547	0.0927	0.0305	0.186	2.01	0.547	Dec-21	-1	0.500	---	50% (-)	No Trend	Not Stable	356
MW-112	1,1-Dichloroethene	7	7	100	---	0.0181	---	0.0402	0.0289	0.0291	0.0074	0.257	0.0291	Dec-21	-1	0.500	---	50% (-)	No Trend	Stable	355
MW-113	1,1-Dichloroethene	7	6	86	0.0050	0.0002	0.0050	0.0219	0.0070	0.0040	0.0088	1.26	0.0197	Dec-21	15	0.015	0.0032	98.5% (sig +)	Increasing	---	357
MW-121	1,1-Dichloroethene	8	5	63	0.0010	0.0021	0.0010	0.0420	0.0106	0.0031	0.0147	1.38	ND (0.001)	Dec-21	-17	0.024	-0.0015	97.7% (sig -)	Decreasing	---	196
MW-122	1,1-Dichloroethene	9	9	100	---	0.0020	---	0.0258	0.0076	0.0073	0.0073	0.958	0.0258	Dec-21	6	0.306	---	69.4% (+)	No Trend	Stable	124
MW-145	1,1-Dichloroethene	13	8	62	0.0010	0.0004	0.0100	0.0110	0.0037	0.0041	0.0036	0.973	ND (0.001)	Dec-21	-49	0.001	-0.0016	99.9% (sig -)	Decreasing	---	65
MW-146	1,1-Dichloroethene	14	12	86	0.0010	0.0012	0.0010	0.0490	0.0211	0.0243	0.0177	0.840	ND (0.001)	Dec-21	-71	0.000	-0.0086	100% (sig -)	Decreasing	---	54
MW-147	1,1-Dichloroethene	14	13	93	0.0010	0.0007	0.0010	0.0170	0.0084	0.0091	0.0055	0.655	0.0016	Dec-21	-43	0.010	-0.0019	99% (sig -)	Decreasing	---	54
MW-160	1,1-Dichloroethene	10	7	70	0.0010	0.0004	0.0050	0.0108	0.0027	0.0027	0.0031	1.12	0.0024	Dec-21	4	0.398	---	60.2% (+)	No Trend	Not Stable	137
MW-161	1,1-Dichloroethene	10	10	100	---	0.0008	---	0.0871	0.0185	0.0041	0.0283	1.53	0.0482	Dec-21	25	0.014	0.0058	98.6% (sig +)	Increasing	---	137
MW-162	1,1-Dichloroethene	11	0	0	0.0010	---	0.0050	---	---	---	---	---	ND (0.001)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	137
MW-163	1,1-Dichloroethene	11	3	27	0.0010	0.0002	0.0050	0.0168	---	---	---	---	0.0168	Dec-21	17	0.109	---	89.1% (+)	No Trend	>50% ND	137
MW-168	1,1-Dichloroethene	14	14	100	---	0.0074	---	0.160	0.0602	0.0440	0.0517	0.859	0.0098	Dec-21	-59	0.000	-0.0223	100% (sig -)	Decreasing	---	49
MW-178	1,1-Dichloroethene	9	0	0	0.0010	---	0.0010	---	---	---	---	---	ND (0.001)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	37
MW-179	1,1-Dichloroethene	7	4	57	0.0010	0.0004	0.0010	0.0043	0.0015	0.0010	0.0016	1.03	0.0043	Dec-21	18	0.003	0.0010	99.7% (sig +)	Increasing	---	169
MW-01	Vinyl Chloride	7	1	14	0.0010	0.0004	0.0020	0.0004	---	---	---	---	ND (0.002)	Dec-21	-4	0.334	---	66.6% (-)	No Trend	>50% ND	356
MW-15R	Vinyl Chloride	6	2	33	0.0020	0.0007	0.0020	0.0021	---	---	---	---	0.0021	Dec-21	7	0.136	---	86.4% (+)	No Trend	>50% ND	363
MW-16R	Vinyl Chloride	5	4	80	0.0020	0.0023	0.0020	0.0073	0.0039	0.0039	0.0019	0.476	0.0073	Dec-20	8	0.042	0.0014	95.8% (sig +)	Increasing	---	364
MW-17R	Vinyl Chloride	7	0	0	0.0020	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	358
MW-50R	Vinyl Chloride	7	5	71	0.0020	0.0010	0.0020	0.0850	0.0211	0.0023	0.0287	1.36	ND (0.002)	Dec-21	-16	0.010	-0.0086	99% (sig -)	Decreasing	---	357
MW-65	Vinyl Chloride	9	7	78	0.0020	0.0006	0.0020	0.0020	0.0010	0.0013	0.0005	0.435	ND (0.002)	Dec-21	-20	0.022	-0.0002	97.8% (sig -)	Decreasing	---	126
MW-70	Vinyl Chloride	7	2	29	0.0002	0.0012	0.0020	0.0013	---	---	---	---	ND (0.002)	Dec-21	-3	0.386	---	61.4% (-)	No Trend	>50% ND	357
MW-71	Vinyl Chloride	12	0	0	0.0002	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	54
MW-74	Vinyl Chloride	14	14	100	---	0.0009	---	0.0182	0.0039	0.0021	0.0045	1.17	0.0182	Dec-21	26	0.088	---	91.2% (+)	No Trend	Not Stable	51
MW-76	Vinyl Chloride	7	0	0	0.0002	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	357
MW-77	Vinyl Chloride	8	2	25	0.0002	0.0003	0.0020	0.0006	---	---	---	---	ND (0.002)	Dec-21	-11	0.114	---	88.6% (-)	No Trend	>50% ND	132
MW-83	Vinyl Chloride	7	6	86	0.0002	0.0023	0.0002	0.0091	0.0058	0.0073	0.0031	0.530	0.0023	Dec-21	-11	0.068	---	93.2% (-)	No Trend	Stable	357
MW-88	Vinyl Chloride	7	1	14	0.0002	0.0004	0.0020	0.0004	---	---	---	---	ND (0.002)	Dec-21	-4	0.334	---	66.6% (-)	No Trend	>50% ND	355
MW-89	Vinyl Chloride	7	2	29	0.0002	0.0091	0.0020	0.0119	---	---	---	---	0.0091	Dec-21	7	0.191	---	80.9% (+)	No Trend	>50% ND	356
MW-90	Vinyl Chloride	7	0	0	0.0002	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	355
MW-92	Vinyl Chloride	7	0	0	0.0002	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	355
MW-93R	Vinyl Chloride	8	0	0	0.0002	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	169
MW-97	Vinyl Chloride	14	0	0	0.0010	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	50
MW-98	Vinyl Chloride	12	0	0	0.0010	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	121
MW-100	Vinyl Chloride	7	3	43	0.0002	0.0006	0.0020	0.0014	---	---	---	---	ND (0.002)	Dec-21	-11	0.068	---	93.2% (-)	No Trend	>50% ND	357
MW-106	Vinyl Chloride	9	2	22	0.0020	0.0091	0.0020	0.0118	---	---	---	---	0.0118	Dec-21	13	0.110	---	89% (+)	No Trend	>50% ND	135
MW-108	Vinyl Chloride	7	5	71	0.0020	0.0004	0.0020	0.0221	0.0040	0.0014	0.0074	1.84	ND (0.002)	Dec-21	-10	0.094	---	90.6% (-)	No Trend	Not Stable	356
MW-109	Vinyl Chloride	7	7	100	---	0.0163	---	0.112	0.0482	0.0327	0.0342	0.710	0.0163	Dec-21	-7	0.191	---	80.9% (-)	No Trend	Stable	357
MW-110	Vinyl Chloride	7	7	100	---	0.0004	---	0.0276	0.0069	0.0039	0.0097	1.40	0.0004	Dec-21	-7	0.191	---	80.9% (-)	No Trend	Not Stable	357
MW-111	Vinyl Chloride	7	4	57	0.0020	0.0027	0.0020	0.0941	0.0157	0.0027	0.0320	2.04	0.0941	Dec-21	2	0.443	---	55.7% (+)	No Trend	Not Stable	356
MW-112	Vinyl Chloride	7	7	100	---	0.0051	---	0.0269	0.0154	0.0143	0.0075	0.484	0.0051	Dec-21	-5	0.281	---	71.9% (-)	No Trend	Stable	355
MW-113	Vinyl Chloride	7	4	57	0.0020	0.0003	0.0020	0.0013	0.0007	0.0013	0.0004	0.493	0.0009	Dec-21	12	0.052	---	94.8% (+)	No Trend	Stable	357
MW-121	Vinyl Chloride	8	0	0	0.0002	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	196
MW-122	Vinyl Chloride	9	0	0	0.0002	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	124
MW-145	Vinyl Chloride	13	6	46	0.0020	0.0008	0.0200	0.0021	---	---	---	---	ND (0.002)	Dec-21	-37	0.013	-0.0003	98.7% (sig -)	Decreasing	---	65

Appendix G. Mann-Kendall Trend Evaluation Results (2015-2021)

2021 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

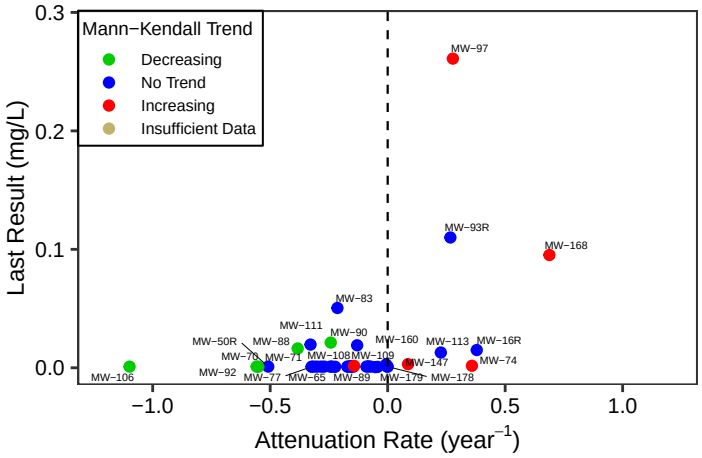
Well	Parameter	Total Samples	Detect Results	Detect Freq. (%)	Min Non-Detect (mg/L)	Min Detect (mg/L)	Max Non-Detect (mg/L)	Max Detect (mg/L)	Mean (mg/L)	Median (mg/L)	Std Dev. (mg/L)	CV	Last Result (mg/L)	Last Sample Date	MK Test Value (S)	MK p-value	Sen's Slope Estimator (mg/L/yr)	Mann-Kendall Result	Trend Analysis Result	Stability Based On CV	Min Sample Spacing (days)
MW-146	Vinyl Chloride	14	10	71	0.0002	0.0003	0.0020	0.0033	0.0011	0.0011	0.0008	0.769	ND (0.002)	Dec-21	-58	0.001	-0.0004	100% (sig -)	**Decreasing**	---	54
MW-147	Vinyl Chloride	14	6	43	0.0002	0.0005	0.0020	0.0040	---	---	---	---	ND (0.002)	Dec-21	-17	0.194	---	80.6% (-)	No Trend	>50% ND	54
MW-160	Vinyl Chloride	10	1	10	0.0002	0.0003	0.0200	0.0003	---	---	---	---	ND (0.002)	Dec-21	-1	0.500	---	50% (-)	No Trend	>50% ND	137
MW-161	Vinyl Chloride	10	0	0	0.0002	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	137
MW-162	Vinyl Chloride	11	0	0	0.0002	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	137
MW-163	Vinyl Chloride	11	1	9	0.0020	0.0011	0.0020	0.0011	---	---	---	---	0.0011	Dec-21	10	0.247	---	75.3% (+)	No Trend	>50% ND	137
MW-168	Vinyl Chloride	14	2	14	0.0010	0.0003	0.0020	0.0006	---	---	---	---	0.0003	Dec-21	-1	0.500	---	50% (-)	No Trend	>50% ND	49
MW-178	Vinyl Chloride	9	0	0	0.0020	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	37
MW-179	Vinyl Chloride	7	0	0	0.0020	---	0.0020	---	---	---	---	---	ND (0.002)	Dec-21	0	0.500	---	50% (+)	No Trend	>50% ND	169

Notes:
"---" = not applicable
% = percent
(-) = negative trend
(+) = positive trend
CV = coefficient of variation
Freq. = frequency
Max = maximum
mg/L = milligrams per liter
mg/L/yr = milligrams per liter per year
Min = minimum
MK = Mann-Kendall
ND = non-detect
p-value = probability value
sig = (statistically) significant.
Std Dev. = standard deviation
Trend analysis performed using Mann-Kendall single-tailed test at 0.05 significance level with non-detects assigned a common value less than the smallest measured value in the data set.
Summary statistics calculated using the Kaplan-Meier product-limit estimator for nondetects.
For monitoring points exhibiting no trend at the 95 percent confidence level, concentrations are deemed stable if the coefficient of variation (CV) is equal to or less than one.

Mann−Kendall Trend and First−Order Attenuation Plots
(nondetects plotted at the censoring limit)

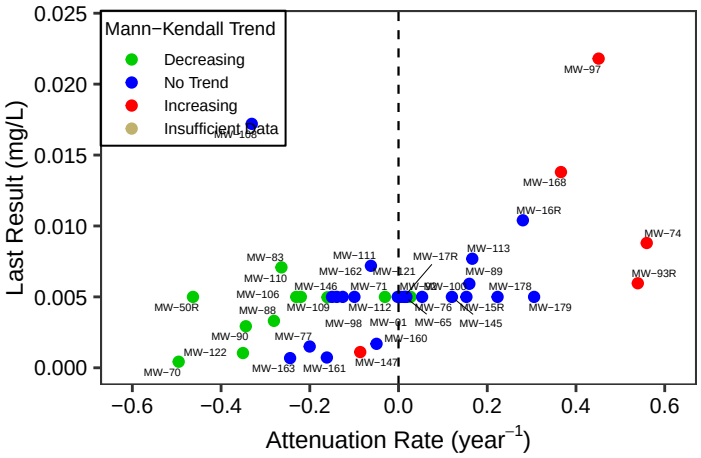
Tetrachloroethene

No. of decreasing trends = 5
No. of increasing trends = 5
Median attentuation rate = −0.154



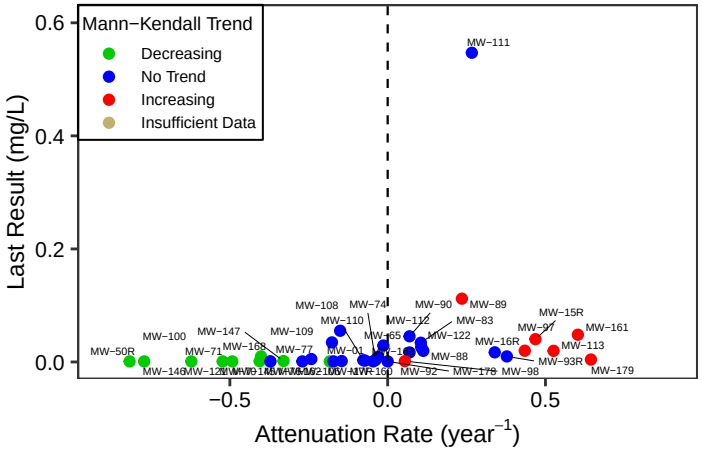
Trichloroethene

No. of decreasing trends = 11
No. of increasing trends = 5
Median attentuation rate = −0.05



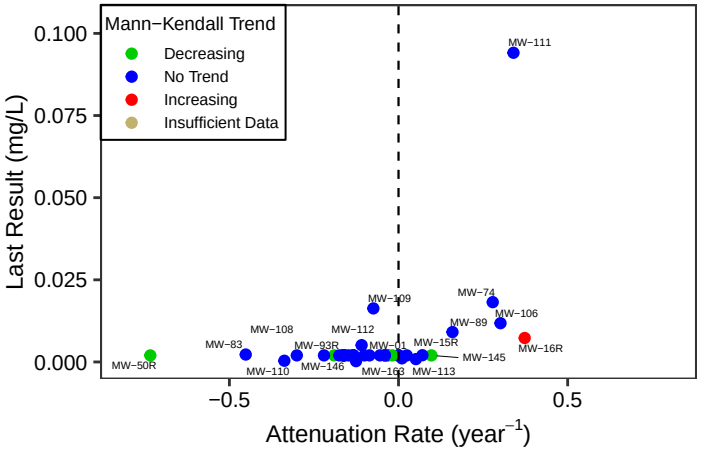
1,1−Dichloroethene

No. of decreasing trends = 10
No. of increasing trends = 7
Median attentuation rate = −0.046

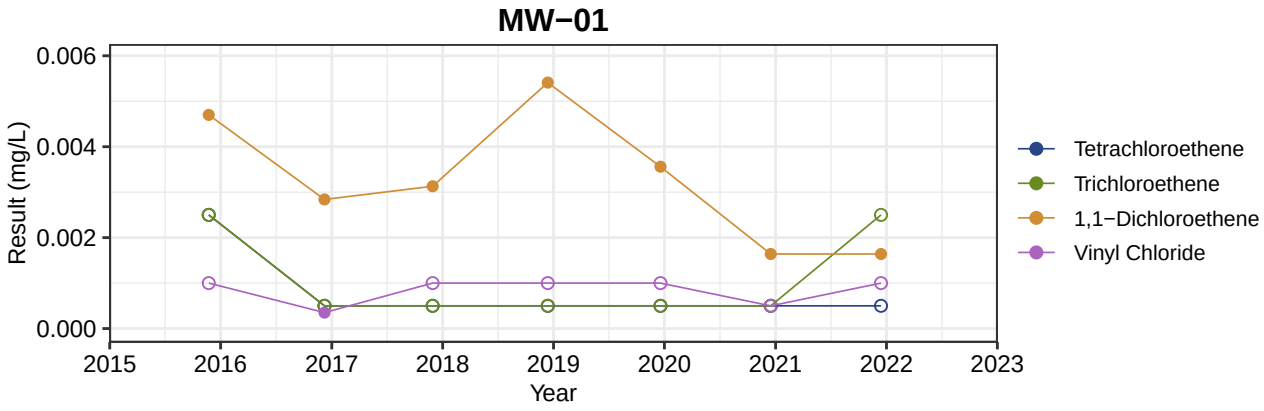


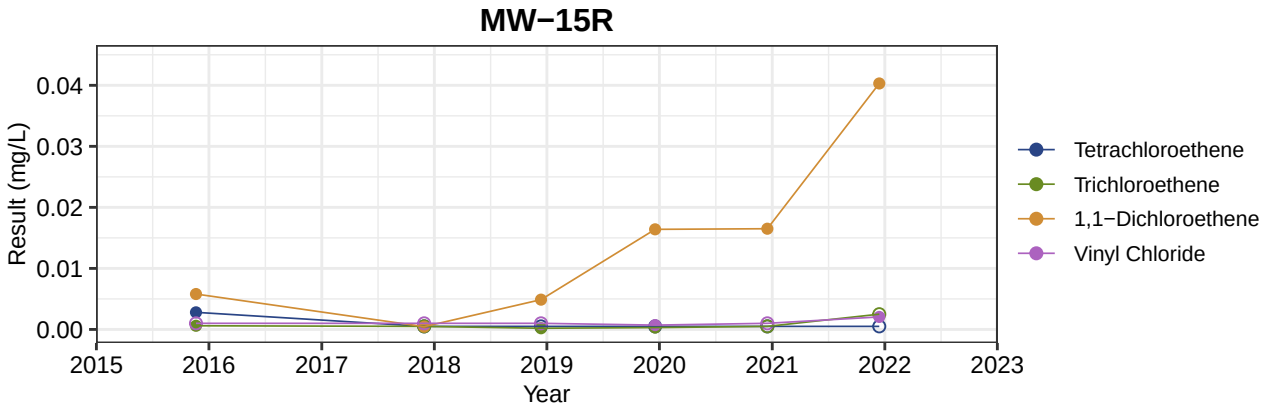
Vinyl Chloride

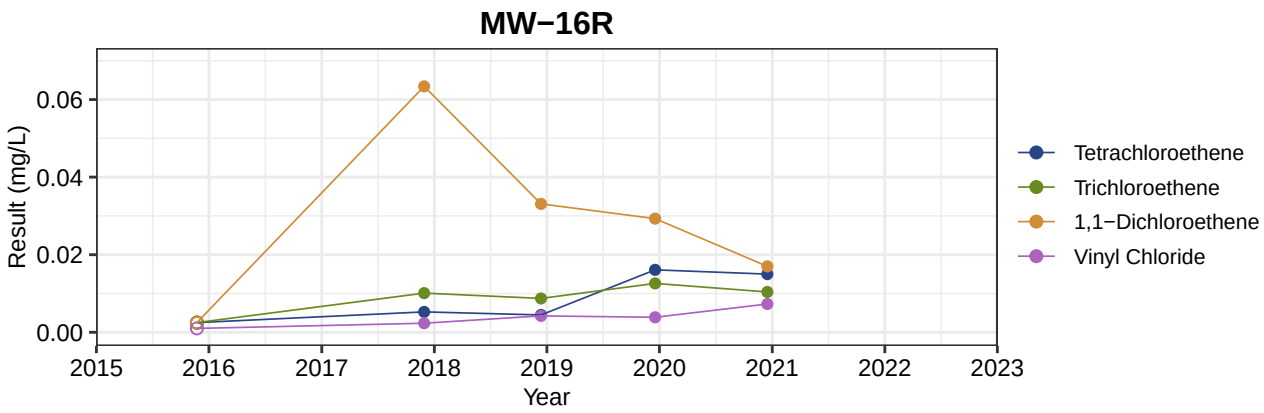
No. of decreasing trends = 4
No. of increasing trends = 1
Median attentuation rate = −0.086

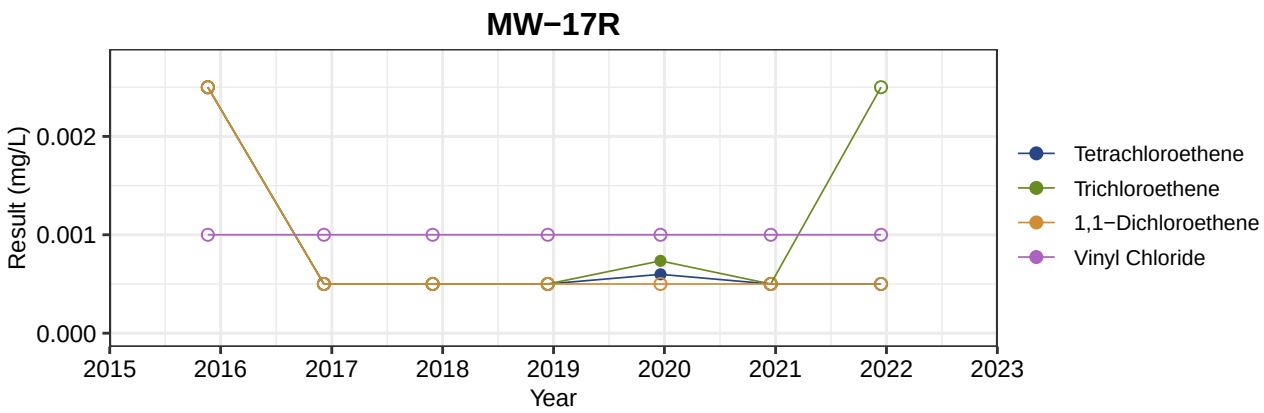


Overlapping Time−Series Plots
(nondetects plotted using open symbols at one−half the reporting limit)

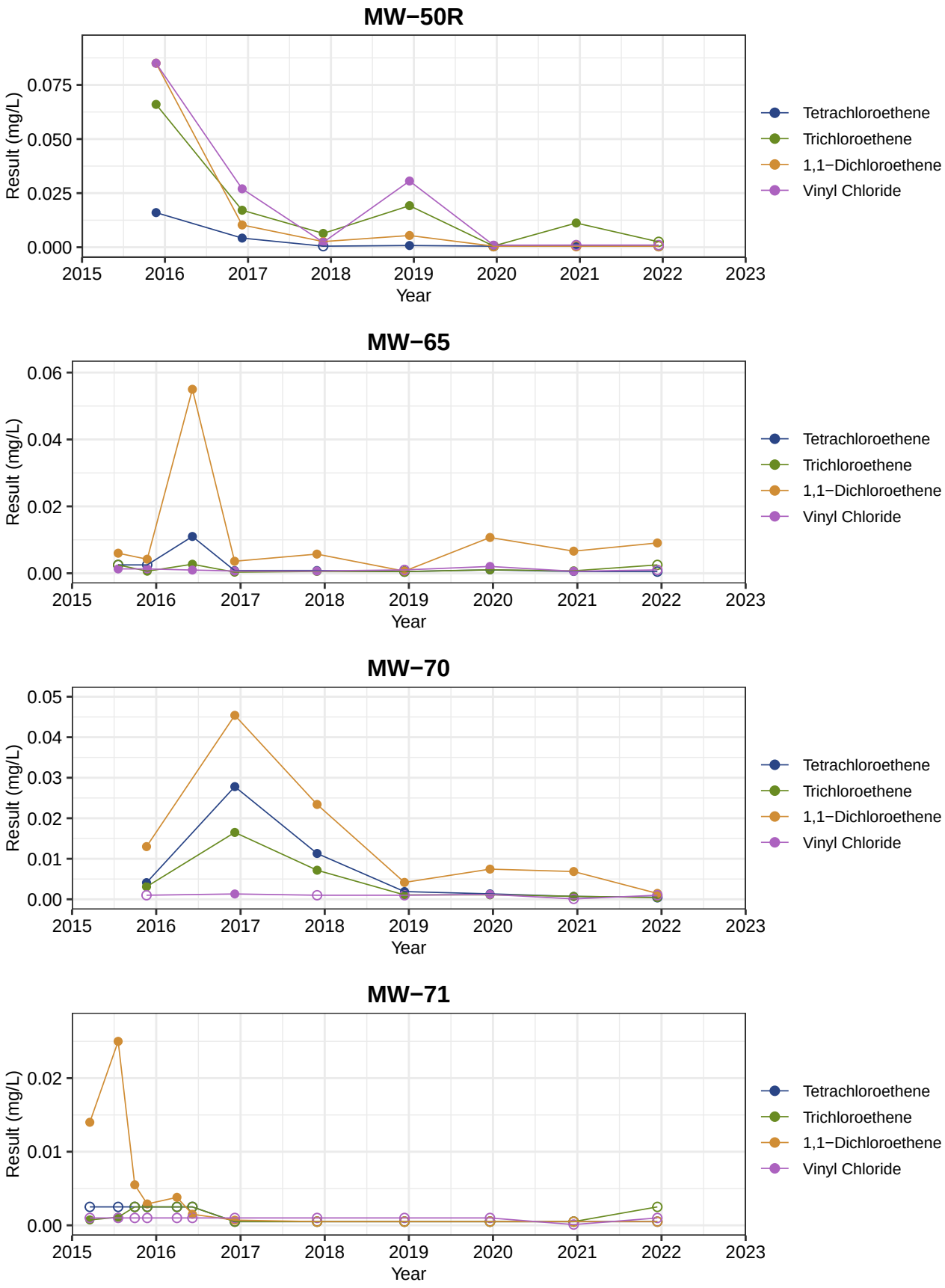




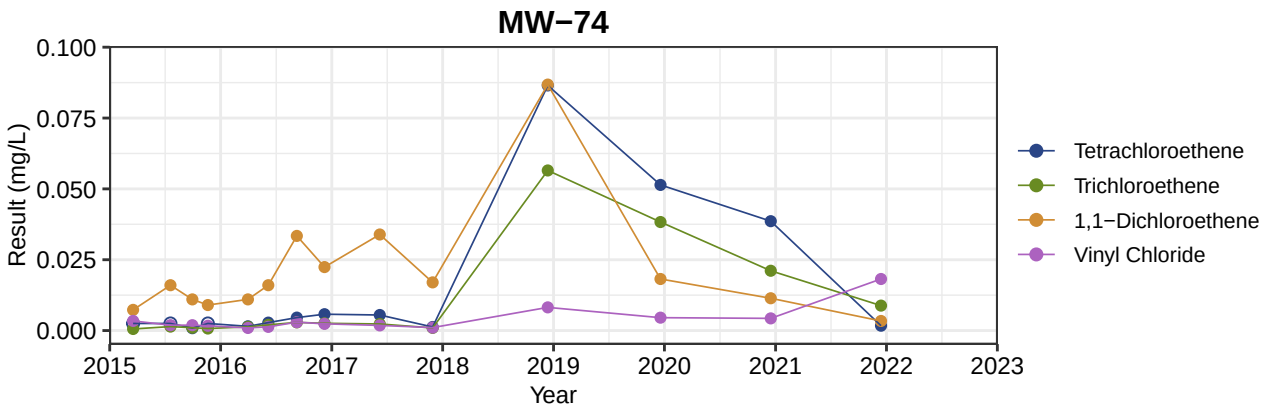


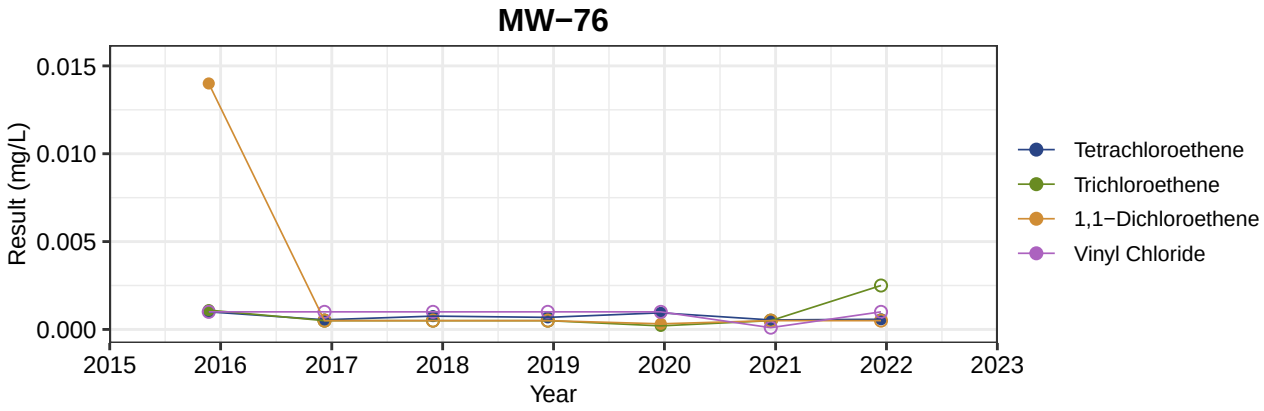


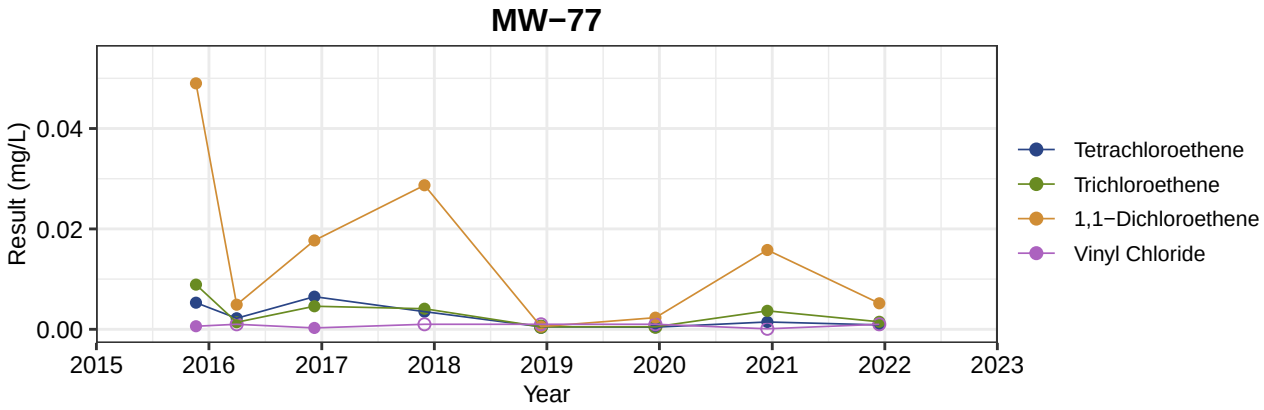
Overlapping Time−Series Plots
(nondetects plotted using open symbols at one−half the reporting limit)

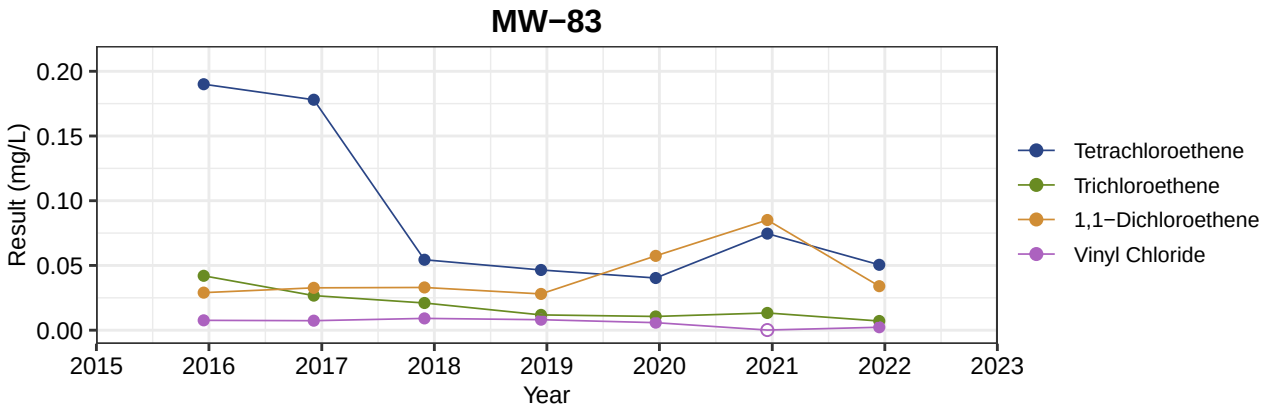


Overlapping Time−Series Plots
(nondetects plotted using open symbols at one−half the reporting limit)

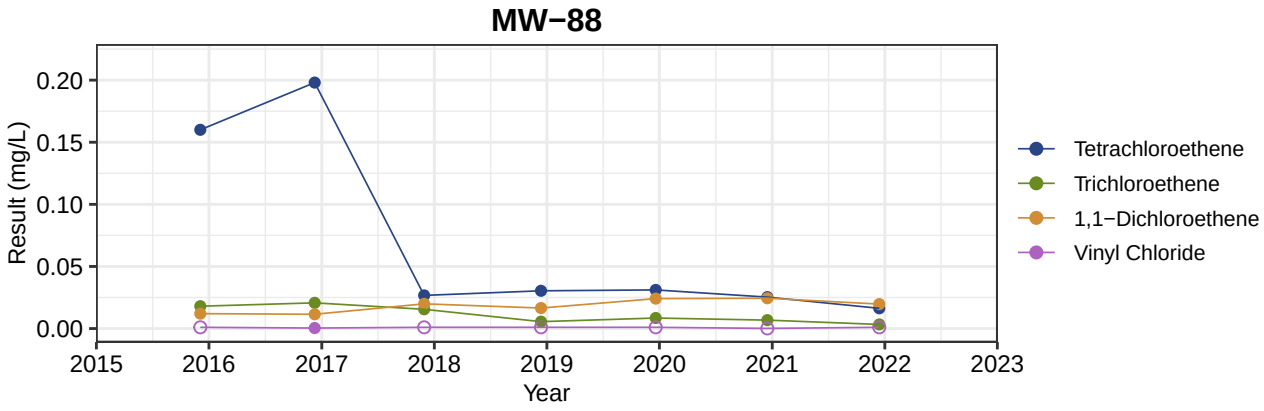


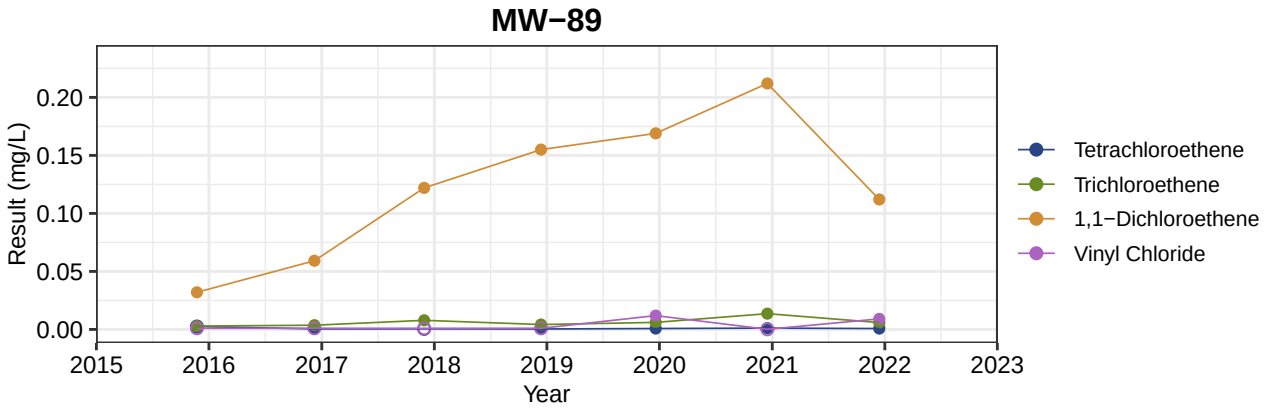


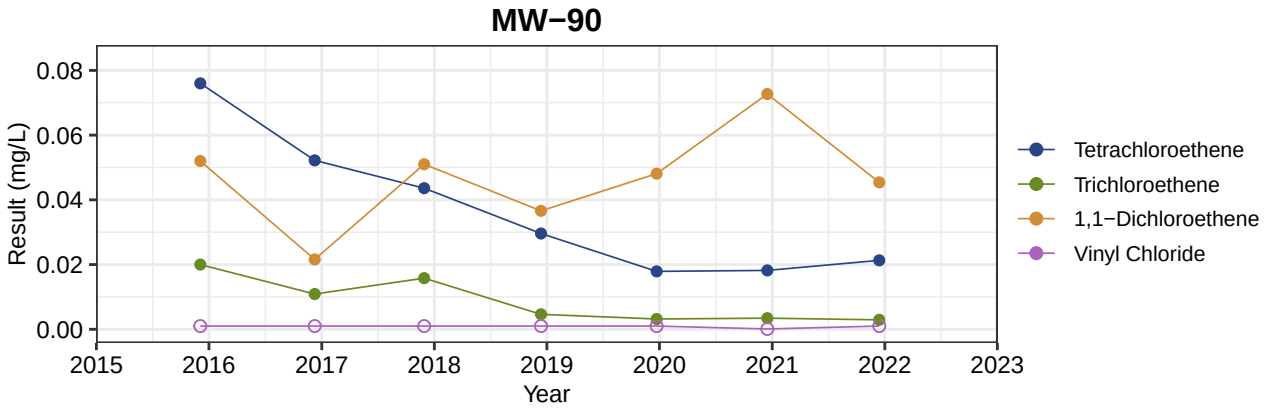


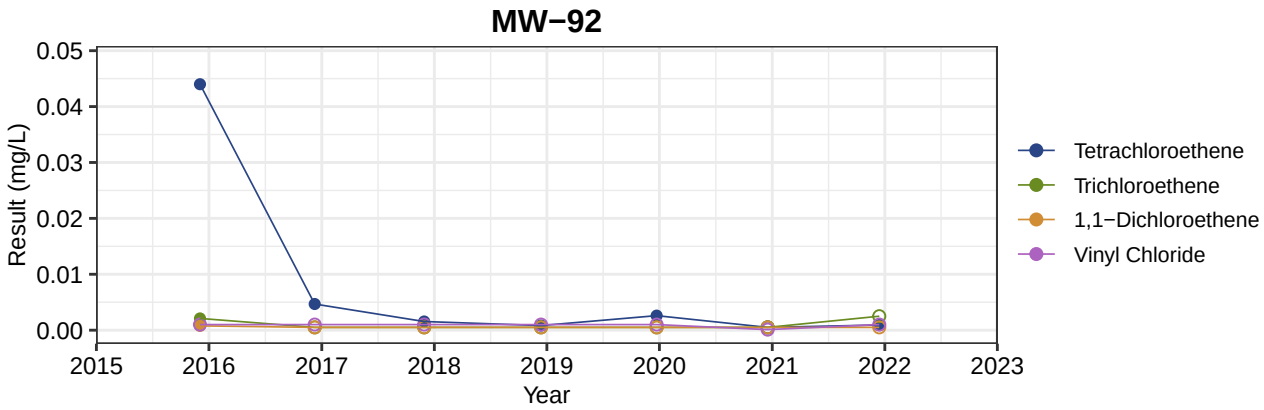


Overlapping Time−Series Plots
(nondetects plotted using open symbols at one−half the reporting limit)

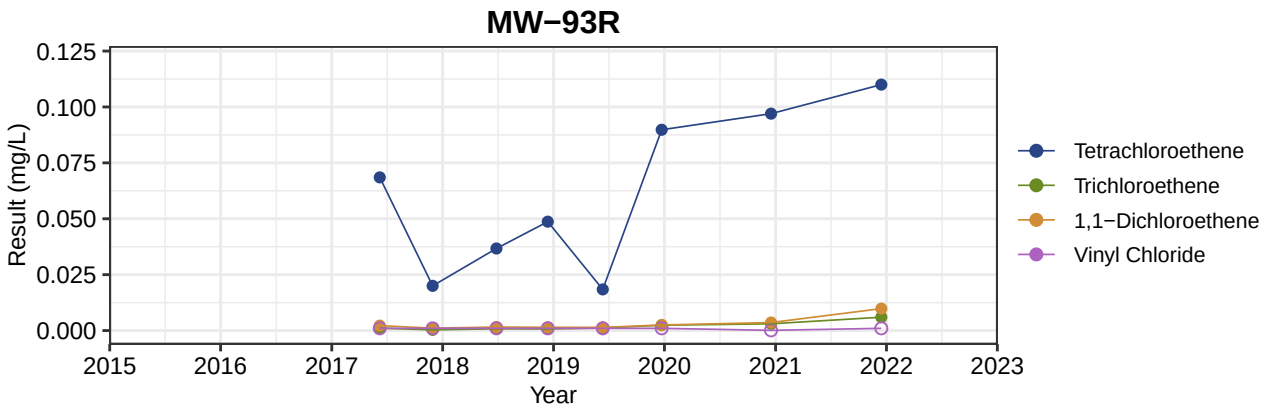


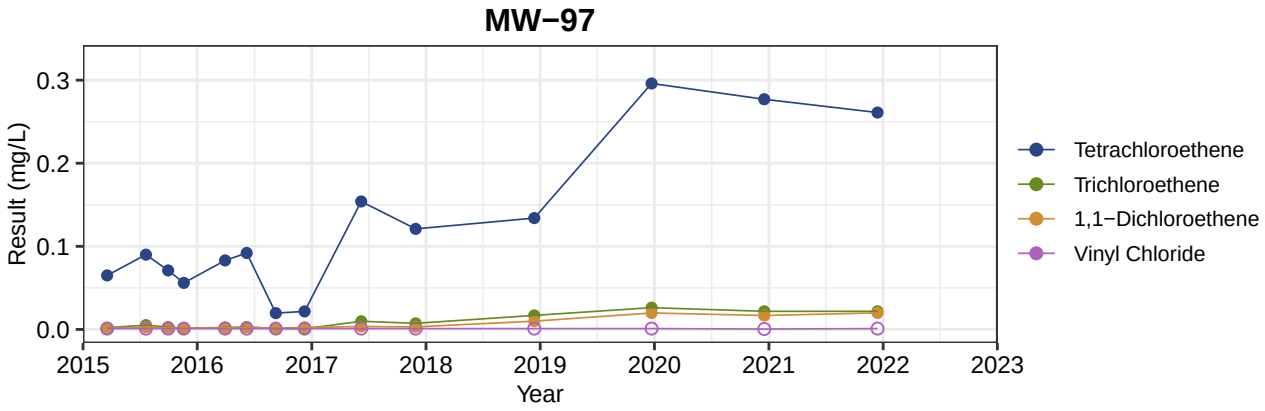


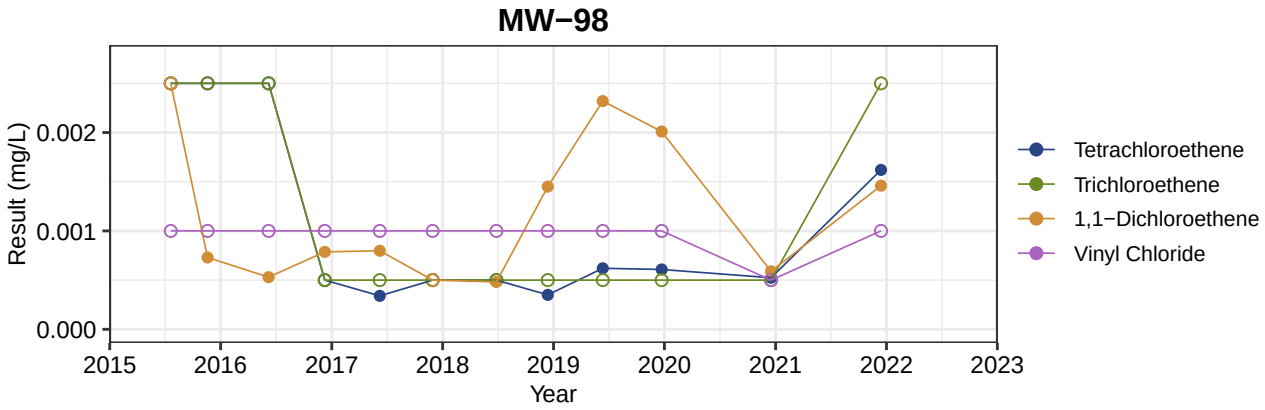


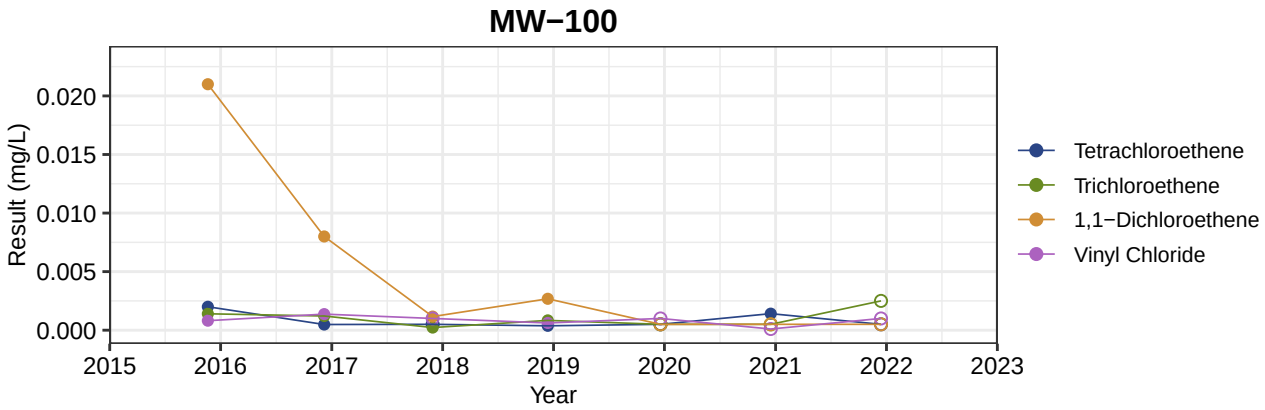


Overlapping Time−Series Plots
(nondetects plotted using open symbols at one−half the reporting limit)

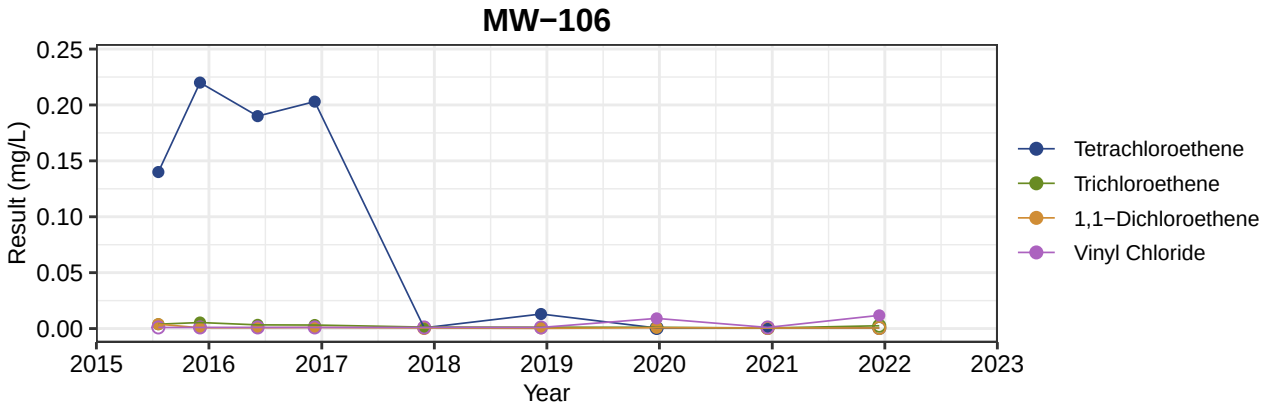


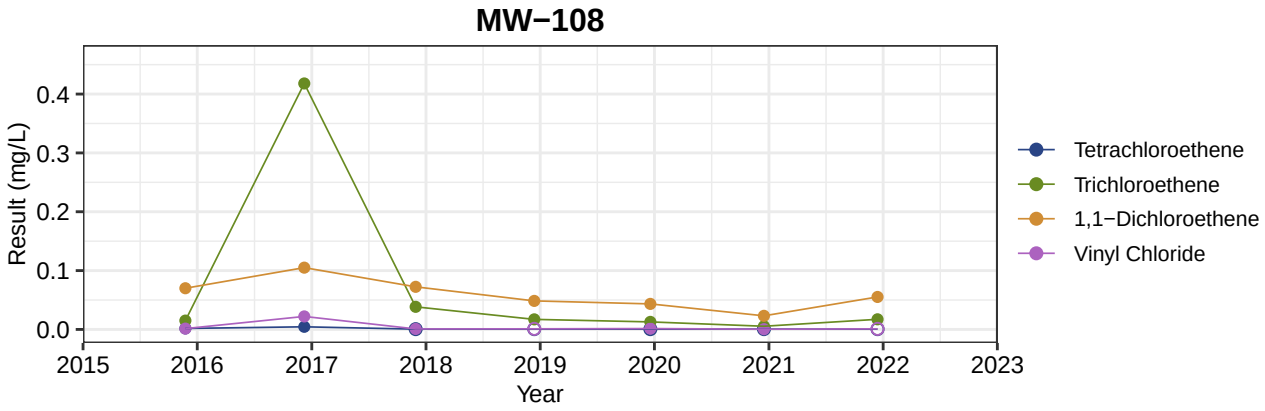


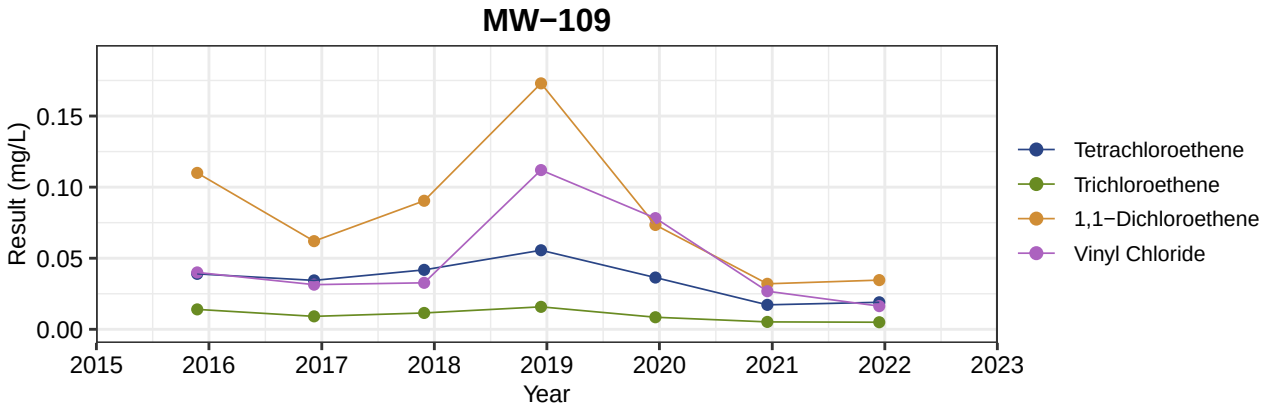


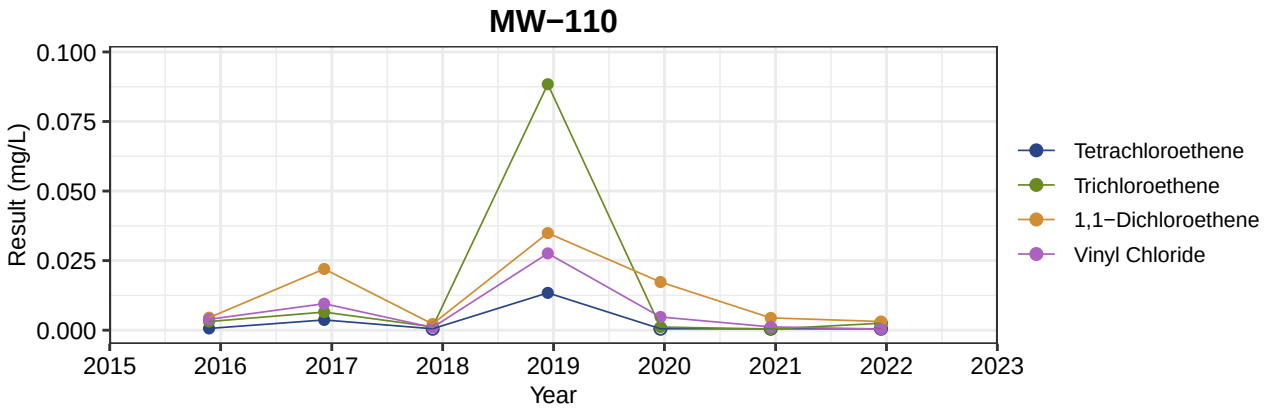


Overlapping Time−Series Plots
(nondetects plotted using open symbols at one−half the reporting limit)

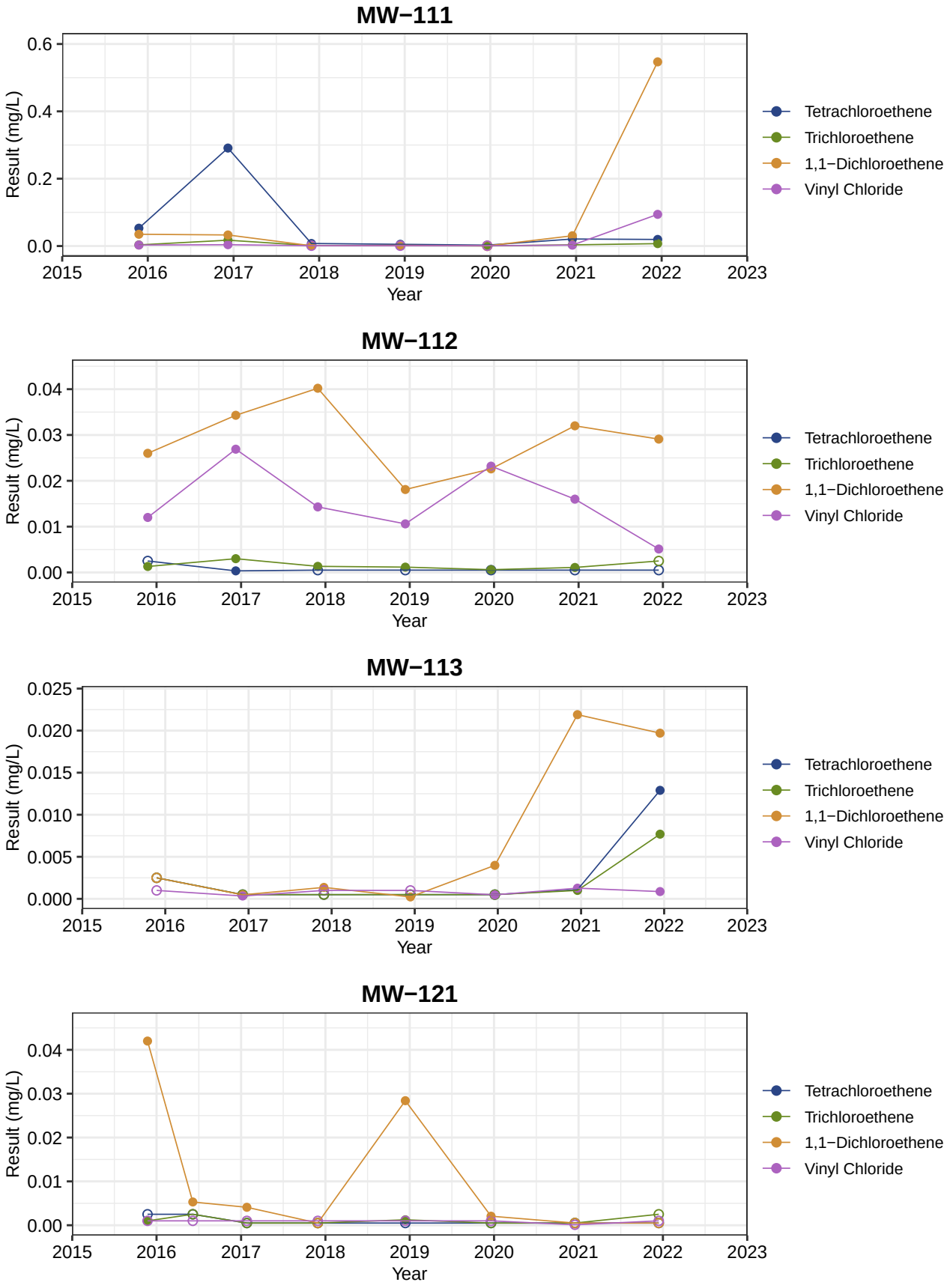




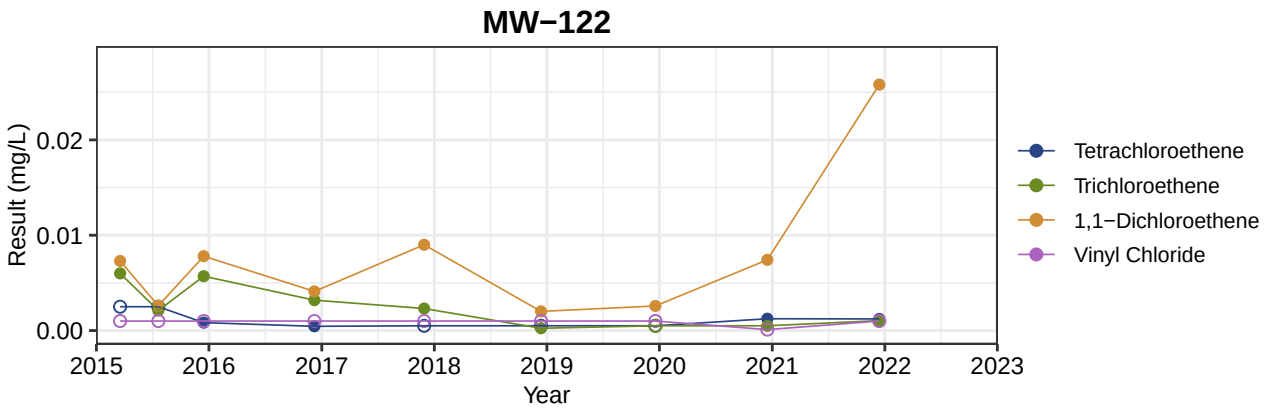


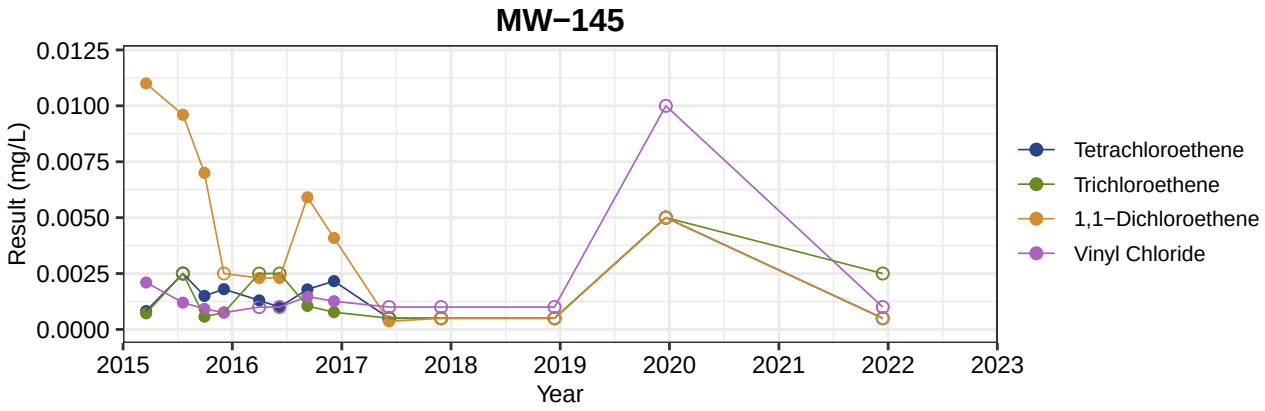


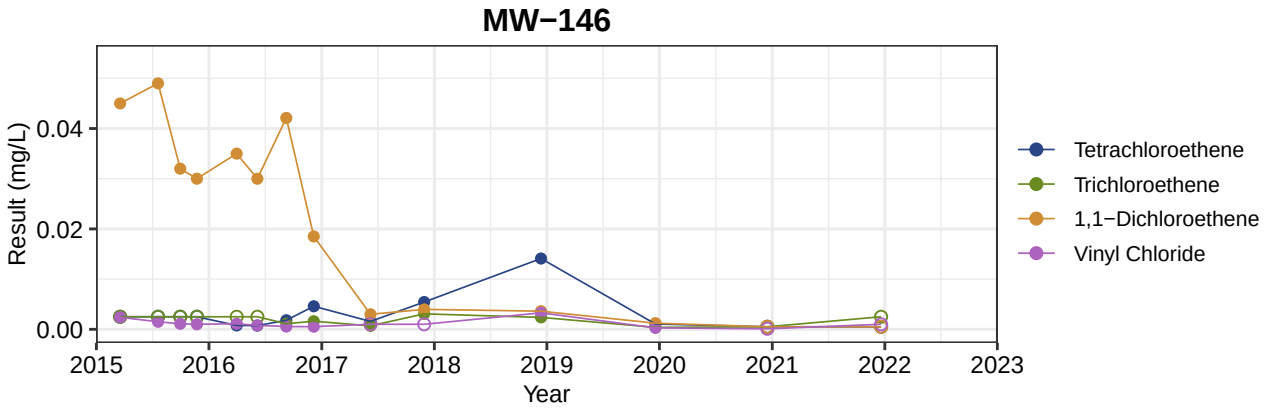
Overlapping Time−Series Plots
(nondetects plotted using open symbols at one−half the reporting limit)

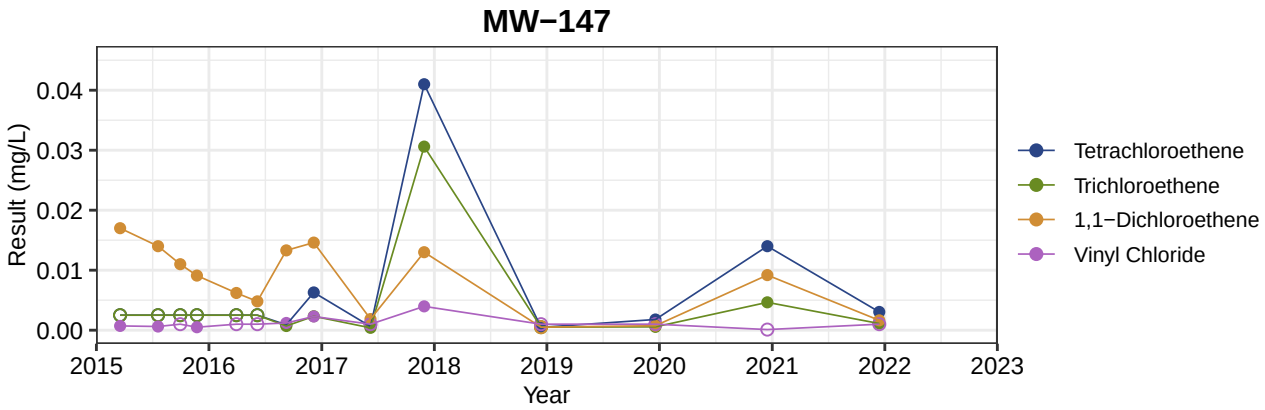


Overlapping Time−Series Plots
(nondetects plotted using open symbols at one−half the reporting limit)

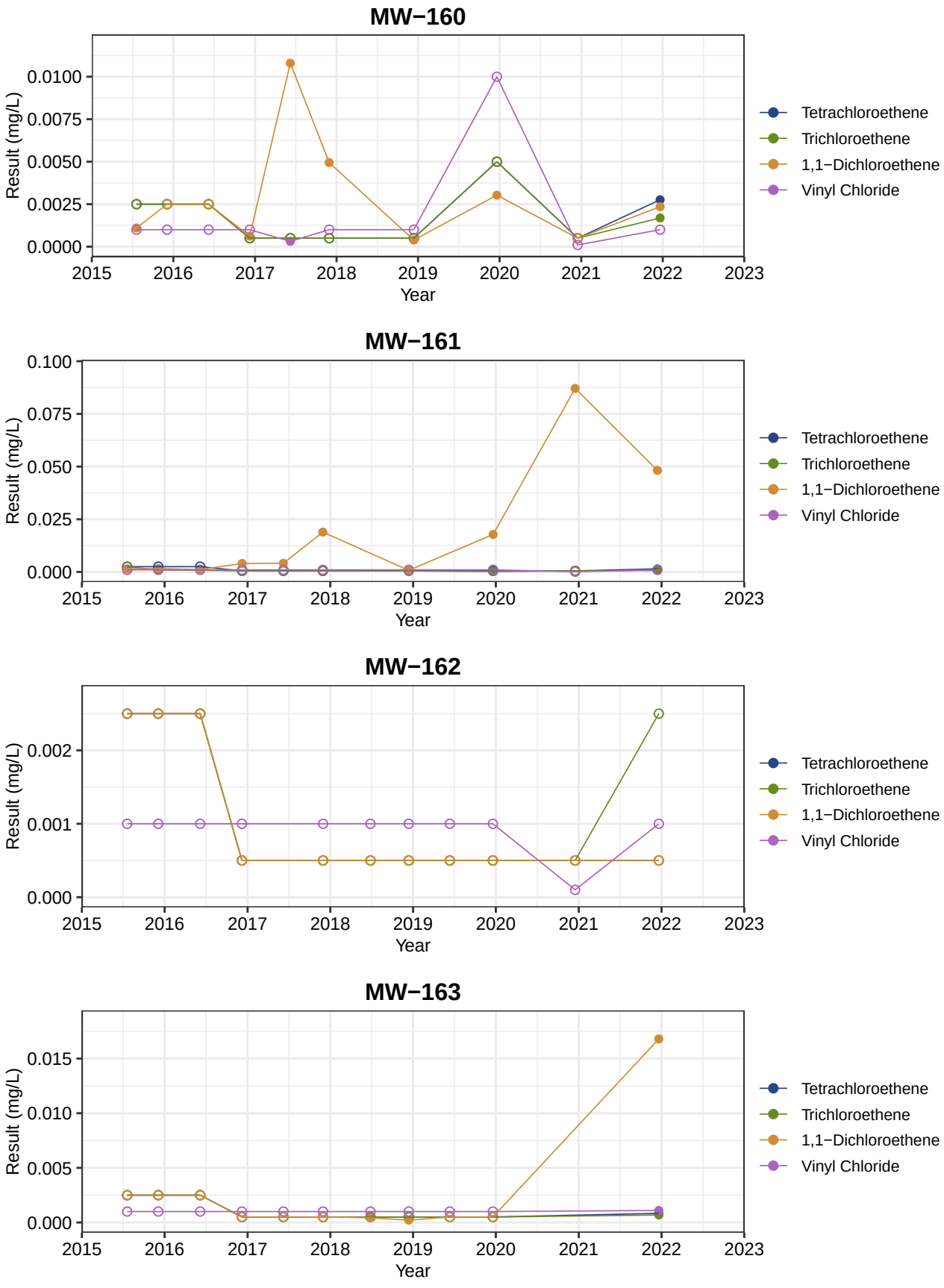




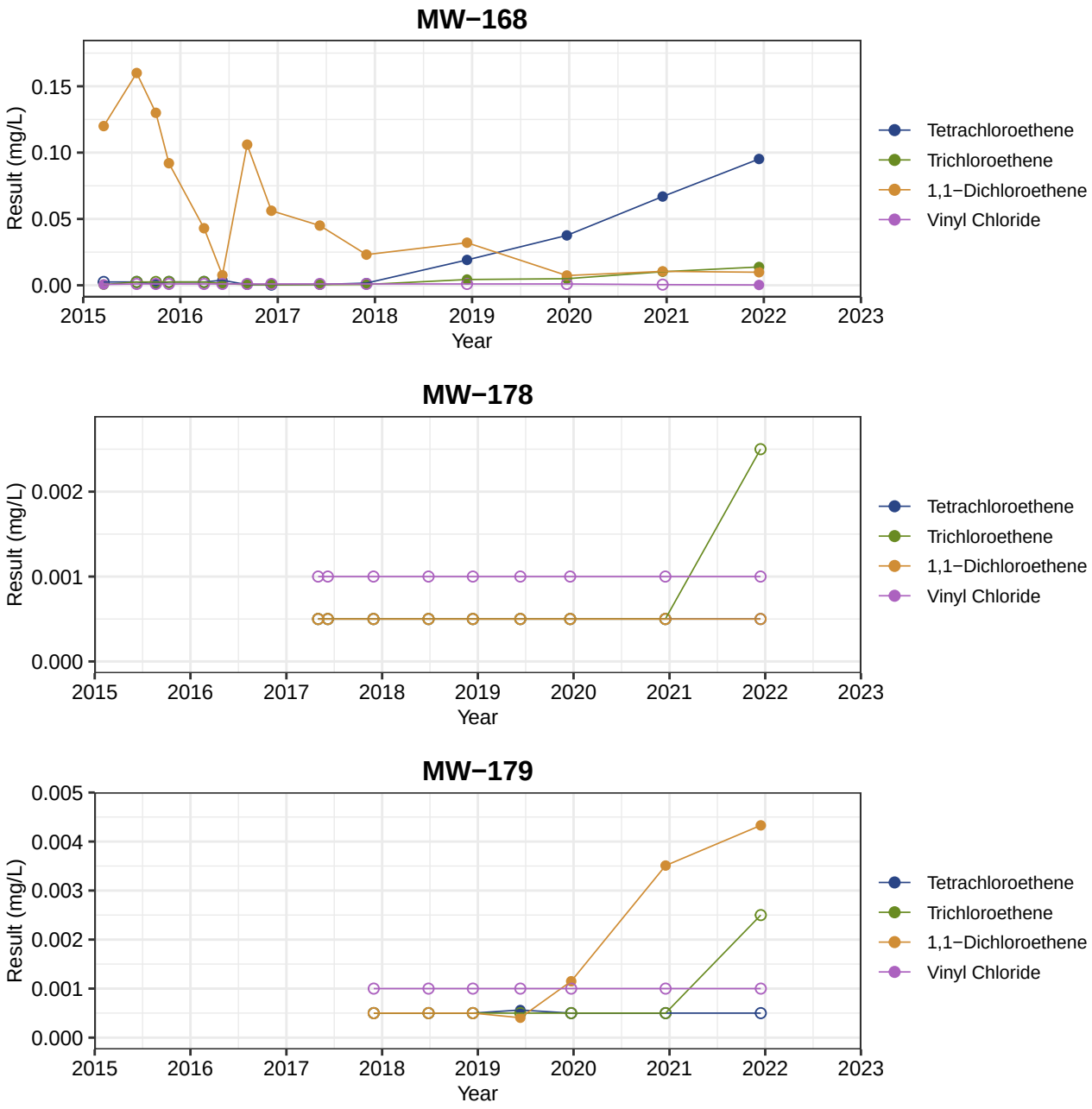




Overlapping Time−Series Plots
(nondetects plotted using open symbols at one−half the reporting limit)



Overlapping Time−Series Plots
(nondetects plotted using open symbols at one−half the reporting limit)



Appendix H
Waste Manifest 2021

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NONEREQUIRED	1	(800) 483-3718	016375611 FLE

5. Generator's Name and Mailing Address
Schlumberger Technology Corporation
Generators's Agent: CH2MHill 14701 St. mary's Ln, Ste 300
Houston, TX 77079
Generator's Phone (409) 781-8015 ATTN:John Knott

Generator's Site Address (if different than mailing address)
1000 Silber Road
Houston, TX 77055

6. Transporter 1 Company Name: Clean Harbors Environmental Services, Inc. — U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Clean Harbors LaPorte, LLC
500 Independence Parkway South
La Porte, TX 77571
Facility's Phone (281) 884-5500
U.S. EPA ID Number: TXD982290140

9a HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
1	NON HAZARDOUS, NON D.O.T. REGULATED, (CLASS 2)	02	DM	1,000	P	TXEXEMPT
2						
3						
4						

14. Special Handling Instructions and Additional Information
1.CH1453867 2X55

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency, convenience, or safety.

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter: I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Atif Hasan/CH2M as agent for Schlumberger Technology Corporation — Signature — Month 11 Day 03 Year 21

TRANSPORTER INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.
Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Kenneth T Nurston — Signature — Month 11 Day 03 Year 21
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: U.S. EPA ID Number:

18b. Alternate Facility (or Generator)
Facility's Phone — Month Day Year

18c. Signature of Alternate Facility (or Generator)

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

1007 5140
8:38

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: N/A
2. Page 1 of: 1
3. Emergency Response Phone: 404.414.2505
4. Manifest Tracking Number: 023779212 JJK

5. Generator's Name and Mailing Address:
SCHLUMBERGER TECHNOLOGY GEN ID 31267
1000 SILBER ROAD
HOUSTON, TX 77055

Generator's Site Address (if different than mailing address): SAME

Generator's Phone: 128, 7046814

6. Transporter 1 Company Name: Velez Trucking — 5303 oates rd Houston tx
U.S. EPA ID Number: TX R00007798 1

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BLUE RIDGE LANDFILL TX, LP
2200 FM 521, FRESNO, TEXAS 77545
281.835.6142
U.S. EPA ID Number: TXR000084592

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. CLASS 1 NON HAZ SPENT GAC MEDIA & DEBRIS	1	CM	25	Y	GDNR-404-1
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
REPUBLIC WASTE APPROVAL # 51122137180
BILL CMS # 333458

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: David Rowan / CH2M as Agent for Schlumberger Technology Corp.
Signature: [signature] / CH2M
Month 12 Day 13 Year 21

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Raymundo DePaz
Signature: [signature] Month 12 Day 13 Year 21
Transporter 2 Printed/Typed Name: Signature: Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

Republic Services
2200 FM 521 (PO Box 979)
Fresno, TX 77545
DEC 23 2021
Blue Ridge Landfill
Permit# 1505A
SWR# 89429

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Signature: Month 12 Day 23 Year 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Solid Waste