

June 2022
Groundwater Summary Report
for
Town of Warren TCE Investigation

Located at:
Section 19, T29N, R18W
Town of Warren
St. Croix County, Wisconsin

WDNR BRRTS No. 02-56-373815
WDNR Project No. 2000RRYY

Prepared for:

Wisconsin Department of Natural Resources
890 Spruce St.
Baldwin, WI 54002

Prepared by:



604 Wilson Avenue
Menomonie, WI 54751

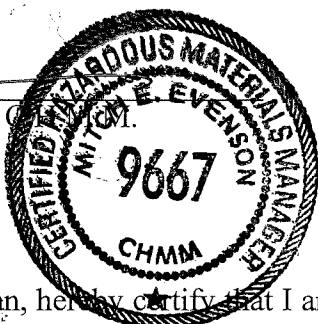
Project No. W2481-014

SIGNATURE PAGE

2022 Groundwater Summary Report for
Town of Warren TCE Investigation
Town of Warren
St. Croix County, Wisconsin

I, Mitch Evenson, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.


Mitch Evenson,

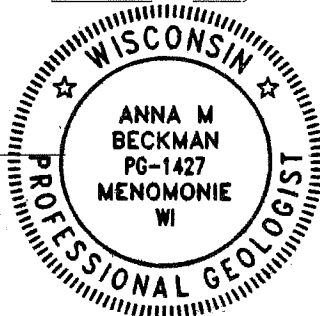


6/24/2022
Date

I, Anna Beckman, hereby certify that I am a professional geologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.



Anna Beckman, P.G.
PG No. 1427



6/24/2022
Date

TABLE OF CONTENTS

Executive Summary	i
1.0 Introduction.....	1
1.1 Purpose.....	1
1.2 Contact Information	1
1.3 Investigative/Remedial Objectives	1
1.4 Scope of Work	2
2.0 Procedures.....	2
2.1 Well Installation Procedures	2
2.1.1 Monitoring Well Installation.....	2
2.1.2 Injection Well Installation.....	3
2.2 Injection Well Rehabilitation.....	3
2.3 In-Situ Chemical Oxidation Procedures	4
2.4 Groundwater Monitoring Procedures	4
2.5 Residential Water Sampling	5
3.0 Results.....	6
3.1 In-Situ Chemical Oxidation	6
3.2 Groundwater Monitoring	7
3.2.1 VOCs.....	7
3.2.2 PFAS/1,4-Dioxane.....	8
3.2.3 Groundwater Flow/Gradients.....	8
3.3 Residential Water Sampling	9
4.0 Conclusions.....	10
5.0 Limitations	10
6.0 References.....	10

TABLES

Table 1	Groundwater Elevations and Hydrograph
Table 2	Piezometric Elevations and Vertical Gradients
Table 3	Monitoring Well VOC Groundwater Analytical Results
Table 4.a.	Monitoring Well PFAS Groundwater Analytical Results
Table 4.b.	Monitoring Well 1,4-Dioxane Groundwater Analytical Results
Table 5	Residential VOC Analytical Results
Table 6.a.	Injection Summary – September 2019
Table 6.b.	Injection Summary – April 2020

FIGURES

Figure 1	Detailed Site Map
Figure 2	Generalized Groundwater Flow Map
Figure 3	TCE Isoconcentration Map – Water Table
Figure 4	TCE Isoconcentration Map – Piezometers
Figure 5	Regional Geologic Cross-Section
Figure 6	Junkers Landfill Groundwater Flow Map

APPENDICES

Appendix A	Standard Operating Procedures
Appendix B	Geologic Borehole Logs, Well Construction Forms
Appendix C.1.	Laboratory Analytical Reports – VOCs
Appendix C.2.	Laboratory Analytical Reports – PFAS/1,4-Dioxane

Executive Summary

The Town of Warren TCE Investigation site is a trichloroethene (TCE) spill site of unknown origin, managed by the Wisconsin Department of Natural Resources (WDNR), which is located in the Town of Warren, just west of the Village of Roberts, in southwest St. Croix County, WI (referred to as the “Site”). A series of environmental investigations consisting of soil borings, soil gas survey, and groundwater monitoring began at the site in 2000 as a result of the detection of TCE in a residential water supply well in the area. This residence, located on 80th Avenue, is located hydraulically upgradient of the known Junkers Landfill and NorLake, Inc. TCE groundwater plumes, indicating a separate release of TCE at the Town of Warren Site. The results of these investigations, and an evaluation of historic information obtained for the area, indicate that prior to the mid-1970s, a release of TCE occurred within an approximately 300 ft. by 300 ft. area south of the intersection of 80th Avenue and the “Polen residence” (identified on the attached Figure 1: Detailed Site Map). Groundwater downgradient of this location was determined to be impacted above Wis. Adm. Code NR 140 standards.

To remediate TCE-impacted groundwater at this Site, a pilot test for in-situ chemical oxidation was conducted in 2004 using sodium permanganate, under direction of WDNR. The presence of karst topography, resulting from the fracturing and dissolution of underlying Ordovician limestone/dolomite bedrock, complicates the characterization of both horizontal and vertical groundwater flow in this area.

The first round of chemical oxidation was completed at three original multi-point injection wells near the suspected source area. Over the course of the last 20 years, 34 monitoring wells/piezometers and 21 injection wells (42 total injection points) have been installed at and in the vicinity of the Site and 11 rounds of in-situ chemical oxidation have been completed at various injection points across the Site. Based on the results of groundwater sampling completed post-injection, in-situ chemical oxidation has been determined to be effective in remediating TCE in groundwater at this Site, as concentrations are observed to be substantially decreased in monitoring points where treatment chemicals were observed following the injection.

Information regarding the specific land use, site history, regional hydrogeology and regional geology can be found in the Site Investigation Report (*Cedar Corp, 2003*). Per Wis. Adm. Code NR 716.15, this report describes the most recent phases of groundwater investigation and chemical injections conducted at the Town of Warren TCE Investigation Site from 2019 to 2022.

1.0 Introduction

1.1 Purpose

Cedar Corporation, on behalf of the Wisconsin Department of Natural Resources (WDNR), has overseen the completion of an additional phase of in-situ chemical oxidation, monitoring well installation, and groundwater and residential drinking water sampling at the Town of Warren TCE Investigation Site. The current phase of work was completed from July 2019 – April 2022. This report provides an overview of the remedial work completed as part of this scope of work, as well as details on the findings of the additional groundwater investigation, and presents the status of the project to date.

1.2 Contact Information

Consultant Contact: Cedar Corporation
Contact: Mitch Evenson
604 Wilson Avenue
Menomonie, WI 54751
715-235-9081

Regulatory Representative: Candace Sykora
Wisconsin Department of Natural Resources (WDNR)
890 Spruce Street
Baldwin, WI 54002
715-928-0452

Drilling Contractor: Traut Companies
Contact: Daryl Karasch
P.O. Box 547
Waite Park, MN 56387
320-251-5090

In-Situ Injection Contractor: Orin Technologies
Contact: Jacob Mirfield
405 Investment Court
Verona, WI 53593
608-838-6699

1.3 Investigative/Remedial Objectives

Both investigative and remedial activities were completed as part of this scope of work.

Per NR 716.11, the goal of this continued groundwater investigation was to:

- continue to “determine the nature, degree, and extent” of groundwater impacts which remain at the Site to date,
- collect current groundwater analytical data to evaluate both interim and remedial action options,
- determine groundwater flow characteristics including horizontal and vertical gradients

Per NR722.09, the intent of this remedial action (in-situ chemical oxidation) was to restore “the environment to the extent practicable, minimize harmful effects to the air, lands, and waters of the state” and “comply with applicable state and federal public health and environmental laws and standards” including: restoring groundwater to the Preventive Action Limit (PAL) or below, as determined to be technically and economically feasible, as listed in NR 140.

1.4 Scope of Work

The following items were completed as part of the most recent phase of work at the Town of Warren TCE Investigation Site:

- Siting, construction, and development of 3 new injection wells.
- Siting, construction, and development of 3 additional monitoring wells/piezometers.
- Rehabilitation of several injection wells.
- Completion of 2 in-situ chemical oxidation injection events.
- Several rounds of pre- and/or post-injection groundwater VOC sampling, including a round of Per- and Polyfluoroalkyl Substances (PFAS) samples collected in July 2019.
- Sampling of private residential wells

2.0 Procedures

2.1 Well Installation Procedures

2.1.1 Monitoring Well Installation

To investigate groundwater quality just downgradient of the source area, an additional monitoring well (MW-31) was constructed along the north

side of 80th Avenue near the Albright pasture. The well was drilled to approximately 100 ft. To observe groundwater quality at both the water table and at depth at the far northwest edge of the TCE groundwater plume, two additional groundwater monitoring wells (P-32 and MW-33) were installed by Traut Companies at the north end of the Yellowstone Trail cul-de-sac in May 2021 via sonic drilling methods. These wells were installed as a well nest, composed of a shallow groundwater monitoring well screened at the water table (MW-33) and a deeper piezometer (P-32) screened at depth within the aquifer. MW-33 was completed at approximately 120 ft. bgs and P-32 was drilled to approximately 155 ft. bgs. All monitoring wells were constructed of 2-in. diameter schedule 80 PVC, 0.01-in. slotted screens, and were finished with 6 ft. steel well casings/risers, covers, and locks. Following construction, wells were developed by surging and purging the well with a disposable bailer for at least 30 minutes, removing 10 well volumes of water to remove sediment from the well and filter pack. All new well construction and development was completed per Wis. Adm. Code NR 141 requirements.

2.1.2 Injection Well Installation

In order to facilitate continued remediation of TCE-impacted groundwater identified at and downgradient of the Site, an additional injection well (I-15) was constructed along the south side of 80th Avenue near the Ogburn driveway. A nested injection well (I-14S and I-14D), composed of both a shallow and deep injection well, was also installed just north of 80th Avenue in the Albright pasture. Injection wells were installed by Traut Companies in August 2019 via air rotary drilling methods. I-15 was drilled to approximately 130 ft. bgs, and I-14S and I-14D were installed to approximately 95 and 105 ft. bgs, respectively. Injection wells were constructed of 2-in. diameter schedule 80 PVC, 0.02-in. slotted screens, and were finished with 6-ft. steel well casings/risers, covers, and locks. See Appendix B for soil boring logs and monitoring well construction forms for both the newly constructed injection and groundwater monitoring wells.

2.2 Injection Well Rehabilitation

Prior to the initial round of in-situ chemical oxidation, several injection wells which were targeted for upcoming injections were rehabilitated in order to clear the well screens of any built-up material (manganese dioxide) remaining from

previous injections which could inhibit efficient injection of oxidation chemicals into the wells. Rehabilitation fluid, composed of 1 part water, 1 part white vinegar, and 1 part 3% hydrogen peroxide, was mixed and poured into the injections wells. Monitoring wells received one treatment of 2 gallons of rehabilitation solution, while piezometers received one treatment of 4 gallons. Surging the wells with a 4-ft. PVC bailer was completed for several minutes after pouring the solution into the wells in order to dissolve and dislodge the manganese dioxide. The solution was added to the wells and surged at least 48 hours prior to the next injection event. After rehabilitation, injection wells were pressure-tested using compressed air applied to the sealed well in order to test the adequacy of the rehabilitation efforts.

2.3 In-Situ Chemical Oxidation Procedures

A chemical treatment solution composed of 2.5% potassium permanganate was injected into the underlying bedrock formations for in-situ chemical oxidation to reduce TCE concentrations in groundwater at and downgradient of the Site. The Village of Roberts public water supply was utilized for mixing with potassium permanganate chemistry.

The first round of in-situ chemical oxidation treatment, performed as part of the current scope of work, was completed September 24-27, 2019. This injection targeted the I-1 injection well nest, I-4S/D, I-5S/D, I-6S/D, I-7S/D, I-9, I-10, I-11, I-12, I-13S/D, I-14S/D, and I-15. The second round of injections was completed April 27 – May 1, 2020, and targeted the I-5 injection nest, I-6S/D, I-7S/D, I-10, I-11, I-12, I-13S/D, I-14S/D, and I-15. Injection times, flow rates, injection pressures, and injection volumes were monitored during the injection events. A total of 20,000 gallons of potassium permanganate treatment chemistry was injected into the various injections wells listed above during each event. Cedar Corporation personnel were on-site during both injection events and monitored wells immediately downgradient of the injection wells for the presence of the injection chemicals and to confirm the distribution of chemistry into the formation.

Injection summaries detailing the injection points, gallons injected, and other details for both injection events are included as Table 6.a. and 6.b.

2.4 Groundwater Monitoring Procedures

Sampling of the groundwater monitoring well network at the Site has been ongoing since the initial monitoring wells were installed in 2000. As part of the

current scope of work, a round of groundwater monitoring was completed in July 2019 prior to the first of 2 rounds of chemical injection. Groundwater samples collected in July 2019 were analyzed for both total Volatile Organic Compounds (VOCs) and PFAS. Additional rounds of groundwater sampling were completed in January and July 2020, June 2021, and April 2022.

Collection of samples from groundwater monitoring wells was completed by purging each well with a dedicated bailer, removing at least four well volumes prior to sampling, and bottom-emptying the sample into laboratory-supplied containers. Before well purging and sampling, water level measurements were collected using an electronic depth to water meter and recorded to the nearest 0.01 foot. Depth-to-water measurements are utilized to determine groundwater elevations (in ft. above mean sea level) which are recorded in Table 1. An updated Generalized Groundwater Flow Map is included as Figure 2. Residual permanganate concentrations observed in monitoring wells were recorded during each sampling event by either visual observation or using permanganate field testing tablets. See Appendix A for Cedar Corporation's Standard Operating Procedures.

2.5 Residential Water Sampling

Private residential drinking water sampling at residences in the vicinity of the Site has been ongoing since the site was opened in 2000. Over the course of the last 20 years, over 30 private wells have been sampled in the vicinity of the Site. As part of this scope of work, residential sampling was completed at various residences in conjunction with the Junkers Landfill residential sampling from July through November 2020, January 2021, and April 2022. Samples were collected from residences where access was provided to the untreated drinking water supply or where a sample could be collected from an outside tap. In most cases, drinking water samples were collected from the untreated water supply entering the home prior to any filtration equipment and laboratory-analyzed for total VOCs. Any samples collected from treated or filtered water supplies are noted as such in the attached Table 5. Various residences in the vicinity of the Town of Warren TCE Investigation Site and Junkers Landfill have granular activated carbon (GAC) filters to treat drinking water for TCE.

Following the sampling, private drinking water sample analytical results were provided to property owners in a letter details the results of the sampling.

3.0 Results

3.1 In-Situ Chemical Oxidation

The overall effectiveness of the most recent in-situ chemical injections completed in September 2019 and April 2020 has not been determined at this time, pending additional groundwater sampling completed over time. It is commonly observed that TCE concentrations slightly increase in the sample/s collected following the injection before decreasing again. This is likely attributed to the injection influencing groundwater flow through the aquifer. This is observed in several of the monitoring well/piezometers following both the recent injections and previous injections.

However, it appears that the effectiveness of newly constructed injection wells I-14S/D and I-15 can be most readily observed in nearby monitoring wells. TCE concentrations in P-25D, located just downgradient of I-15 have decreased from 210 ug/L before the September 2019 injection to 150 ug/L following both injections. Recent chemical injections are not observed to be as effective in P-25S as the I-15 is screened to a depth below the bottom of screen in P-25S and is targeting deeper groundwater. The effects of the recent injections on MW-29/P-30 downgradient of I-14S/D have not yet been observed and/or are not as significant. The monitoring well (MW-29) had no detections of TCE prior to the injection and concentrations in P-30 were slowly decreasing over time prior to the injection. The influence of these injections should be observed in the further downgradient MW-9/P-10 well nest where concentrations in MW-9 have been variable over time and TCE remains above 25-30 ug/L in the P-10.

The overall effectiveness of the in-situ chemical oxidation in reducing TCE concentrations in groundwater appears to be relatively equal between shallow and deeper groundwater, as observed in contaminant concentration trends observed in monitoring well/piezometer nests constructed across and downgradient of the site. An exception to this statement can be observed in the MW-26/P-27 well nest located closest to the source area where TCE concentrations initially observed in both wells were approximately 300 ug/L in 2006. TCE concentrations have decreased in both wells, but remain around approximately 100 ug/L in MW-26 while P-27 has had no detections of TCE in five of the last six sampling events.

Of those wells with decreasing trends, TCE was observed to have been reduced by between 47% and 100% from the initial round of sampling to April 2022, with the majority of the wells decreasing by between 80% and 100%. Nine wells

originally containing detectable concentrations of TCE no longer had TCE detects in April 2022.

3.2 Groundwater Monitoring

3.2.1 VOCs

In general, all but two wells sampled over the course of the last 20 years at this Site are observed to have significantly decreased concentrations of TCE. The following wells have most notably decreased in TCE concentrations: MW-1: 1700-33 ug/L, P-6: 1200 ug/L-ND, MW-17: 3400-130 ug/L, P-19: 620-4.2 ug/L, MW-22: 880-170 ug/L. These wells are primarily located in the suspected source area, had some of the highest initial TCE concentrations observed, and were targeted most heavily during the remedial chemical injections. However, 16 of the monitoring wells/piezometers at the Site still exceeded Wis. Adm. Code NR 140 ES for TCE (5 ug/L) and five wells exceed the PAL (0.5 ug/L) in April 2022. VOC analytical reports are included as Appendix C.1. and the results for all monitoring wells sampled throughout the course of the project are summarized in Table 3.

In general, shallow groundwater impacts (observed in monitoring wells screened across the water table) tend to be contained to the source area and the immediate vicinity but remain at relatively high concentrations. However, impacts to groundwater collected from piezometers screened deeper in the aquifer appear to be more extensive, but generally lower in concentration. This indicates a more pronounced downward hydraulic gradient is likely present in areas downgradient (west) of the source area (as described in further detail in Section 3.2.3 below. See Figures 3 and 4 for current TCE Isoconcentration Maps.

Two monitoring wells at the Site are observed to have increasing TCE concentrations. P-18 had an initial concentration of 0.61 ug/L for TCE in the initial sample collected from the well in 2004. Since then, concentrations have varied between no detections and 7.2 ug/L. However, following the April 2020 injection, TCE concentrations have increased to 25, 38, and 9.1 ug/L in the last three rounds of sampling. This can potentially be attributed to the disturbance of groundwater in the formation resulting from the injection, moving contaminants through the subsurface. MW-31 was recently constructed near the entrance to the Albright pasture

along 80th Ave and has increased in concentration from 8.8 ug/L in the initial sample collected from the well to 28 ug/L in April 2022. The newly constructed P-32 exhibits a similar trend, with no TCE detected in the initial round of sampling in June 2021, but increasing concentrations observed in the two samples collected since. This is a trend which is commonly observed in other wells constructed at the site. It is suspected that an initial “lower” concentration in contaminant concentrations following the installation of a well via sonic or rotary drilling methods is a result of a disturbance in the formation from drilling, pushing impacted groundwater away from the well. In most cases, concentrations stabilized after the first four or five sampling events, then decreased thereafter. Increasing trends in these wells should continue to be observed in future sampling events.

3.2.2 PFAS/1,4-Dioxane

PFAS: No samples exceeded the EPA advisory level and Wisconsin Natural Resource Board recommendation for the drinking water standard of 70 parts per trillion (ppt) for PFOA and PFOS combined. One well (MW-17) exceeded the Wisconsin Department of Health (DHS) recommended groundwater enforcement standard of 20 ppt for PFOA and PFOS combined at 20.8 ppt. There are currently no Federal or State standards for PFAS concentrations in groundwater.

MW-9, P-10, MW-13, or P-14 were also sampled for 1,4-dioxane in December 2020. There were no detections in any of the wells. PFAS and 1,4-dioxane analytical reports are included as Appendix C.2. and the results are summarized in Tables 4.a. and 4.b.

3.2.3 Groundwater Flow/Gradients

As discussed in the previously submitted Town of Warren Remedial Action Report (*Cedar Corporation, 2008*), research completed by UW-Madison and the Wisconsin Geological and Natural History Survey in 2005-2006 indicates that bedrock geology at the Site is complex and contaminant migration at the site is influenced heavily by location. The highly permeable St. Peter Sandstone is observed in the upper 10-15 ft. of the aquifer near the suspected source area. However, karst limestone and dolomite bedrock also observed at the site limits the ability to use assumptions for evaluating groundwater flow rates and media transport. This bedrock has been observed to transmit groundwater exceedingly fast through pores, solution channels, and fractures, but can also be extremely limiting. In general, groundwater flow at the Site is west/northwesterly (see

Figure 2).

A geologic cross-section for the region (Town of Warren TCE Investigation site and Junkers Landfill site) has been developed to demonstrate both the composition of surficial and bedrock geology, as well as the flow of groundwater through the region (Figure 5). A groundwater flow map for the Junkers Landfill site, updated in 2022, is also provided to accompany the regional cross-section (see Figure 6).

Vertical gradient calculations, utilizing groundwater elevation data collected in April 2022 from several monitoring well/piezometer well nests installed at and horizontally downgradient of the site, were completed to analyze the variations in vertical groundwater movement through the subsurface at several locations (See Table 2). Based on these calculations, there is approximately 3.5 times more downward flow at west end of the plume at MW-33/P-32 than east end at MW-17/P-18. In general, in well nests near the source area (MW-26/P-27 and MW-17/P-18) the monitoring wells tend to remain more impacted than the piezometers. In well nests horizontally downgradient of the site, piezometers tend to be more impacted than the monitoring wells. Several piezometers in these nests (P-4, P-30, P-10, and P-32 had no detections of TCE in April 2022. This indicates that the gradient of vertical groundwater flow is more persistent in areas horizontally downgradient of the source area, influencing impacted groundwater to move downward in the aquifer, impacting deeper portions of the aquifer.

3.3 Residential Water Sampling

In general, the TCE concentrations observed in private residential drinking water supply wells has been decreasing over time and most wells had no detections during the most recent sampling event. The “Ogburn Well House”, located at 955/961 80th Ave, had a detection of TCE above the Wis. Adm. Code NR 140 PAL at 0.62 ug/L in July 2020, but no detections in April 2022. There have been no detections of TCE or other VOCs in the “Albright (New)” well located at 962 80th Ave since it was first sampled in October 2000. The “Dornseif” well, located at 843 Polen Dr., has had variable concentrations of TCE between 0.81 and 3.2 ug/L. TCE was detected above the PAL at 1.4 ug/L in April 2022. The “Wilbur” well, located at 910 80th Avenue, has had consistently decreasing concentrations of TCE since 2001, decreasing from 2.8 ug/L to no detection in April 2022.

Sampling of residential drinking water wells along the 87th Ave cul-de-sac, near the south edge of the Junkers Landfill, began in 2015 in coordination with the

Town of Warren TCE Investigation and have been sampled most recently in 2020 and 2022. 907 and 908 87th Ave both had TCE detections above the PAL in the untreated water in the most recent sample collected from that well (908 87th Ave has granular activated carbon filters). 903 87th Ave has had detections of TCE above the PAL in previous samples, but had no detection in April 2022. The residential well located at 904 87th Ave was sampled for the first time in April 2022 and had no detections of TCE.

4.0 Conclusions

Based on groundwater analytical data collected at the site, it is apparent that in-situ chemical oxidation at the site, completed over the last 20 years, has been effective in reducing TCE concentrations in both shallow and deeper groundwater at the source area and downgradient of the original identified source area located south of 80th Ave (967 80th Ave). Continued long term monitoring of the impacted area is recommended to evaluate the effectiveness of remedial efforts to-date, and the potential for future additional remedial efforts.

5.0 Limitations

Cedar Corporation has completed, or observed the completion of, the services provided during this assessment. Laboratory analyses are reported within the accuracy of the method employed. Cedar Corporation reserves the right to alter the opinions expressed herein should additional information pertaining to the environmental quality of this Site become available

6.0 References

- 1) Town of Warren TCE Investigation, Cedar Corporation, July 2003.
- 2) Report on Remedial Action, In-Situ Chemical Treatment, Town of Warren Trichloroethylene Spill, Cedar Corporation, January 2008.

Tables

**TABLE 1
GROUNDWATER ELEVATIONS AND HYDROGRAPH
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

	MW-1	MW-2	MW-3	P-4	MW-5	P-6	MW-7	MW-8	MW-9	P-10	MW-11	P-12	MW-13	P-14
TOC, MSL	1024.95	1069.87	995.88	995.6	998.56	1031.25	978.78	1013.85	1057.41	1057.94	1051.83	1052.89	959.04	958.92
WELL DEPTH, FT	114	152	83	106	84	140	65	101	165	183	156	182	75	87
SCREEN LENGTH	20	20	20	5	20	5	20	20	20	5	20	5	20	5
TOS, MSL	930.95	937.87	932.88	894.6	934.56	896.25	933.78	932.85	912.41	879.94	915.83	875.89	904.04	876.92

DATE	DEPTH TO GROUNDWATER MEASUREMENTS													
12/5/2000	102.62	145.37	72.18	72	79.5		54.9	89.85						
1/3/2001	102.53	145.28	72.04	71.87	79.37		54.8	89.74						
6/15/2001									150.26	151.13	144.51	145.7		
7/20/2001	100.34	144.65	71.59	71.39	79.28	106.92	54.26	89.19	149.79	150.6	144.03	145.3	57.52	57.25
9/17/2001	99.5	143.9	70.79	70.6	78.35	106.9	53.45	88.4	149.21	150	143.3	143.78	57.04	56.8
4/15/2002	98.78	143.24	69.99	69.84	77.28	105.44	52.76	87.66	148.66	149.48	142.8	144.07	56.71	56.42
4/1/2004	96.99	141.36	68.14	68.02	75.53	103.65	50.94	85.92	146.79	147.53	140.93	142.18	55.3	55.02
4/26/2004	97.27		68.47	68.33		103.93		86.15						
4/29/2004	97.41					104.17								
5/3/2004	97.24					104.05								
5/11/2004	96.93		68.16	68.05		103.71		85.94						
5/28/2004	97.31		68.62	68.52		104.14		86.23						
6/11/2004	97.21		68.49	68.39		104.05		86.13						
8/11/2004	97.57		68.78	68.68		104.37		86.46						
11/9/2004	97.81		69.13	69		104.62		86.81						
5/4/2005	99.06		70.24	70.12		105.57		87.92						
10/7/2005	99.91					106.54								
1/26/2006	99.52		70.57	70.67		106.13		88.33						
3/2/2006														
5/23/2006	99.64		70.85	70.8		106.52								
10/18/2006	99.93	144.41	71.2	71.05	78.49		53.91	88.9	149.47	150.16	143.65		57.44	57.18
1/12/2007	100.46	144.86	71.65	71.54		107.12		89.31						
9/13/2007		145.38	72	71.9	79.13		90.02	154.9	152.18	144.51	145.8	57.13	57.87	
3/27/2008	101.48		72.64	72.51		108.14		90.36						
10/29/2008	100.58	145.28	71.78	72.27	79.11	107.27	54.63	89.6	149.9	150.54	144.14	145.35	57.62	57.38
4/8/2008	101.07	145.61	72.42	72.3	79.47	107.76	55.03	89.98	150.18	150.82	144.49	145.71	57.8	57.53
11/2/2009	102.27	146.82	73.35	73.25	80.39	109	56.24	91.03	151.55	152.1	145.47	146.7	58.92	58.67
9/14/2010	103.48	148.01	74.52	74.4	81.53	110.17	57.4	92.39	152.53	153.16	147	147.58	59.76	59.51
11/22/2011	99.41	143.82	70.43	70.3	77.71	106.01	53.18		148.92	149.49	143.03		56.68	56.41
3/13/2012	99.1			70.1										
5/13/2012	101.22					107.89		90.12						
3/13/2014														
4/1/2014								89.51						
10/8/2014									146.9	147.46			54.9	54.61
4/13/2015	96.75	142.21	67.6	68.75				85.48	146.25	146.9				
9/29/2015	97.86	142.2	69.08	68.97	76.35	104.35	51.75	86.71	147.35	147.95	141.35		55.55	55.26
5/22/2017	96.83	141.13	68.08	67.96	75.72	103.52	50.67	85.68	146.62	147.11	140.4	141.61	54.91	54.6
7/23/2019	95.95	140.19	67.14	67	74.95	102.66	49.78	84.81	145.61	146.08	139.1		53.84	53.5
1/9/2020	94.32	138.68	65.59	63.34	73.08	100.98	48.29	83.25		144.29	137.45		52.33	52.04
7/20/2020	92.9	137.29	64.25	64.12	71.78	99.53	46.9	82	142.4	143	136.14		51.12	50.8
6/28/2020	93.2	137.45	64.5	64.36	72.3	100.05	47.11	82.07	143.3	143.67	136.82		52.02	51.72
4/11/2022	95.4	139.65	66.76	66.59	80.82	101.65	49.32	84.32	145.34	145.95	139		53.92	53.62

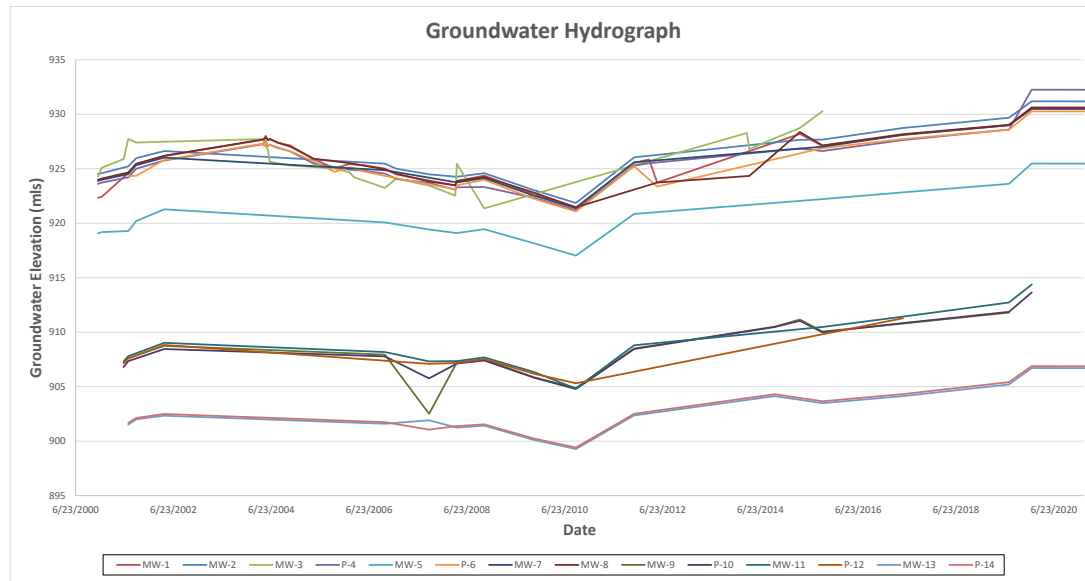
**TABLE 1
GROUNDWATER ELEVATIONS AND HYDROGRAPH
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

	MW-1	MW-2	MW-3	P-4	MW-5	P-6	MW-7	MW-8	MW-9	P-10	MW-11	P-12	MW-13	P-14
TOC, MSL	1024.95	1069.87	995.88	995.6	998.56	1031.25	978.78	1013.85	1057.41	1057.94	1051.83	1052.89	959.04	958.92
WELL DEPTH, FT	114	152	83	106	84	140	65	101	165	183	156	182	75	87
SCREEN LENGTH	20	20	20	5	20	5	20	20	20	5	20	5	20	5
TOS, MSL	930.95	937.87	932.88	894.6	934.56	896.25	933.78	932.85	912.41	879.94	915.83	875.89	904.04	876.92

DATE	MW-1	MW-2	MW-3	P-4	MW-5	P-6	MW-7	MW-8	MW-9	P-10	MW-11	P-12	MW-13	P-14
12/5/2000	922.33	924.5	923.7	923.6	919.06		923.88	924						
1/3/2001	922.42	924.59	923.84	923.73	919.19		923.98	924.11						
6/15/2001									907.15	906.81	907.32	907.19		
7/20/2001	924.61	925.22	924.29	924.21	919.28	924.33	924.52	924.66	907.62	907.34	907.8	907.59	901.52	901.67
9/17/2001	925.45	925.97	925.09	925	920.21	924.35	925.33	925.45					902	902.12
4/15/2002	926.17	926.63	925.89	925.76	921.28	925.81	926.02	926.19	908.75	908.46	909.03	908.82	902.33	902.5
4/1/4004	927.96	928.51	927.74	927.58	923.03	927.6	927.84	927.93					903.74	903.9
4/26/2004	927.68		927.41	927.27		927.32	927.7							
4/29/2004	927.54					927.08								
5/3/2004	927.71					927.2								
5/11/2004	928.02		927.72	927.55		927.54		927.91						
5/28/2004	927.64		927.26	927.08		927.11		927.62						
6/11/2004	927.74		927.39	927.21		927.2		927.72						
8/11/2004	927.38		927.1	926.92		926.88		927.39						
11/9/2004	927.14		926.75	926.6		926.63		927.04						
5/4/2005	925.89		925.64	925.48		925.68		925.93						
10/7/2005	925.04					924.71								
1/26/2006	925.43		925.31	924.93		925.12		925.52						
3/2/2006														
5/23/2006	925.31		925.03	924.8		924.73								
10/18/2006	925.02	925.46	924.68	924.55	920.07		924.87	924.95	907.94	907.78	908.18		901.6	901.74
1/12/2007	924.49	925.01	924.23	924.06		924.13		924.54						
9/13/2007		924.49	923.88	923.7	919.43			923.83	902.51	905.76	907.32	907.09	901.91	901.05
3/27/2008	923.47		923.24	923.09		923.11		923.49						
10/29/2008	924.37	924.59	924.1	923.33	919.45	923.98	924.15	924.25	907.51	907.4	907.69	907.54	901.42	901.54
4/8/2008	923.88	924.26	923.46	923.3	919.09	923.49	923.75	923.87	907.23	907.12	907.34	907.18	901.24	901.39
11/2/2009	922.68	923.05	922.53	922.35	918.17	922.25	922.54	922.82	905.86	905.84	906.36	906.19	900.12	900.25
9/14/2010	921.47	921.86	921.36	921.2	917.03	921.08	921.38	921.46	904.88	904.78	904.83	905.31	899.28	899.41
11/22/2011	925.54	926.05	925.45	925.3	920.85	925.24	925.6		908.49	908.45	908.8		902.36	902.51
3/13/2012	925.85			925.5										
5/13/2012	923.73					923.36		923.73						
3/13/2014														
4/1/2014								924.34						
10/8/2014									910.51	910.48			904.14	904.31
4/13/2015	928.2	927.66	928.28	926.85				928.37	911.16	911.04				
9/29/2015	927.09	927.67	926.8	926.63	922.21	926.9	927.03	927.14	910.06	909.99	910.48		903.49	903.66
5/22/2017	928.12	928.74	927.8	927.64	922.84	927.73	928.11	928.17	910.79	910.83	911.43	911.28	904.13	904.32
7/23/2019	929	929.68	928.74	928.6	923.61	928.59	929	929.04	911.8	911.86	912.73		905.2	905.42
1/9/2020	930.63	931.19	930.29	932.26	925.48	930.27	930.49	930.6		913.65	914.38		906.71	906.88
7/20/2020	932.05	932.58	931.63	931.48	926.78	931.72	931.88	931.85	915.01	914.94	915.69		907.92	908.12
6/28/2020	931.75	932.42	931.38	931.24	926.26	931.2	931.67	931.78	914.11	914.27	915.01		907.02	907.2
4/11/2022	929.55	930.22	929.12	929.01	917.74	929.6	929.46	929.53	912.07	911.99	912.83		905.12	905.3

**TABLE 1
GROUNDWATER ELEVATIONS AND HYDROGRAPH
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

	MW-1	MW-2	MW-3	P-4	MW-5	P-6	MW-7	MW-8	MW-9	P-10	MW-11	P-12	MW-13	P-14
TOC, MSL	1024.95	1069.87	995.88	995.6	998.56	1031.25	978.78	1013.85	1057.41	1057.94	1051.83	1052.89	959.04	958.92
WELL DEPTH, FT	114	152	83	106	84	140	65	101	165	183	156	182	75	87
SCREEN LENGTH	20	20	20	5	20	5	20	20	20	5	20	5	20	5
TOS, MSL	930.95	937.87	932.88	894.6	934.56	896.25	933.78	932.85	912.41	879.94	915.83	875.89	904.04	876.92



**TABLE 1
GROUNDWATER ELEVATIONS AND HYDROGRAPH
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

	P-15	MW-16	MW-17	P-18	P-19	P-20	MW-21	MW-22	P-23	MW-24	P-25D	P-25S	MW-26	P-27	MW-28	MW-29	P-30	MW-31	P-32	MW-33
TOC, MSL	1065.78	1064.19	1032.03	1031.25	1030.84	1032.78	1062.88	1026.26	1034.09	1023.31	1020.93	1020.01	1062.8	1062.83	1004.56	998.05	998.22		1006.56	1006.63
WELL DEPTH, FT	193	148	117	170	140	170	148	114	141	107	127	112	149	170	91	86.5	117	95.42	155	120
SCREEN LENGTH	5	20	20	5	5	5	20	10	5	20	5	5	20	5	20	20	5		10?	20?
TOS, MSL	877.78	936.19	935.03	866.25	895.84	867.78	934.88	922.26	898.09	936.31	898.93	913.01	933.8	897.83	933.56	931.55	886.22		897.86	900.38

DATE	DEPTH TO GROUNDWATER MEASUREMENTS																			
12/5/2000																				
1/3/2001																				
6/15/2001																				
7/20/2001	162.89																			
9/17/2001	162.44																			
4/15/2002	162.12	137.86	105.73																	
4/1/4004	160.87	136.12	104.1	104.1	103.4	106.15														
4/26/2004			104.24	104.26	103.61	106.49														
4/29/2004			104.33	104.4	103.81	106.67														
5/3/2004			104.18	104.25	103.63	106.6														
5/11/2004			103.99	104.02	103.42	106.21														
5/28/2004			104.26	104.37	103.74	106.68														
6/11/2004			104.2	104.25	103.65	106.52														
8/11/2004			104.53	104.66	103.99	106.95														
11/9/2004			104.86	107.92	104.27	107.22														
5/4/2005		138.2	105.98	106.12	105.44	108.46	136.58													
10/7/2005			106.82	106.69	106.16	109.11	137.31													
1/26/2006		138.69	106.55	106.43	105.75	108.7	137.28	100.86	108.92	97.99	95.89	95.55	137.12	137.41	78.67					
3/2/2006								101.33	109.32	98.38	96.39	96.02	137.35	137.68	79.15					
5/23/2006			106.77	106.84	105.87	109.19	137.83	101.04	109.26	97.99	96	95.67								
10/18/2006	162.94	139.15		106.88	106.23	109.17	137.64	101.32	109.38	98.37	95.19	95.99	137.54	137.9	79.21					
1/12/2007		139.6	107.37	107.41	106.75	109.68	137.97	101.85	109.92	98.89	96.87	96.31	137.85	138.3	79.62					
9/13/2007		140.38	108.04	108.15	107.46		138.52			99.55	97.61	97.21	138.4	138.82	80.19					
3/27/2008		140.62	108.45	108.44	107.46	110.64	139.1	102.85	110.95	99.91	97.91	97.53	138.99	139.35	80.71					
10/29/2008	163.2	139.97	107.78	107.74	107.1	109.72	138.52	101.98	110.02	99.19	97.03	97.68	138.43	138.7	79.99					
4/8/2008	163.46	140.25	108.22	108.21	107.55	110.25	138.82	102.49	110.55	99.67	97.52	97.15	138.75	139.06	80.41					
11/2/2009	164.33	141.46	109.09	109.27	108.56	110.58	139.89	103.66	111.79	100.58	98.75	98.35	139.76	140.26	81.59					
9/14/2010		142.67	110.5	110.53	109.86	112.57	141.15	104.91	113.03	101.99	99.67	99.32	141	141.43	82.77					
11/22/2011	161.7	138.52	106.57	106.23	105.63	108.34	137.24	100.79	108.84		95.8	95.45	137.27	137.27	78.66					
3/13/2012		138.32						100.52						137.06	78.43					
5/13/2012					107.52			102.85												
3/13/2014																74.77	75.74			
4/1/2014							138.18	102.04		99.08			138.08	138.55		75.26	76.25			
10/8/2014															76.79					
4/13/2015		135.88					134.26	98.11		95.16	93.21	92.8	134.15	134.65		71.51	72.51			
9/29/2015	161.25	136.96	104.87	104.87	104.26	107.11	135.4	99.26	107.41	96.27	94.35	93.93	135.3	135.79	77.04	72.72	73.68			
5/22/2017	160.53	135.96	104.03	103.75	103.15	106.07	134.48	98.21	103.68	95.24	93.31	92.88	134.44	134.75	75.98	71.81	72.74			
7/23/2019	159.68	135.11	103.07	102.85	102.25	105.09	133.68	96.27	105.61	94.34	92.37	91.96	133.66	133.78	74.96	70.83	71.78	83.72		
1/9/2020	158.17	133.59	101.5	101.22	100.64	103.4	132.23	95.76	103.81	92.81	90.79		132.15	132.25	73.45	68.93	70.11	82.35		
7/20/2020	157	132.22	100.22	99.95	99.37		130.79	94.3	102.5	91.54	89.47	89.12	130.76	130.85	71.95	67.61	68.77	81		
12/28/2020	158	132.38	100.16	100.3	99.65	102.75	130.69	94.55	102.73	91.63	89.73	89.26	130.65	131.07	72.22	67.96	69.33	81.23		
4/11/2022	159.84	134.57	102.37	102.52	101.87	104.85	132.88	96.45	105.23	93.88	91.99	91.48	133.75	133.24	74.36	70.34	71.43	83.5	110.41	108.17

**TABLE 1
GROUNDWATER ELEVATIONS AND HYDROGRAPH
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

	P-15	MW-16	MW-17	P-18	P-19	P-20	MW-21	MW-22	P-23	MW-24	P-25D	P-25S	MW-26	P-27	MW-28	MW-29	P-30	MW-31	P-32	MW-33
TOC, MSL	1065.78	1064.19	1032.03	1031.25	1030.84	1032.78	1062.88	1026.26	1034.09	1023.31	1020.93	1020.01	1062.8	1062.83	1004.56	998.05	998.22		1006.56	1006.63
WELL DEPTH, FT	193	148	117	170	140	170	148	114	141	107	127	112	149	170	91	86.5	117	95.42	155	120
SCREEN LENGTH	5	20	20	5	5	5	20	10	5	20	5	5	20	5	20	20	5		107	20?
TOS, MSL	877.78	936.19	935.03	866.25	895.84	867.78	934.88	922.26	898.09	936.31	898.93	913.01	933.8	897.83	933.56	931.55	886.22		897.86	900.38

DATE	P-15	MW-16	MW-17	P-18	P-19	P-20	MW-21	MW-22	P-23	MW-24	P-25D	P-25S	MW-26	P-27	MW-28	MW-29	P-30	MW-31	P-32	MW-33	
12/5/2000																					
1/3/2001																					
6/15/2001																					
7/20/2001	902.89																				
9/17/2001	903.34																				
4/15/2002	903.66	926.33	926.3																		
4/1/4004	904.91	928.07	927.93	927.15	927.44	926.63															
4/26/2004			927.79	926.99	927.23	926.29															
4/29/2004			927.7	926.85	927.03	926.11															
5/3/2004			927.85	927	927.21	926.18															
5/11/2004			928.04	927.23	927.42	926.57															
5/28/2004			927.77	926.88	927.1	926.1															
6/11/2004			927.83	927	927.19	926.26															
8/11/2004			927.5	926.59	926.85	925.83															
11/9/2004			927.17	923.33	926.57	925.56															
5/4/2005		925.99	926.05	925.13	925.4	924.32	926.3														
10/7/2005			925.21	924.56	924.68	923.67	925.57														
1/26/2006		925.5	925.48	924.82	925.09	924.08	925.6	925.4	925.17	925.32	925.04	924.46	925.68	925.42	925.89						
3/2/2006								924.93	924.77	924.93	924.54	923.99	925.45	925.15	925.41						
5/23/2006			925.26	924.41	924.97	923.59	925.05	925.22	924.83	925.32	924.93	924.34									
10/18/2006	902.84	925.04		924.37	924.61	923.61	925.24	924.94	924.71	924.94	925.74	924.02	925.26	924.93	925.35						
1/12/2007		924.59	924.66	923.84	924.09	923.1	924.91	924.41	924.17	924.42	924.06	923.7	924.95	924.53	924.94						
9/13/2007		923.81	923.99	923.1	923.38		924.36			923.76	923.32	922.8	924.4	924.01	924.37						
3/27/2008		923.57	923.58	922.81	923.38	922.14	923.78	923.41	923.14	923.4	923.02	922.48	923.81	923.48	923.85						
10/29/2008	902.58	924.22	924.25	923.51	923.74	923.06	924.36	924.28	924.07	924.12	923.9	922.33	924.37	924.13	924.57						
4/8/2008	902.32	923.94	923.81	923.04	923.29	922.53	924.06	923.77	923.54	923.64	923.41	922.86	924.05	923.77	924.15						
11/2/2009	901.45	922.73	922.94	921.98	922.28	922.2	922.99	922.6	922.3	922.73	922.18	921.66	923.04	922.57	922.97						
9/14/2010		921.52	921.53	920.72	920.98	920.21	921.73	921.35	921.06	921.32	921.26	920.69	921.8	921.4	921.79						
11/22/2011	904.08	925.67	925.46	925.02	925.21	924.44	925.64	925.47	925.25		925.13	924.56	925.53	925.56	925.9						
3/13/2012		925.87						925.74						925.77	926.13						
5/13/2012					923.32			923.41													
3/13/2014																923.28	922.48				
4/1/2014							924.7	924.22		924.23			924.72	924.28		922.79	921.97				
10/8/2014															927.77						
4/13/2015		928.31					928.62	928.15		928.15	927.72	927.21	928.65	928.18		926.54	925.71				
9/29/2015	904.53	927.23	927.16	926.38	926.58	925.67	927.48	927	926.68	927.04	926.58	926.08	927.5	927.04	927.52	925.33	924.54				
5/22/2017	905.25	928.23	928	927.5	927.69	926.71	928.4	928.05	930.41	928.07	927.62	927.13	928.36	928.08	928.58	926.24	925.48				
7/23/2019	906.1	929.08	928.96	928.4	928.59	927.69	929.2	929.99	928.48	928.97	928.56	928.05	929.14	929.05	929.6	927.22	926.44				
1/9/2020	907.61	930.6	930.53	930.03	930.2	929.38	930.65	930.5	930.28	930.5	930.14		930.65	930.58	931.11	929.12	928.11				
7/20/2020	908.78	931.97	931.81	931.3	931.47		932.09	931.96	931.59	931.77	931.46	930.89	932.04	931.98	932.61	930.44	929.45				
12/28/2020	907.78	931.81	931.87	930.95	931.19	930.03	932.19	931.71	931.36	931.68	931.2	930.75	932.15	931.76	932.34	930.09	928.89				
4/11/2022	905.94	929.62	929.66	928.73	928.97	927.93	930	929.81	928.86	929.43	928.94	928.53	929.05	929.59	930.2	927.71	926.79		896.15	898.46	

**TABLE 1
GROUNDWATER ELEVATIONS AND HYDROGRAPH
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

	P-15	MW-16	MW-17	P-18	P-19	P-20	MW-21	MW-22	P-23	MW-24	P-25D	P-25S	MW-26	P-27	MW-28	MW-29	P-30	MW-31	P-32	MW-33	
TOC, MSL	1065.78	1064.19	1032.03	1031.25	1030.84	1032.78	1062.88	1026.26	1034.09	1023.31	1020.93	1020.01	1062.8	1062.83	1004.56	998.05	998.22			1006.56	1006.63
WELL DEPTH, FT	193	148	117	170	140	170	148	114	141	107	127	112	149	170	91	86.5	117	95.42	155	120	
SCREEN LENGTH	5	20	20	5	5	5	20	10	5	20	5	5	20	5	20	20	5			10?	20?
TOS, MSL	877.78	936.19	935.03	866.25	895.84	867.78	934.88	922.26	898.09	936.31	898.93	913.01	933.8	897.83	933.56	931.55	886.22			897.86	900.38

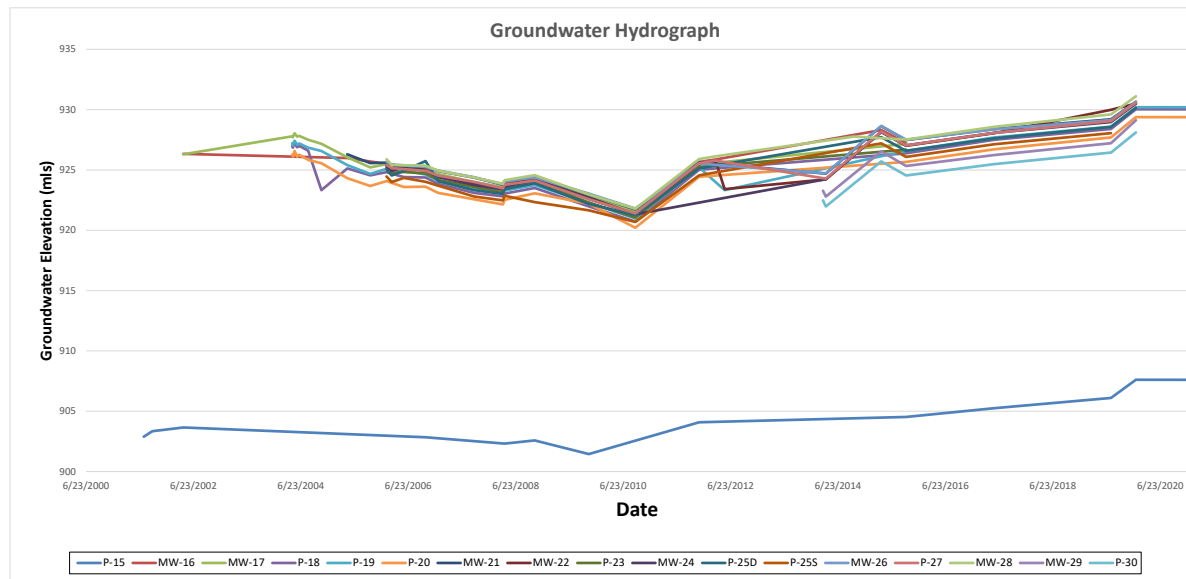


TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
MW-1	11/13/2000	418586	510	<1.0	<2.5	<2.5	-	<1.0	<2.5	<1.0
	12/05/2000	421083	1,200	<1.0	<2.5	3 *	-	<1.0	<2.5	<1.0
	12/05/2000	421091	1,700	<1.0	<6.2	15 *	-	<2.5	<6.2	<1.0
	01/03/2001	423693	1,600	<1.0	<5.0	16 *	-	<2.0	<5.0	<1.0
	07/20/2001	445333	370	<1.0	<2.5	<2.5	-	<1.0	<2.5	<1.0
	09/17/2001	451754	180	<1.0	<1.0	2.6 *	-	3.8	<1.0	<1.0
	04/15/2002	477765	250	<1.0	<1.0	3.2*	-	<0.40	<1.0	<1.0
	04/01/2004	565013	270	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0
First Injection	04/26/2004									
	05/11/2004	570586	280	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/28/2004	573007	280	<2.5	<2.5	<5	-	<1	<2.5	<1.2
	06/11/2004	574906	370	<2.5	<2.5	<5	-	<1	<2.5	<1.2
	08/11/2004	583511	420	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0
	11/09/2004	596433	500	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	05/04/2005	W0E0280-11	1,400	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	10/07/2005	W0J0310-03	2,200	<12	<12	<25	-	<5.0	<12	<6.2
	01/27/2006	WPA0851-22	1,600	<20	<20	<40	-	<8.0	<20	<10
Second Injection	04/11/2006									
	05/23/2006	WPE1038-14	1,500	<16	<16	<32	-	<6.4	<16	<8.0
Third Injection	06/27/2006									
Fourth Injection	10/10/2006									
	10/19/2006	WPJ0883-29	1,800	<16	<16	<32	-	<6.4	<16	<8.0
	01/12/2007	WQA0451-01	2,000	<16	<16	<32	-	<6.4	<16	<8.0
	09/14/2007	WQI0561-22	1,800	<20	<20	<40	-	<8.0	<20	<10
	03/28/2008	WRD0003-19	1,700	<16	<16	<32	-	<6.4	<16	<8.0
	10/30/2008	WRK0033-20	130	<20	<20	<40	-	<8.0	<20	<10
	04/08/2009	WSD0446-01	560	<1.0	<1.0	<2.0	-	<1.0	<1.0	<0.50
	11/02/2009	WSK0160-20	2,000	<20	<20	<40	-	<20	<20	<10
	09/14/2010	WTI0566-28	1,500	<13	<13	<25	-	<13	<13	12
	11/23/2011	WUK0754-25	15	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	03/13/2012	610-2430-6	45	<0.50	<0.50	<1.0	-	<0.50	<0.50	1.9
	05/23/2013	500-57397-1	200	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
Injection	May-14									
	08/12/2014	500-82380-5	9.6	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	04/13/2015	500-94678-17	<0.17	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
Injection	May-15									
Injection	Aug-15									
	09/29/2015	500-102040-1	2.4	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/22/2017	500-128753-1	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167232-1	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Sep-19									
	01/09/2020	500-176296-1	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.2	<0.34
Injection	Apr-20									
	7/28/2020	500-185693-2	1.5	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	6/30/2021	500-201791-1	2.7	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	4/11/2022	500-215109-31	33	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-2	12/05/2000	421084	0.51	<0.25	<0.25	0.35 *	-	0.12	1.1	<0.25
	01/03/2001	423694	<0.10	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	07/20/2001	445334	0.43	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	09/17/2001	451751	0.56	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	04/15/2002	477773	0.75	<0.25	<0.25	0.41*	-	<0.10	<0.25	<0.25
	04/02/2004	565066	0.51	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/19/2006	WPJ0883-11	0.46	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	01/12/2007	WQA0451-02	0.49	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WQI0561-13	0.52	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-35	0.67	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/08/2009	WSD0446-02	0.55	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/02/2009	WSK0160-04	0.45	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25

**TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
	09/14/2010	WTI0566-01	0.53	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-01	0.5	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	10/08/2014	500-85893-1	0.56	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	04/13/2015	500-94678-4	0.81	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/29/2015	500-102040-22	0.66	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/24/2017	500-128753-21	0.46	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	05/10/2019	500-163269-1	0.44 J	<0.37	<0.67	3.6 J	-	0.23 J	<0.22	<0.34
	01/10/2020	500-176296-1	0.47 J	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2020	500-185479-1	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/29/2021	500-201791-2	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-21	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-3	12/05/2000	421085	39	<0.25	<0.25	0.39 *	-	<0.10	<0.25	<0.25
	01/03/2001	423697	13	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	07/20/2001	445335	20	<0.25	<0.25	<0.25	-	0.69	<0.25	<0.25
	09/18/2001	452046	43	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	04/15/2002	477775	0.72	<0.25	<0.25	0.33*	-	<0.10	<0.25	<0.25
	04/02/2004	565021	16	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
First Injection	04/26/2004									
	05/11/2004	570589	1.8	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/28/2004	573010	14	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	06/11/2004	574900	1	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	08/11/2004	583516	1.4	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	11/10/2004	596430	55	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/04/2005	WQE0280-07	30	<0.50	<0.50	<1.0	-	<0.20	<0.50	0.89
	01/27/2006	WPA0851-27	6.9	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
Second Injection	04/11/2006									
	05/23/2006	WPE1038-01	0.29	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
Third Injection	06/27/2006									
Fourth Injection	10/10/2006									
	10/19/2006	WPJ0883-12	7	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	01/12/2007	WQA0451-03	31	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WQI0561-08	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	03/28/2008	WRD0003-07	35	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-03	6.3	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/09/2009	WSD0446-03	17	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/03/2009	WSK0160-23	2.1	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/15/2010	WTI0566-29	30	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-16	0.39	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
Injection	May-14									
	04/13/2015	500-94678-11	0.74	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
Injection	May-15									
Injection	Aug-15									
	09/30/2015	500-102040-30	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/22/2017	500-128753-27	0.94	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/25/2019	500-167423-1	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Sep-19									
	01/10/2020	500-176296-3	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Apr-20									
	07/22/2020	500-185479-2	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-11	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-11	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-4 (M)	12/05/2000	421086	370	<2.5	<2.5	5.7 *	-	15	<2.5	<2.5
	01/03/2001	423692	420	<2.5	<2.5	16 *	-	1.9	<2.5	<2.5
	01/03/2001	423695	430	<2.5	<2.5	10 *	-	3.2	<2.5	<2.5
	07/20/2001	445336	390	<2.5	<2.5	<2.5	-	4.6	<2.5	<2.5
	09/18/2001	452039	290	<2.5	<2.5	4.1 *	-	<1.0	<2.5	<2.5
	09/18/2001	452043	290	<0.25	<2.6	<0.25	-	<0.10	<0.25	<0.25

TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichlorodi-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
First Injection	04/15/2002	477774	240	<1.2	<2.7	4.2*	-	<0.50	<1.2	<1.2
	04/02/2004	565014	200	<2.0	<2.8	<4.0	-	<0.80	<2.0	1.3
	04/26/2004									
	05/11/2004	570590	160	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	05/28/2004	573011	210	<2.0	<2.0	<4.0	-	<0.8	<2.0	<1.0
	06/11/2004	574902	240	<2.0	<2.0	<4.0	-	<0.8	<2.0	<1.0
	08/11/2004	583517	160	<2.0	<2.0	<4.0	-	<0.8	<2.0	<1.0
	11/10/2004	596431	190	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	05/04/2005	W0E0280-04	180	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0
	01/27/2006	WPA0851-21	210	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
Second Injection	04/11/2006									
	05/23/2006	WPE1038-02	140	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0
Third Injection	06/27/2006									
Fourth Injection	10/10/2006									
	10/19/2006	WPJ0883-13	97	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	01/12/2007	WQA0451-04	110	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	09/13/2007	WQI0561-07	85	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	03/28/2008	WRD0003-10	76	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-03	99	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/09/2009	WSD0446-04	88	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/03/2009	WSK0160-27	87	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/15/2010	WTI0566-34	90	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-17	42	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
Injection	03/13/2012	610-2430-5	38	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	May-14									
	08/13/2014	500-82540-1	31	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
Injection	04/13/2015	500-94678-10	14	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	May-15									
Injection	Aug-15									
	09/30/2015	500-102040-31	19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/22/2017	500-128753-30	24	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	07/25/2019	500-167423-2	8.5	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	Sep-19									
Injection	01/10/2020	500-176296-4	9.2	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	Apr-20									
	07/22/2020	500-185479-3	9.4	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-3	9.3	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-10	8.4	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-5										
	12/05/2000	421087	20	<0.25	<0.25	0.39 *	-	<0.10	<0.25	<0.25
	01/03/2001	423691	27	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	07/20/2001	445337	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	09/18/2001	452044	5.7	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	04/15/2002	477776	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	04/02/2004	565072	0.76	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/19/2006	WPJ0883-10	7.8	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WQI0561-03	2.6	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-03	2.4	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/09/2009	WSD0446-05	2.1	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/02/2009	WSK0160-26	0.93	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/15/2010	WTI0566-33	1	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-15	1.4	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	10/08/2014	500-85893-2	0.63	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/30/2015	500-102040-33	1	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/22/2017	500-128753-32	0.84	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/25/2019	500-167423-3	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	01/10/2020	500-176296-5	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2020	500-185479-4	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-4	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34

**TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
P-6 (M)	07/20/2001	445338	870	<2.5	<2.5	<2.5	-	12	<2.5	<2.5
	09/17/2001	451749	450	<2.5	<2.5	<2.5	-	46	<2.5	<2.5
	04/15/2002	477764	700	<2.5	<2.5	<2.5	-	28	<2.5	<2.5
	04/01/2004	565019	1100	<5.0	<5.0	<10	-	49	<5.0	2.7
First Injection	04/26/2004									
	04/29/2004	568584	1100	<0.50	<0.50	<1.0	-	0.75	<0.50	<0.25
	05/03/2004	569076	1200	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	05/11/2004	570591	1200	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	05/28/2004	573013	810	<10	<10	<20	-	<4.0	<10	<5.0
	06/11/2004	574904	20	<0.5	<0.5	<1.0	-	0.22	<0.5	<0.25
	08/11/2004	583510	100	<0.5	<0.5	<1.0	-	<0.20	<0.5	<0.25
	11/09/2004	596427	40	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	05/04/2005	W0E0280-10	2.3	<0.50	<0.50	<1.0	-	<0.20	<0.50	0.63
	10/07/2005	W0J0310-04	1.9	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	01/27/2006	WPA0851-23	0.63	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
Second Injection	04/11/2006									
	05/23/2006	WPE1038-08	0.5	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
Third Injection	06/27/2006									
Fourth Injection	10/10/2006									
	01/12/2007	WQA0451-09	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/14/2007	WQI0561-28	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	03/28/2008	WRD0003-11	1.5	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-11	0.43	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/08/2009	WSD0446-06	0.55	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/02/2009	WSK0160-16	0.29	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/14/2010	WTI0566-06	0.49	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/23/2011	WUK0754-24	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	05/23/2013	500-57397-4	0.25	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
** Preserved with HCL**	05/23/2013	500-57397-6	<0.95	<0.85	<1.0	<3.4	-	<0.55	<0.34	<0.80
Injection	May-14									
Injection	May-15									
Injection	Aug-15									
	09/29/2015	500-102040-1	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/22/2017	500-128753-3	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167232-2	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Sep-19									
	01/09/2020	500-176296-6	0.41 J	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Apr-20									
	07/21/2020	500-185479-5	<0.16	<0.37	<0.67	<1.6	1.8	<0.15	<0.22	<0.34
	06/29/2021	500-201791-5	0.42	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-26	<0.16	<0.37	<0.48	<1.6	<0.48	<0.15	<0.22	<0.34
S-5	07/20/2001	445350	200	<1.2	<1.2	11	-	1.6	<1.2	<1.2
	09/18/2001	452051	480	<0.25	<0.25	<0.25	-	0.17	<0.25	<0.25
	04/15/2002	477768	970	<2.5	<2.5	8.0*	-	<1.0	<2.5	<2.5
	04/01/2004	565076	1400	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
S-6	12/05/2000	421088	180	<1.0	<1.0	2.4 *	-	<0.40	<1.0	<1.0
	01/03/2001	423689	610	<2.5	<2.5	10 *	-	<1.0	<2.5	<2.5
	07/20/2001	445351	1,000	<1.0	<1.0	8.8 *	-	<0.40	<1.0	<1.0
	09/18/2001	452050	2,300	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	04/15/2002	477766	1,700	<12	<12	40*	-	<5.0	<12	<12
	04/01/2004	565081	2,300	1	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/29/2004	568586	2,400	<20	<20	<40	-	<8.0	<20	<10
	05/03/2004	569074	2,100	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	05/11/2004	570587	2,300	<20	<20	<40	-	<8.0	<20	<10
	05/28/2004	573012	2,300	<25	<25	<50	-	<10	<25	<12
	06/11/2004	574903	2,200	<25	<25	<50	-	<10	<25	<12

**TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)								
			Trichloro-ethene	Tetrachloro-ethene	Dichlorodi-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene	
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8	
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40	
	08/11/2004	583509	1,800	<20	<20	<40	-	<8.0	<20	<10	
	11/09/2004	596432	2,100	<20	<20	<40	-	<8.0	<20	<10	
	05/04/2005	WOE0280-06	2,100	<20	<20	<40	-	<8.0	<20	<10	
	10/07/2005	WOJ0310-01	2,100	<20	<20	<40	-	<8.0	<20	<10	
MW-7	12/05/2000	421089	2.3	<0.25	<0.25	0.34 *	-	<0.10	<0.25	<0.25	
	01/03/2001	423696	2.5	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	07/20/2001	445339	0.38	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	09/17/2001	451748	0.46	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	04/15/2002	477771	1.4	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	04/02/2004	565059	2.8	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/19/2006	WPJ0883-14	1.6	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	09/14/2007	WQI0561-25	1.9	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/30/2008	WRK0033-05	1	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	04/08/2009	WSD0446-07	1.2	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	11/02/2009	WSK0160-08	1.4	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/14/2010	WTI0566-26	1.3	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	11/22/2011	WUK0754-14	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/29/2015	500-102040-14	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	05/22/2017	500-128753-14	0.75	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	07/23/2019	500-167232-3	<0.16	<0.37	<0.67	<1.6	-	0.34 J	<0.22	<0.34	
	01/09/2020	500-176296-7	<0.43	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	07/22/2020	500-185479-6	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
	06/30/2021	500-201791-6	0.64	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
	04/11/2022	500-215109-8	0.88	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
MW-8	12/05/2000	421090	310	<2.2	<2.2	2.8 *	-	0.8	<1.2	<1.2	
	01/03/2001	423690	370	<2.5	<2.5	11 *	-	<1.0	<2.5	<2.5	
	07/20/2001	445340	220	<2.5	<2.5	24 *	-	<1.0	<2.5	<2.5	
	09/17/2001	451746	480	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	04/15/2002	477770	450	<2.5	<2.5	8.2*	-	<1.0	<2.5	<2.5	
	04/02/2004	565058	330	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0	
First Injection	04/26/2004										
	05/11/2004	570582	340	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	05/28/2004	573008	350	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
	06/11/2004	574899	350	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
	08/11/2004	583508	320	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0	
	11/10/2004	596428	300	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	05/04/2005	WOE0280-03	300	<2.5	<2.5	<5.0	-	<1.0	<2.5	2.7	
	01/27/2006	WPA0851-26	260	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
Second Injection	04/11/2006										
Third Injection	06/27/2006										
Fourth Injection	10/10/2006										
	10/19/2006	WPJ0883-15	240	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
	1/12/07	WQA0451-05	250	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
	09/14/2007	WQI0561-23	230	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
	03/28/2008	WRD0003-15	190	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
	10/30/2008	WRK0033-31	190	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
	04/08/2009	WSD0446-08	190	<2.0	<2.0	<4.0	-	<2.0	<2.0	<1.0	
	11/03/2009	WSK0160-15	200	<2.0	<2.0	<4.0	-	<2.0	<2.0	<1.0	
	09/14/2010	WTI0566-16	160	<1.0	<1.0	<2.0	-	<1.0	<1.0	<0.50	
	11/23/2011	WUK0754-22	110	<1.0	<1.0	<2.0	-	<1.0	<1.0	<0.50	
	05/23/2013	500-57397-1	140	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	04/01/2014	500-74500-5	150	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
Injection	May-14										
	08/12/2014	500-82380-1	44	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	04/13/2015	500-94678-16	150	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
Injection	May-15										
Injection	Aug-15										

TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
	09/29/2015	500-102040-12	150	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/23/2017	500-128753-12	160	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167232-4	93	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Sep-19									
	01/09/2020	500-176296-8	99	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Apr-20									
	07/20/2020	500-185479-7	67	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/30/2021	500-201791-7	82	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-7	86	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-9	07/20/2001	445341	1.7	<0.25	<0.25	<0.25	-	0.2	<0.25	<0.25
	09/19/2001	452263	3.6	<0.25	<0.25	<0.25	-	1.2	<0.25	<0.25
	04/15/2002	477779	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	04/01/2004	565062	0.28	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/18/2006	WPJ0883-08	12	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WQI0561-15	5.4	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-10	0.55	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/08/2009	WSD0446-09	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/02/2009	WSK016-06	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/15/2010	WTI0566-30	33	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-12	3.3	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	10/08/2014	500-85893-3	1.1	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	04/13/2015	500-94678-6	0.83	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/30/2015	500-102040-25	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/24/2017	500-128753-23	0.71	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/24/2019	500-167232-5	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	01/10/2020	500-176296-6	0.45 J	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/22/2020	500-185479-8	0.37 J	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-8	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-15	<0.15	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-10 (M)	07/20/2001	445342	79	<0.50	<0.50	<0.50	-	0.48	<0.50	<0.50
	09/19/2001	452264	81	<0.25	<0.25	<0.25	-	0.45	<0.25	<0.25
	04/15/2002	477780	81	<0.25	<0.25	0.32*	-	<0.10	<0.25	<0.25
	04/01/2004	565073	110	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/18/2006	WPJ0883-09	89	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WQI0561-10	94	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-16	140	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/08/2009	WSD0446-10	130	<1.0	<1.0	<2.0	-	<1.0	<1.0	<0.50
	11/02/2009	WSK0160-03	140	<1.0	<1.0	<2.0	-	<1.0	<1.0	<0.50
	09/15/2010	WTI0566-25	170	<1.0	<1.0	<2.0	-	<1.0	<1.0	<0.50
	11/22/2011	WUK0754-13	160	<1.0	<1.0	<2.0	-	<1.0	<1.0	<0.50
	10/08/2014	500-85893-4	110	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	04/13/2015	500-94678-7	110	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/30/2015	500-102040-26	86	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/24/2017	500-128753-24	70	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/24/2019	500-167232-6	44	<0.37	<0.67	<0.32	-	<0.15	<0.22	<0.34
	01/10/2020	500-176296-10	43	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/22/2020	500-185479-9	35	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-9	31	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-16	28	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-11	07/20/2001	445343	<0.25	<0.25	<0.25	<0.25	-	1.8	<0.25	<0.25
	09/19/2001	452266	<0.25	<0.25	<0.25	<0.25	-	0.97	<0.25	<0.25
	04/15/2002	477777	3.2	<0.25	<0.25	<0.25	-	0.22	<0.25	<0.25
	04/02/2004	565067	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/19/2006	WPJ0883-06	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WQI0561-12	0.56	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-19	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25

TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
	04/09/2009	WSD0446-11	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/03/2009	WSK0160-10	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/15/2010	WTI0566-35	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-11	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/29/2015	500-102040-19	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/23/2017	500-128753-19	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/24/2019	500-167232-7	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	01/10/2020	500-176296-11	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/22/2020	500-185479-10	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-10	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-20	<0.16	<0.7	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-12 (M)	07/20/2001	445344	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	09/19/2001	452265	<0.25	<0.25	<0.25	0.64	-	<0.10	<0.25	<0.25
	04/15/2002	477778	<0.25	<0.25	<0.25	0.40*	-	<0.10	<0.25	<0.25
	04/02/2004	565070	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/19/2006	WPJ0883-07	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WQI0561-02	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-36	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/09/2009	WDR0446-12	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/03/2009	WSK0160-24	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/15/2010	WTI0566-14	<0.20	<0.50	<0.50	<1.0	-	1.8	<0.50	<0.25
	11/28/2011	WUK0782-04	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/29/2015	500-102040-20	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/23/2017	500-128753-20	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
MW-13	07/20/2001	445345	24	<0.25	<0.25	<0.25	-	0.63	<0.25	<0.25
	09/19/2001	452269	16	<0.25	<0.25	0.85	-	0.78	<0.25	<0.25
	04/15/2002	477763	17	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	04/01/2004	565077	15	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/18/2006	WPJ0883-01	14	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WQI0561-17	12	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-02	13	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/08/2009	WSD0446-13	12	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/02/2009	WSK0160-11	12	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/15/2010	WTI0566-15	13	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-10	13	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	10/08/2014	500-85893-5	7.8	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/30/2015	500-102040-34	7.3	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/23/2017	500-128753-33	6	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	05/10/2019	500-163269-3	4.4	<0.37	<0.67	3.9 J	-	0.17 J	<0.22	<0.34
	01/10/2020	500-176296-12	3.1	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2020	500-185479-11	2.3	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-12	1.7	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-9	2.1	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-14 (M)	07/20/2001	445346	23		<0.25	<0.25	-	1.4	<0.25	
	09/18/2001	452041	22		<0.25	<0.25	-	<0.10	<0.25	
	04/15/2002	477762	20			<0.25	-	<0.10	<0.25	
	04/01/2004	565079	19	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/18/2006	WPJ0883-02	15	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WPI0561-19	17	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-06	14	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/08/2009	WSD0446-15	14	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/02/2009	WSK0160-25	14	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/15/2010	WTI0566-24	14	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-09	14	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	10/08/2014	500-85893-6	9.9	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16

TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
	09/30/2015	500-102040-35	7	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/23/2017	500-128753-34	6.5	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	05/10/2019	500-163269-4	5.8	<3.7	<6.7	<16	-	<1.5	<2.2	<3.4
	01/10/2020	500-176296-3	4.6	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2020	500-185479-12	3.8	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-13	3.2	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-50	3.6	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-15 (M)	07/20/2001	445347	<1.0	<1.0	<1.0	8.4 *	-	0.52	<1.0	<1.0
	09/19/2001	452262	<0.25	<0.25	<0.25	<0.25	-	0.51	<0.25	<0.25
	04/15/2002	477767	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	04/01/2004	565065	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/18/2006	WPJ0883-05	0.21	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WQI0561-01	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-15	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/09/2009	WSD0446-16	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/03/2009	WSK0160-21	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-07	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/30/2015	500-102040-37	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/24/2017	500-128753-35	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/25/2019	500-167423-4	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	01/10/2020	500-176296-14	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	07/23/2020	500-185479-13	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-14	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-46	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-16	03/13/2002	473662	120	<1.0	<1.0	3.8*	-	3.5	<1.0	<1.0
	04/15/2002	477772	96	<0.50	<0.50	1.7*	-	<0.20	<0.50	<0.50
	04/02/2004	565084	210	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/04/2005	WOE0280-02	150	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0
	01/27/2006	WPA0851-25	140	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	10/19/2006	WPJ0883-16	150	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	01/12/2007	WQA0451-11	160	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	09/13/2007	WQI0561-04	72	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	10/30/2008	WRK0033-39	140	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	04/08/2009	WSD0446-17	140	<1.0	<1.0	<2.0	-	<1.0	<1.0	<0.50
	11/11/2009	WSK0160-01	140	<1.0	<1.0	<2.0	-	<1.0	<1.0	<0.50
	09/14/2010	WTI0566-20	140	<1.0	<1.0	<2.0	-	<1.0	<1.0	<0.50
	11/22/2011	WUK0754-02	52	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	03/13/2012	610-2430-1	160	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	04/13/2015	500-94678-5	130	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/29/2015	500-102040-23	110	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/24/2017	500-128753-22	120	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/24/2019	500-167232-8	85	<0.37	<0.67	<1.6	-	0.39 J	<0.22	<0.34
	01/09/2020	500-176296-15	39	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/22/2020	500-185479-14	82	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/29/2021	500-201791-15	65	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-23	72	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-17	03/13/2002	473663	3400	<20	<20	110*	-	<8.0	<20	<20
	03/13/2002	473664	3100	<20	<20	100*	-	<8.0	<20	<20
	03/13/2002	473661	2000	<12	<12	68*	-	7.5	<12	<12
	04/15/2002	477769	2200	<12	<12	200*	-	<5.0	<12	<12
	04/15/2002	477782	2300	<12	<12	82*	-	<5.0	<12	<12
First Injection	04/26/2004									
Second Injection	04/11/2006									
	04/29/2004	568585	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/03/2004	569077	470	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/11/2004	570583	1300	0.57	<0.50	<1.0	-	<0.20	<0.50	<0.25

TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-difluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
	05/28/2004	573015	1000	<12	<12	<25	-	<5	<12	<6.2
	05/28/2004	573017	780	<12	<12	<25	-	<5	<12	<6.2
	06/11/2004	574905	1200	<12	<12	<25	-	<5	<12	<6.2
	08/11/2004	583514	1000	<12	<12	<25	-	<5	<12	<6.2
	11/10/2004	596429	1100	<10	<10	<20	-	<4.0	<10	<5.0
	05/04/2005	W0E0280-12	1100	<10	<10	<20	-	<4.0	<10	<5.0
	10/07/2005	W0J0310-07	760	<10	<10	<20	-	<4.0	<10	<5.0
Second Injection	04/11/2006									
	01/26/2006	WPA0851-06	1100	<10	<10	<20	-	<4.0	<10	<5.0
	05/23/2006	WPE1038-09	1200	<10	<10	<20	-	<4.0	<10	<5.0
Third Injection	06/27/2006									
Fourth Injection	10/10/2006									
	10/19/2006	WPJ0883-30	750	<10	<10	<20	-	8	<10	<5.0
	01/12/2007	WQA0451-08	570	<8.0	<8.0	<16	-	<3.2	<8.0	<4.0
	09/14/2007	WQI0561-24	640	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	03/28/2008	WRD0003-16	520	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	10/30/2008	WRK0033-33	560	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	04/09/2009	WSD0446-18	460	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/03/2009	WSK0160-14	530	<4.0	<4.0	<8.0	-	<4.0	<4.0	<2.0
	09/14/2010	WTI0566-08	540	<4.0	<4.0	<8.0	-	<4.0	<4.0	<2.0
	11/23/2011	WUK0754-19	570	<4.0	<4.0	<8.0	-	<4.0	<4.0	<2.0
Injection	May-14									
Injection	May-15									
	05/12/2015	500-95987-1	1.7	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
Injection	Aug-15									
	09/29/2015	500-102040-8	130	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/22/2017	500-128753-8	180	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167232-9	28	<0.37	<0.67	<1.6	-	0.39 J	<0.22	<0.34
Injection	Sep-19									
	1/9/2020	500-176296-16	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Apr-20									
	7/20/2020	500-185479-15	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	6/30/2021	500-201791-16	89	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	4/11/2022	500-215109-29	130	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-18 (D)	04/02/2004	545020	0.61	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
First Injection	04/26/2004									
	04/29/2004	568587	7.2	<0.50	<0.50	<1.0	-	0.36	<0.50	<0.25
	05/03/2004	569078	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/11/2004	570584	2.2	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/28/2004	573009	0.37	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	06/11/2004	574898	0.46	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	08/11/2004	583515	2.5	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	11/10/2004	596424	0.77	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/04/2005	W0E0280-09	0.32	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/07/2005	W0J0310-06	0.45	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	01/26/2006	WPA0851-19	0.39	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
Second Injection	04/11/2006									
	05/23/2006	WPE1038-06	0.33	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
Third Injection	06/27/2006									
Fourth Injection	10/10/2006									
	10/19/2006	WPJ0883-17	0.38	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	01/12/2007	WQA0451-19	0.41	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/14/2007	WQI0561-26	0.35	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	03/27/2008	WRD0003-17	0.5	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-07	0.47	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/09/2009	WSD0446-21	0.42	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/03/2009	WSK0160-22	0.34	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/14/2010	WTI0566-10	0.28	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25

**TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
	11/22/2011	WUK0754-18	0.21	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
Injection	May-14									
Injection	May-15									
Injection	Aug-15									
	09/29/2015	500-102040-9	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/22/2017	500-128753-9	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167232-10	<u>2.8</u>	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Sep-19									
	01/09/2020	500-176296-17	3.0	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Apr-20									
	07/20/2020	500-185479-16	25.0	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/30/2021	500-201791-17	38.0	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-4	9.1	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-19 (M)	04/02/2004	565022	620	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
First Injection	04/26/2004									
	04/29/2004	568588	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/03/2004	569079	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/11/2004	570585	<0.20	<0.50	<0.50	<1.0	-	0.38	<0.50	<0.25
	05/28/2004	573016	<0.20	<0.50	<0.50	<1.0	-	0.21	<0.50	<0.25
	06/11/2004	574901	<0.20	<0.50	<0.50	<1.0	-	0.32	<0.50	<0.25
	08/11/2004	583513	<u>0.75</u>	<0.50	<0.50	<1.0	-	0.32	<0.50	<0.25
	11/10/2004	596425	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/04/2005	WQE0280-05	0.26	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/07/2005	WQJ0310-05	<u>1.4</u>	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	01/26/2006	WPA0851-15	<u>0.75</u>	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
Second Injection	04/11/2006									
	05/23/2006	WPE1038-10	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
Third Injection	06/27/2006									
Fourth Injection	10/10/2006									
	10/19/2006	WPJ0883-18	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	01/12/2007	WQA0451-20	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/14/2007	WQI0561-27	<u>0.63</u>	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	03/27/2008	WRD0003-17	5.8	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-40	1.8	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/09/2009	WSD0446-19	1.3	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/03/2009	WSK0160-17	<u>0.76</u>	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/14/2010	WTI0566-31	1.5	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/23/2011	WUK0754-20	<u>0.54</u>	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	05/23/2013	500-57397-5	1.6	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
** Preserved with HCL **	05/23/2013	500-57397-6	<0.95	<0.85	<1.0	<3.4	-	<0.55	<0.34	<0.80
Injection	May-14									
Injection	May-15									
Injection	Aug-15									
	09/29/2015	500-102040-10	<u>0.71</u>	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/22/2017	500-128753-10	<u>0.92</u>	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167232-11	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Sep-19									
	01/09/2020	500-176296-18	3.5	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Apr-20									
	07/20/2020	500-185479-17	10	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/30/2021	500-201791-18	<u>2.5</u>	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-27	4.2	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-20 (D)	04/01/2004	565056	25	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
First Injection	04/26/2004									
	04/29/2004	568583	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/03/2004	569075	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/11/2004	570588	14	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25

TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
	05/28/2004	573014	9.7	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	06/11/2004	574907	5.6	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	08/11/2004	583512	3.2	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	11/09/2004	596426	1.2	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	05/04/2005	W0E0280-01	0.93	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/07/2005	W0J0310-08	2.5	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	01/27/2006	WPA0851-18	0.41	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
Second Injection	04/11/2006									
	05/23/2006	WPE1038-12	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
Third Injection	06/27/2006									
Fourth Injection	10/10/2006									
	10/19/2006	WPJ0883-19	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	01/12/2007	WQA0451-10	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/14/2007	WQI0561-11	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	03/28/2008	WRD0003-01	0.33	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-13	0.33	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/08/2009	WSD0446-20	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/02/2009	WSK0160-18	0.47	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/14/2010	WTI0566-02	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/23/2011	WUK0754-26	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
Injection	May-14									
Injection	May-15									
Injection	Aug-15									
	09/29/2015	500-102040-2	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/22/2017	500-128753-2	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167232-12	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Sep-19									
	01/09/2020	500-176296-20	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	Apr-20									
	07/20/2020	500-185479-17	10	<0.37	<0.67	<1.6	0.57 J	<0.15	<0.22	<0.34
	06/29/2021	500-201791-19	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	200-215109-26	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-21	01/27/2005	604588	330	<0.50	<0.50	<1.0	-	0.35	<0.50	<0.25
	05/04/2005	W0E0280-08	470	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	10/07/2005	W0J0310-02	540	<5.0	<25	<10	-	<2.0	<5.0	<2.5
	01/26/2006	WPA0851-11	480	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0
	05/23/2006	WPE1038-13	480	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0
	10/19/2006	WPJ0883-21	480	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0
	01/12/2007	WQA0451-12	440	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	09/13/2007	WQI0561-05	480	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	03/28/2008	WRD0003-08	400	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	10/30/2008	WRK0033-32	410	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	04/08/2009	WSD0446-22	370	<4.0	<4.0	<8.0	-	<4.0	<4.0	<2.0
	11/02/2009	WSK0160-02	410	<2.5	<2.5	<5.0	-	<2.5	<2.5	<1.2
	09/14/2010	WTI0566-17	350	<2.5	<2.5	<5.0	-	<2.5	<2.5	<1.3
	11/22/2011	WUK0754-05	260	<2.0	<2.0	<4.0	-	<2.0	<2.0	<1.0
	04/01/2014	500-74500-11	260	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	04/13/2015	500-94678-3	180	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/29/2015	500-102040-18	190	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/24/2017	500-128753-18	180	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167032-13	140	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	01/09/2020	500-176296-20	140	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2020	500-185479-19	140	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/30/2020	500-201791-20	100	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-18	100	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-22	01/27/2006	WPA0851-13	620	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5
	03/02/2006	WPC0266-10	550	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5

**TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)								
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene	
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8	
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40	
	05/23/2006	WPE1038-04	880	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5	
	10/19/2006	WPJ0883-22	780	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5	
	01/12/2007	WQA0451-13	850	<8.0	<8.0	<16	-	<3.2	<8.0	<4.0	
	09/14/2007	WQI0561-29	740	<0.50	<5.0	<1.0	-	<0.20	<0.50	<0.25	
	03/28/2008	WRD0003-09	570	<0.50	<5.0	<1.0	-	<0.20	<0.50	<0.25	
	10/30/2008	WRK0033-18	640	<0.50	<5.0	<1.0	-	<0.20	<0.50	<0.25	
	04/08/2009	WSD0446-23	550	<5.0	<5.0	<10	-	<5.0	<5.0	<2.5	
	11/02/2009	WSK0160-07	790	<4.0	<4.0	<8.0	-	<4.0	<4.0	<2.0	
	09/14/2010	WTI0566-13	520	<5.0	<5.0	<10	-	<5.0	<5.0	<2.5	
	11/23/2011	WUK0754-27	30	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	03/13/2012	610-2430-4	150	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	05/23/2013	500-57397-3	310	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	04/01/2014	500-74500-10	320	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	08/12/2014	500-82380-4	2.6	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	04/13/2015	500-94678-12	190	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	09/29/2015	500-102040-5	200	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	05/23/2017	500-128753-5	190	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	07/23/2019	500-167232-14	13	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	01/09/2020	500-167296-21	7.1	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	07/21/2020	500-185479-20	0.31 J	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
	06/29/2021	500-201791-21	140	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
	04/11/2022	500-215109-3	170	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
P-23(M)	01/27/2006	WPA0851-16	580	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
	03/02/2006	WPC0266-03	610	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
	05/23/2006	WPE1038-11	500	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5	
	10/19/2006	WPJ0883-23	<2.0	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5	
	01/12/2007	WQA0451-18	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	09/14/2007	WQI0561-18	0.6	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	03/28/2008	WRD0003-03	0.69	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/30/2008	WRK0033-01	0.51	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	04/08/2009	WSD0446-24	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	11/02/2009	WSK0160-19	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/14/2010	WTI0566-09	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	11/23/2011	WUK0754-23	0.24	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/29/2015	500-102040-4	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	05/23/2017	500-128753-4	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	07/23/2019	500-167232-15	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	01/09/2020	500-176296-11	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	07/20/2020	500-185479-21	<0.16	<0.37	<0.67	<1.6	2.4	<0.15	<0.22	<0.34	
	06/30/2021	500-201791-22	0.17	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
	04/11/2022	500-215109-28	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
MW-24	01/26/2006	WPA0851-09	330	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
	03/02/2006	WPC0266-03	210	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
	05/23/2006	WPE1038-05	180	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
	10/19/2006	WPJ0883-24	170	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50	
	01/12/2007	WQA0451-14	180	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50	
	09/14/2007	WQI0561-21	160	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50	
	03/27/2008	WRD0003-02	150	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50	
	10/30/2008	WRK0033-09	120	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50	
	04/09/2009	WSD0446-25	88	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	11/03/2009	WSK0160-30	140	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/14/2010	WTI0566-05	65	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	11/23/2011	WUK0754-21	150	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	04/01/2014	500-74500-7	76	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	08/12/2014	500-82380-1	59	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	04/13/2015	500/94678-15	150	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	09/29/2015	500-102040-11	140	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	

**TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
	05/23/2017	500-128753-11	150	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	05/14/2019	500-163269-7	57	<0.37	<0.67	2.9 J	-	0.15 J	<0.22	<0.34
	01/09/2020	500-176296-23	79	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/20/2020	500-185479-22	72	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/30/2021	500-201791-23	53	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-5	52	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-25D	01/27/2006	WPA0851-17	150	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	03/02/2006	WPC0266-12	280	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	05/23/2006	WPE1038-03	390	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0
	10/19/2006	WPJ0883-25	460	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0
	01/12/2007	WQA0451-07	490	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0
	09/14/2007	WQI0561-16	470	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0
	03/28/2008	WRD0003-05	360	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0
	10/30/2008	WRK0033-12	360	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0
	04/08/2009	WSD0446-27	370	<2.5	<2.5	<5.0	-	<2.5	<2.5	<1.2
	11/02/2009	WSK0160-28	360	<2.5	<2.5	<5.0	-	<2.5	<2.5	<1.2
	09/15/2010	WTI0566-12	360	<2.5	<2.5	<5.0	-	<2.5	<2.5	<1.3
	11/22/2011	WUK0754-29	370	<2.5	<2.5	<5.0	-	<2.5	<2.5	<1.3
	04/01/2014	500-74500-8	270	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	04/13/2015	500-94678-13	280	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/29/2015	500-102040-6	250	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/23/2017	500-128753-6	210	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167232-17	<0.43	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	09/26/2019									
	01/09/2020	500-176296-24	<0.43	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	04/29/2020									
	07/20/2020	500-185479-23	150	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/30/2021	500-201791-25	140	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-1	160	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-25S	01/27/2006	WPA0851-28	100	<0.50	<0.50	<1.0	-	3	<0.50	<0.25
	03/02/2006	WPC0266-14	100	<0.50	<0.50	<1.0	-	2.1	<0.50	<0.25
	05/23/2006	WPE1038-07	120	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	10/19/2006	WPJ0883-26	110	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	01/12/2007	WQA0451-06	110	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	09/14/2007	WQI0561-20	75	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	03/28/2008	WRD0003-12	100	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	10/30/2008	WRK0033-14	92	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	04/08/2009	WSD0446-26	100	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/02/2009	WSK0160-09	100	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/15/2010	WTI0566-22	97	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-28	81	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	04/13/2015	500-94678-14	62	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/29/2015	500-102040-7	61	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/23/2017	500-128753-7	35	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167232-16	64	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	09/26/2019									
	01/09/2020	500-176296-24	76	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
Injection	04/29/2020									
	07/20/2020	500-185479-24	64	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/30/2021	500-201791-24	47	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-2	63	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-26	01/26/2006	WPA0851-03	310	<2.5	<2.5	<5.0	-	2.3	<2.5	<1.2
	03/02/2006	WPC0266-1	330	<2.5	<2.5	<5.0	-	2.3	<2.5	<1.2
	10/19/2006	WPJ0883-27	340	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	01/12/2007	WQA0451-15	340	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	09/13/2007	WQI0561-14	270	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2

**TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
	03/28/2008	WRD0003-14	300	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	10/30/2008	WRK0033-08	280	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	04/08/2009	WSD0446-28	280	<2.5	<2.5	<5.0	-	<2.5	<2.5	<1.2
	11/02/2009	WSK0160-13	280	<2.0	<2.0	<4.0	-	<2.0	<2.0	<1.0
	09/14/2010	WTI0566-04	280	<2.0	<2.0	<4.0	-	<2.0	<2.0	<1.0
	11/22/2011	WUK0754-03	320	<2.0	<2.0	<4.0	-	<2.0	<2.0	<1.0
	04/01/2014	500-74500-14	200	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	08/13/2014	500-82540-2	<0.17	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	04/13/2015	500-94678-1	130	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/29/2015	500-102040-16	150	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/23/2017	500-128753-16	160	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2019	500-167232-18	50	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	01/09/2020	500-176296-26	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2020	500-185479-25	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/30/2021	500-201791-26	100	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-32	98	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-27	01/26/2006	WPA0851-12	300	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	03/02/2006	WPC0266-08	310	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50
	10/19/2006	WPJ0883-28	270	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	01/12/2007	WQA0451-16	280	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	09/13/2007	WQI0561-09	350	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	03/28/2008	WRD0003-13	300	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	10/30/2008	WRK0033-34	350	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2
	04/08/2009	WSD0446-29	380	<2.5	<2.5	<5.0	-	<2.5	<2.5	<1.2
	11/02/2009	WSK0160-29	440	<2.5	<2.5	<5.0	-	<2.5	<2.5	<2.5
	09/14/2010	WTI0566-07	380	<4.0	<4.0	<8.0	-	<4.0	<4.0	<2.0
	11/22/2011	WUK0754-04	88	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	03/13/2012	610-2430-2	140	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	04/01/2014	500-74500-13	120	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	04/13/2015	500-94678-1	63	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/29/2015	500-102040-17	0.49	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/23/2017	500-128753-17	<0.82	<1.9	<3.4	<8.2	-	<0.76	<1.1	<1.7
	07/23/2019	500-167232-19	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	01/09/2020	500-176296-27	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/23/2020	500-185479-26	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/29/2021	500-201791-28	0.69	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-33	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-28	03/02/2006	WPC0266-13	28	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/19/2006	WPJ0883-20	26	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	01/12/2007	WQA0451-17	31	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	09/13/2007	WQI0561-06	25	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	03/28/2008	WRD0003-06	20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/30/2008	WRK0033-37	16	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/08/2009	WSD0446-30	17	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/02/2009	WSK0160-05	23	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/14/2010	WTI0566-19	22	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-06	0.43	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	03/13/2012	610-2430-3	0.79	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	10/08/2014	500-85893-7	0.34	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/29/2015	500-102040-13	4.4	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/23/2017	500-128753-13	6.1	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/24/2019	500-167232-20	0.26 J	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	01/09/2020	500-176296-28	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/27/2020	500-185693-3	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/30/2021	500-201791-27	2.9	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-17	7.7	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34

**TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)							
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40
MW-29	04/01/2014	500-74500-3	<u>3.5</u>	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/13/2014	500-76988-1	<u>2.8</u>	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	04/13/2015	500-94678-7	<0.17	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	09/30/2015	500-102040-28	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/24/2017	500-128753-25	0.36	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/25/2019	500-167423-5	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	Injection	09/26/2019								
P-30	01/09/2020	500-176296-29	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	Injection	04/29/2020								
	07/22/2020	500-185479-27	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-29	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-30	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/01/2014	500-74500-4	29	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
	05/13/2014	500-76988-1	28	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16
04/13/2015	500-94678-9	23	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
09/30/2015	500-102040-29	22	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
05/24/2017	500-128753-26	16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
07/25/2019	500-167423-6	10	0.51 J	<0.67	<1.6	-	<0.15	<0.22	<0.34	
Injection	09/26/2019									
01/09/2020	500-176296-30	9.9	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
Injection	04/29/2020									
07/22/2020	500-185479-28	8.1	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
06/28/2021	500-201791-30	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
04/11/2022	500-215109-14	7.4	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
MW-31	01/09/2020	500-176296-31	8.8	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34
	07/22/2020	500-185479-29	3.7	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	06/28/2021	500-201791-31	21	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/11/2022	500-215109-13	28	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
P-32	06/30/2021	500-201789-1	<0.16	<0.37	<0.67	10	0.49	0.19	<0.22	<0.34
	08/10/2021	500-203778-6	<u>0.77</u>	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-35	<u>1.1</u>	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
MW-33	06/30/2021	500-201789-2	<0.16	<0.37	<0.67	9.7	<0.48	<0.15	<0.22	<0.34
	08/10/2021	500-2033778-7	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
	04/12/2022	500-215109-34	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
JW-11	07/20/2001	445352	<0.49	<0.25	<0.49	<0.87	-	<0.39	<1.1	<0.25
	04/15/2002	477781	<0.25	<0.25	<0.25	0.40*	-	<0.10	<0.25	<0.25
	04/01/2004	565087	0.48	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	10/18/2006	WPJ0883-04	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25
	04/12/2022	500-215109-49	<u>0.92</u>	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
JW-13	07/20/2001	445353	11	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25
	09/19/2001	452267	7.5	<0.25	0.79	0.39	-	<0.10	<0.25	<0.25
	10/30/2008	WRK0033-17	8.5	<0.50	<0.50	<1.0	-	0.22	<0.50	<0.25
	04/09/2009	WSD0446-14	6.6	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/03/2009	WSK0160-12	6.6	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	09/14/2010	WTI0566-13	8.5	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	11/22/2011	WUK0754-08	6.9	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25
	04/12/2022	500-215109-45	7.3	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
JW-18A	06/30/2021		0.21	<0.37	<0.67	15	<0.48	<0.15	<0.22	<0.34
	08/10/2021		<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34
JW-18B	06/30/2021		<u>1.9</u>	<0.37	<0.67	14	<0.48	<0.15	<0.22	<0.34
	08/10/2021		<u>1.5</u>	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34

**TABLE 3
MONITORING WELL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)								
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene	
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8	
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40	
Injection Wells/Depth											
I-1-1 113'	04/02/2004	565080	1100	<20	<20	<40	-	<8.0	<20	<10	
I-1-2 127'	04/02/2004	565082	1100	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-1-3 141'	04/02/2004	565068	1100	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-1-5 169'	04/02/2004	565069	20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-2-5 113'	04/01/2004	565089	1900	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5	
I-2-4 127'	04/01/2004	565088	540	<u>1.2</u>	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-2-3 141'	04/01/2004	565078	990	<u>0.9</u>	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-2-2 155'	04/01/2004	565086	76	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-2-1 169'	04/01/2004	565085	25	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-3-5 113'	04/01/2004	565075	2100	<u>2.1</u>	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-3-4 127'	04/01/2004	565060	410	<u>3.5</u>	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-3-3 141'	04/01/2004	565063	1000	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-3-2 155'	04/01/2004	565083	33	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-3-1 169'	04/01/2004	565064	29	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
I-4S	01/26/2006	WPA0851-04	570	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5	
	03/02/2006	WPC0266-18	840	<5.0	<5.0	<10	-	<2.0	<5.0	<2.5	
I-4D	01/26/2006	WPA0851-07	5.6	<1.0	<1.0	<2.0	-	<0.40	1.1	<0.50	
	03/02/2006	WPC0266-07	0.28	<1.0	<1.0	1.1	-	<0.40	1.1	<0.50	
I-5S	01/26/2006	WPA0851-05	360	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0	
	03/02/2006	WPC0266-04	390	<4.0	<4.0	<8.0	-	<1.6	<4.0	<2.0	
I-5D	01/26/2006	WPA0851-02	11	<1.0	<1.0	<2.0	-	<0.40	<1.0	<0.50	
	03/02/2006	WPC0266-09	<u>1.2</u>	<1.0	<1.0	1.1	-	<0.40	<1.0	<0.50	
I-6S	01/26/2006	WPA0851-01	220	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
	03/02/2006	WPC0266-11	230	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
I-6D	01/26/2006	WPA0851-20	120	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
	03/02/2006	WPC0266-06	89	<2.0	<2.0	1.1	-	<0.80	<2.0	<1.0	
I-7S	01/26/2006	WPA0851-10	250	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
	03/02/2006	WPC0266-15	350	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
I-7D	01/26/2006	WPA0851-08	1700	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
	03/02/2006	WPC0266-16	1800	<2.5	<2.5	<5.0	-	<1.0	<2.5	<1.2	
I-8S	01/27/2006	WPA0851-29	1600	<2.0	<2.0	<4.0	-	2.8	<2.0	<1.0	
	03/02/2006	WPC0266-05	1600	<2.0	<2.0	<4.0	-	2.8	<2.0	<1.0	
I-8D	01/27/2006	WPA0851-14	690	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
	03/02/2006	WPC0266-17	720	<2.0	<2.0	<4.0	-	<0.80	<2.0	<1.0	
I-9	04/01/2014	500-74500-15	230	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
I-10	04/01/2014	500-74500-12	15	<0.85	<1.0	<3.4	-	<0.55	<0.34	<0.80	
I-10R	10/09/2014	500-85893-10	320	<0.17	<0.20	<0.68	-	0.3	<0.068	<0.16	
I-11	04/01/2014	500-74500-6	270	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
I-12	04/01/2014	500-74500-9	380	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
13S	04/01/2014	500-74500-1	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
13D	04/01/2014	500-74500-2	91	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
I-14S	09/10/2019	500-169944-1	9.2	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	0.93 J	
I-14D	09/10/2019	500-169944-2	6.6	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
I-15	09/10/2019	500-169944-3	5.5	<0.37	<0.67	<1.6	<0.48	<0.15	>0.22	<0.34	

* Common Lab Contaminant
 ** Results after 4/28/04 are post-injection.
 Contaminant concentrations in excess of NR 140 ES are in bold face font.
 Contaminant concentrations in excess of NR 140 PAL are underlined.
 J Flag: Reported value was between the limit of detection and the limit of quantitation.
 JW-11 and JW-13 are Junker Landfill monitoring wells which are also located downgradient of the Town of Warren TCE Site
 (D) Deep Piezometer
 (M) Medium Depth Piezometer
 B Flag: Compound was found in the blank and sample.

TABLE 4.a.
MONITORING WELL PFAS GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

Sample ID	Sample Date	PFAS Compounds (ng/L)																																				
		Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnA)	Perfluorododecanoic acid (PFDoA)	Perfluorotridecanoic acid (PFTriA)	Perfluorotetradecanoic acid (PFTeA)	Perfluoro-n-hexadecanoic Acid (PFHxDA)	Perfluorobutanesulfonic acid (PFBS)	Perfluoro-n-octadecanoic Acid (PFODA)	Perfluoropentanesulfonic acid (PFPeS)	Perfluorohexanesulfonic acid (PFHS)	Perfluoroheptanesulfonic acid (PFHps)	Perfluorooctanesulfonic acid (PFOS)	Perfluoronanesulfonic acid (PFNS)	Perfluorodecanesulfonic Acid (PFDS)	Perfluorooctanesulfonamide (FOSA)	N- methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	N- ethylperfluorooctanesulfonamidoacetic acid (NEFOSAA)	4:2 FTS	6:2 FTS	8:2 FTS	Perfluorodecanesulfonic Acid (PFDoS)	ADONA	F-53B Major	HFPO-DA (GenX)	F-53B Minor	10:2 FTS	NaDONA	DONA	Ammonium Perfluorooctanoate (APFO)	Total PFAS	
MW-1	7/23/2019	36	1.0 J	0.73 J	0.44 J	1.3 J	<0.25	<0.29	<1.0	<0.51	<1.2	<0.27	<0.82	0.36 JB	<0.43	<0.28	0.51 JB	<0.18	0.83 J	<0.15	<0.30	0.65 J	<2.9	<1.8	<4.8	<1.8	<1.8	<0.42	<0.18	<0.22	<1.4	<0.30	<0.18	<0.18	<0.17	1.3 J	43.12	
MW-2	5/10/2019	95 B	3.2	<0.55	<0.24	<0.80	<0.25	<0.29	<1.0	<0.52	<1.2	<0.27	<0.84	0.72 J	<0.43	<0.28	1 J B	<0.18	<0.51	<0.15	<0.30	<0.33	<2.9	<1.8	<4.9	12 JB *	<1.9	<0.42	<0.18	<0.23	<1.4	<0.30	<0.18	<0.17	<0.83	111.92		
MW-3	7/25/2019	17	0.72 J	<0.53	<0.53	1.3 J	<0.24	<0.28	<1.0	<0.50	<1.2	<0.26	<0.81	0.33 J	0.42 J	<0.27	0.7 JB	<0.17	0.92 J	<0.14	<0.29	<0.32	<2.8	<1.7	<4.7	<1.8	<1.8	<0.41	<0.17	<0.22	<1.4	<0.29	<0.17	<0.17	<0.16	1.3 J	22.69	
P-4	7/25/2019	53	1.7 J	0.74 J	0.33 J	1.5 J	<0.25	0.30 J	<1.0	<0.51	<1.2	<0.27	<0.82	0.90 J	<0.42	<0.28	0.68 JB	<0.17	2.8	<0.15	<0.29	0.63 J	<2.9	<1.7	<4.8	<1.8	<1.8	<0.41	<0.17	<0.22	<1.4	<0.29	<0.17	<0.17	<0.17	1.6 J	63.28	
MW-5	7/25/2019	61	9.7	3.2	<0.23	0.99 J	<0.25	<0.28	<1.0	<0.50	<1.2	<0.27	<0.82	0.60 J	<0.42	<0.27	0.44 JB	<0.17	<0.49	<0.15	<0.29	<0.32	<2.8	<1.7	<4.8	<1.8	<1.8	<0.41	<0.17	<0.22	<1.4	<0.29	<0.17	<0.17	<0.16	1.0 J	76.93	
P-6	7/23/2019	36	1.3 J	1.3 J	0.82 J	3.8	1.6 J	1.6 J	<1.0	<0.51	<1.2	<0.27	<0.83	0.68 JB	<0.43	<0.28	0.36 JB	<0.18	0.57 J	<0.15	<0.30	0.57 J	<2.9	<1.8	<4.8	5.1 J	<1.9	<0.42	<0.18	<0.22	<1.4	<0.30	<0.18	<0.18	<0.17	4	57.7	
MW-7	7/23/2019	51	1.4 J	0.59 J	<0.24	<0.80	<0.25	<0.29	<1.0	<0.52	<1.2	<0.27	<0.84	0.89 JB	<0.43	<0.28	0.55 JB	<0.18	0.63 J	<0.15	<0.30	0.45 J	<2.9	<1.8	<4.9	<1.9	<1.9	<0.42	<0.18	<0.23	<1.4	<0.30	<0.18	<0.18	<0.17	<0.83	55.51	
MW-8	7/23/2019	44	2.6	<0.54	<0.23	<0.80	<0.25	<0.29	<1.0	<0.52	<1.2	<0.27	<0.84	0.68 JB	<0.43	<0.28	0.37 JB	<0.18	<0.51	<0.15	<0.30	<0.33	<2.9	<1.8	<4.9	<1.9	<1.9	<0.42	<0.18	<0.23	<1.4	<0.30	<0.18	<0.18	<0.17	<0.83	47.65	
MW-9	7/24/2019	36	<0.47	<0.55	0.32 J	2.2	<0.26	<0.30	<1.1	<0.53	<1.2	<0.28	<0.85	0.35 JB	<0.44	<0.29	0.53 JB	<0.18	5.1	<0.15	<0.31	1.9	8.4 J	7.3 J	<5.0	<1.9	<1.9	<0.43	<0.18	<0.23	<1.4	<0.30	<0.18	<0.18	<0.17	2.2	64.30	
P-10	7/24/2019	24	<0.47	<0.55	<0.24	<0.81	<0.26	<0.30	<1.1	<0.53	<1.2	<0.28	<0.85	0.20 JB	<0.44	<0.29	0.69 JB	<0.18	1.9	<0.15	<0.31	0.91 J	<3.0	<1.8	<5.0	<1.9	<1.9	<0.43	<0.18	<0.2	<1.4	<0.31	<0.18	<0.18	<0.17	<0.84	27.7	
MW-11	7/24/2019	35	0.63 J	<0.55	<0.24	<0.81	<0.26	<0.30	<1.0	<0.52	<1.2	<0.28	<0.85	0.35 JB	<0.44	<0.29	0.35 JB	<0.18	<0.51	<0.15	<0.30	<0.33	<3.0	<1.8	<4.9	<1.9	<1.9	<0.43	<0.18	<0.23	<1.4	<0.30	<0.18	<0.18	<0.17	<0.84	36.33	
MW-13	5/10/2019	36 B	1.2 J	1.1 J	0.29 J	0.82 J	<0.25	<0.29	<1.0	<0.51	<1.2	<0.27	<0.83	0.38 J	<0.43	<0.28	0.49 J B	<0.18	<0.50	<0.15	<0.30	<0.33	<2.9	<1.8	<4.9	<1.9	<1.9	<0.42	<0.18	<0.22	<1.4	<0.30	<0.18	<0.18	<0.17	0.85 J	87.13	
P-14	5/10/2019	37 B	<0.46	<0.54	<0.23	<0.79	<0.25	<0.29	<1.0	<0.51	<1.2	<0.27	<0.83	0.27 J	<0.43	<0.28	0.45 J B	<0.18	<0.50	<0.15	<0.30	<0.33	<2.9	<1.8	<4.8	<1.9	<1.9	<0.42	<0.18	<0.22	<1.4	<0.30	<0.18	<0.18	<0.17	<0.82	37.72	
P-15	7/25/2019	22	0.87 J	1.2 J	0.52 J	1.6 J	0.78 J	<0.28	<1.0	<0.50	<1.2	0.35 J	<0.81	0.32 J	<0.42	<0.27	0.83 JB	<0.17	3.4	<0.15	<0.29	<0.32	<2.8	<1.7	<4.8	<1.8	<1.8	<0.41	<0.17	<0.22	<1.4	<0.29	<0.17	<0.17	<0.16	1.6 J	33.47	
MW-16	7/24/2019	55	<0.48	<0.57	<0.25	<0.83	<0.27	<0.30	<1.1	<0.54	<1.3	<0.28	<0.87	<0.20	<0.45	<0.29	0.29 JB	<0.19	<0.53	<0.16	<0.31	<0.34	<3.0	<1.9	<5.1	<2.0	<2.0	<0.44	<0.19	<0.24	<1.5	<0.31	<0.19	<0.19	<0.18	<0.17	<0.44	55.29
MW-17	7/23/2019	73	2.9	1.4 J	2	15	0.81 J	0.96 J	<1.1	<0.53	<1.3	<0.28	<0.86	0.43 JB	<0.44	<0.29	0.68 JB	<0.18	5.8	<0.15	<0.31	8.6	11 J	10 J	<5.0	<1.9	<1.9	<0.43	<0.18	<0.23	<1.4	<0.31	<0.18	<0.18	<0.17	16	148.58	
P-18	7/23/2019	41	0.72 J	0.60 J	0.34 J	2.1	12	0.39 J	<1.0	<0.52	<1.2	<0.28	<0.85	1.1 JB	<0.44	<0.29	0.64 JB	<0.18	1.9	<0.15	<0.30	0.43 J	<3.0	<1.8	<5.0	<1.9	<1.9	<0.43	<0.18	<0.23	<1.4	<0.30	<0.18	<0.18	<0.17	2.2	63.42	
P-19	7/23/2019	18	0.84 J	<0.55	0.34 J	1.3 J	1.5 J	0.35 J	<1.0	<0.52	<1.2	0.50 J	<0.84	0.19 JB	<0.44	<0.28	0.38 JB	<0.18	0.64 J	<0.15	<0.30	0.41 J	<2.9	<1.8	<4.9	<1.9	<1.9	<0.43	<0.18	<0.23	<1.4	<0.30	<0.18	<0.18	<0.17	1.3 J	25.25	
P-20	7/23/2019	19	<0.47	<0.55	<0.24	0.82 J	<0.26	<0.29	<1.0	<0.52	<1.2	<0.28	<0.84	<0.19	<0.44	<0.28	0.29 JB	<0.18	<0.51	<0.15	<0.30	<0.33	<2.9	<1.8	<4.9	<1.9	<1.9	<0.43	<0.18	<0.23	<1.4	<0.30	<0.18	<0.18	<0.17	0.86 J	20.97	
MW-21	7/23/2019	30	0.87 J	<0.55	<0.24	<0.80	<0.26	<0.29	<1.0	<0.52	<1.2	0.30 J	<0.84	<0.19	<0.44	<0.28	0.28 JB	<0.18	<0.51	<0.15	<0.30	<0.33	<2.9	<1.8	<4.9	<1.9	<1.9	<0.43	<0.18	<0.23	<1.4	<0.30	<0.18	<0.18	<0.17	<0.83	31.45	
MW-22	7/23/2019	48	1.4 J	0.68 J	<0.23	<0.80	<0.25	<0.29	<1.0	<0.51	<1.2	<0.27	<0.83	0.88 JB	<0.43	0.30 J	0.98 JB	<0.18	<0.51	<0.15	<0.30	<0.33	<2.9	<1.8	<4.9	<1.9	<1.9	<0.42	<0.18	<0.22	<1.4	<0.30	<0.18	<0.18	<0.17	<0.82	51.94	
MW-22	7/23/2019	32.9	<0.661	<1.13	<0.305	<0.336	<0.418	<0.769	<0.542	<0.409	-	-	<0.152	<0.924	<3.17	<1.25	<0.489	<0.484	<0.417	<2.0	<0.635	<0.914	<0.852	<0.707	<0.718	<1.03	<1.06	<2.15	<0.373	-	<2.49	-	<1.62	-	-	-	32.9	
MW-22	7/23/2019	32.9	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	-	-	<2.07	<2.07	<3.61	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.58	<2.07	-	<2.58	-	<2.07	-	-	-	32.9	
P-23	7/23/2019	34	2.1	1.3 J	0.84 J	4.6	8.4	1.1 J	2.4	<0.53	<1.2	<0.28	<0.85	1.6 JB	<0.44	<0.29	0.30 JB	<0.18	0.82 J	<0.15	<0.31	0.35 J	<3.0	<1.8	<5.0	<1.9	<1.9	<0.43	<0.18	<0.23	<1.4	<0.31	<0.18	<0.18	<0.17	4.8	61.79	
MW-24	5/10/2019	49 B	2.6	<0.54	<0.23	<0.79	<0.25	<0.29	1.1 J	0.71 J	<1.2	0.37 J	<0.83	0.74 J	<0.43	<0.28	0.52 JB	<0.18	<0.50	<0.15	<0.30	<0.33	<2.9	<1.8	<4.9	14 JB *	<1.9	<0.42	<0.18	<0.22	<1.4	<0.30	<0.18	<0.18	<0.17	<0.82	69.04	
P-25S	7/23/2019	48	1.7 J	<0.55	<0.24	<0.81	<0.26	<0.29	<1.0	<0.52	<1.2	0.46 J	<0.84	0.61 JB	<0.44	<0.28	0.46 JB	<0.18	0.83 J	<0.15	<0.30	<0.33	<2.9	<1.8	<4.9	<1.9	<1.9	<0.43	<0.18	<0.23	<1.4	<0						

TABLE 4.b.
MONITORING WELL 1,4-DIOXANE GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

Sample ID	Sample Date	1, 4 Dioxane (ug/L)
MW-9	12/10/2020	<0.61
MW-13	12/10/2020	<1.6
P-10	12/10/2020	<0.61
P-14	12/10/2020	<0.61

Notes:

< indicates no detection

**TABLE 5
RESIDENTIAL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)								
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene	
NR140 Preventive Action Limit (PAL)			0.5	0.5	200	0.5	0.44	200	1000	8	
NR 140 Enforcement Standard (ES)			5	5	1000	5	4.4	1000	10000	40	
Larsen, 895 80th Ave. Well: XX013	01/11/2002	467352	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
Dux, 898 80th Ave. (see 898 Badlands Road) Well:-	09/18/2001	452047	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	01/11/2002	467349	<0.25	<0.25	<0.25	0.38	-	<0.10	<0.25	<0.25	
	11/10/2004	596437	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/19/2006	WPJ0883-36	<0.050	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	10/29/2008	WRK0033-22	<0.050	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	11/03/2009	WSK0160-32	0.23	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
Hoyer, 901 80th Ave. Well: XX014	09/18/2001	452037	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
Magee, 902 80th Ave. Well: RA040	04/01/2004	565093	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	11/10/2004	596436	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/19/2006	WPJ0883-34	<0.050	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	10/29/2008	WRK0033-25	<0.050	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	11/02/2009	WSK016-33	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/15/2010	WTI0566-32	0.27	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
Wilbur, 910 80th Ave. Well: XX015	09/17/2001	451752	2.8	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	04/01/2004	565096	1.8	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	11/10/2004	596435	1.8	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/19/2006	WPJ0883-35	1.7	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	10/29/2008	WRK0033-28	1.8	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	11/02/2009	WSK0160-38	1.9	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/15/2010	WTI0566-23	2.2	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	11/23/2011	WUK0754-31	1.4	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/29/2015	500-102040-21	0.87	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	05/24/2017	500-128753-37	0.93	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	04/12/2022	500-215109-24	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
Dux, 922 80th Ave. NF* Well: RL812	04/01/2004	565090	0.34	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	04/01/2004	565098	2.9	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	11/10/2004	596439	2.4	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/19/2006	WPJ0883-33	2.1	<0.050	<0.050	<0.25	-	<0.050	0.06	<0.25	
	10/30/2008	WRK0033-29	2.2	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	11/02/2009	WSK0160-31	2.8	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/15/2010	WTI0566-18	3	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	11/22/2011	WUK0754-32	2.2	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/30/2015	500-102040-27	1.4	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	05/24/2017	500-128753-28	1.4	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	01/25/2021	500-194179-1	0.8	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
Ogburn Well House, 955/961 80th Ave. Well: DA527	07/20/2020	500-185479-32	0.62	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
	04/11/2022	500-215109-6	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
Ogburn Horse Barn, 961 80th Ave. Well: DA527	10/23/2000	416028	12	<0.25	0.3	<0.25	-	<0.10	<0.25	<0.25	
	09/17/2001	451753	3.3	<0.25	0.34	<0.25	-	<0.10	<0.25	<0.25	
	04/02/2004	565097	8.1	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/19/2006	WPJ0883-31	8.8	<0.050	0.19	0.3	-	<0.050	<0.050	<0.25	
	10/29/2008	WRK0033-21	4.4	<0.050	<0.050	<0.050	-	<0.050	<0.050	<0.050	
	11/02/2009	WSK0160-37	9.1	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	05/12/2014	500-76988-1	2.8	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	08/12/2014	500-82380-1	1.3	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/29/2015	500-102040-15	3.1	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	05/22/2017	500-128753-15	2.4	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	

**TABLE 5
RESIDENTIAL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)								
			Trichloro-ethene	Tetrachloro-ethene	Dichlorodifluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene	
Ogburn-Home, 961 80th Ave. Well: DA527	09/18/2001	452042	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	09/19/2014	500-84744-1	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
Albright (New), 962 80th Ave. Well: KQ880	10/23/2000	416026	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	09/17/2001	451747	<0.25	<0.25	<0.25	0.39 *	-	<0.10	<0.25	<0.25	
	04/01/2004	565095	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	11/10/2004	596434	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	05/23/2006	WPE1038-15	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/29/2008	WRK0033-23	<0.050	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	11/02/2009	WSK0160-35	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/15/2010	WTI0566-21	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	05/22/2017	500-128753-31	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	07/22/2020	500-185479-31	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
04/11/2022	500-215109-12	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34		
Albright (Old), 962 80th Ave. Well: -	10/23/2000	416027	250	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	09/17/2001	451750	180	<1.0	<1.0	2.6 *	-	<0.40	<1.0	<1.0	
	11/24/2004	598080	63	<0.50	0.68	<1.0	-	<0.20	<0.50	<0.25	
	10/29/2008	WRK0033-27	38	<0.050	0.38	<0.25	-	<0.050	<0.050	<0.25	
	11/28/2011	WUK0782-05	1	<0.50	16	<1.0	-	<0.50	<0.50	<0.25	
	03/13/2012	610-2696-1	23	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	05/13/2014	500-76988-1	28	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/30/2015	500-102040-32	16	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
Hicks, 967 80th Ave. Well: VH417	02/16/2011	WUB0502-01	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	11/22/2011	WUK0754-30	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	10/08/2014	500-85893-8	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	09/29/2015	500-102040-24	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	05/22/2017	500-128753-36	<0.16	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	09/04/2020	500-187509-3	<0.16	<0.37	<0.67	<0.32	<0.48	<0.15	<0.22	<0.34	
04/12/2022	500-215109-19	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34		
Burton, 974 80th Ave. Well: OF906	01/24/2001	425059	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	09/17/2001	451755	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	04/01/2004	565092	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	11/10/2004	596441	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	05/23/2006	WPE1038-16	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/19/2006	WPJ0883-38	<0.050	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	10/30/2008	WRK0033-26	<0.050	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	11/02/2009	WSK0160-36	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
07/23/2020	500-185479-33	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34		
Schwinden, 978 80th Ave. Well: -	04/01/2004	565091	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
Polan, 978 80th Ave. Well: XX016	09/18/2001	452040	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	05/28/2004	573018	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	11/10/2004	596438	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	05/23/2006	WPE1038-17	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/19/2006	WPJ0883-32	<0.050	<0.050	<0.050	<0.25	-	0.052	<0.050	<0.25	
	10/29/2008	WRK0033-30	<0.050	<0.050	<0.050	<0.25	-	0.052	<0.050	<0.25	
	11/02/2009	WSK0160-39	0.44	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
09/14/2010	WTI0566-03	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25		
10/08/2014	500-85893-9	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16		
Loverude, 985 80th Ave. Well: XX017	04/01/2004	565094	<0.20	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	

**TABLE 5
RESIDENTIAL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)								
			Trichloro-ethene	Tetrachloro-ethene	Dichloro-di-fluoromethane	Methylene Chloride	Bromoform	Toluene	Xylenes	Naphthalene	
Krueger, 997 80th Ave. Well: XX018	01/11/2002	467353	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
Dennis Albright, 988 83rd Ave. Well: XX019	01/11/2002	467346	<0.25	<0.25	<0.25	0.76	-	<0.10	<0.25	<0.25	
Hutera, 903 87th Ave. Well: SY250	09/30/2015	500-102040-36	<0.19	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	08/28/2020	500-187133-2	1.2	<0.37	<0.67	4.5 J	<0.48	<0.15	<0.22	<0.34	
	04/12/2022	500-215109-47	<1.6	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
904 87th Ave.	04/12/2022	500-215109-48	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
Mortel, 907 87th Ave. Well: TL430	09/30/2015	500-102040-38	8.8	<0.17	<0.20	<0.68	-	<0.11	<0.068	<0.16	
	08/28/2020	500-187133-1	3.7	<0.37	<0.67	4.2 J	<0.48	<0.15	<0.22	<0.34	
908 87th Ave. Well: SY999	09/18/2020	500-188153-1	3.8	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
	10/06/2020	500-189034-1	3	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
	11/11/2020	500-191211-1	3.6	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
	11/11/2020	500-191211-2	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
Thomas, 811 99th St. Well: DU114	01/11/2002	467347	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
877 Badlands Rd. Well: SX833	08/26/2020	500-187022-6	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	0.86 J	
898 Badlands Rd. (see 898 80th Ave for historic data) Well: XX020	09/04/2020	500-187509-4	<0.16	<0.37	<0.67	<0.32	<0.48	<0.15	<0.22	<0.34	
877 Benoy Road Well: XX021	12/08/2020	500-192220-7	<0.16	<0.37	<0.67	<0.32	<0.48	<0.15	<0.22	<0.34	
824 Hidden Lake Rd. Well: QZ186	09/03/2020	500-187509-2	<0.16	<0.37	<0.67	<0.32	<0.48	<0.15	<0.22	<0.34	
836 Hidden Lake Rd. Well: QZ151	09/03/2020	500-187509-1	0.30 J	<0.37	<0.67	<0.32	<0.48	<0.15	<0.22	<0.34	
O'Malley, 905 Highway 12 Well: CZ182	09/18/2001	452052	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
873 Jane Cir. Well: XX022	08/26/2020	500-187022-3	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
882 McDiarmid Dr. Well: XX023	08/26/2020	500-187022-5	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
Dornseif, 843 Polen Dr. Well: XX024	09/18/2001	452045	3.1	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
	01/11/2002	467351	1.5	<0.25	<0.25	0.29	-	<0.10	<0.25	<0.25	
	05/28/2004	573019	2	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	11/09/2004	596440	0.81	<0.50	<0.50	<1.0	-	<0.20	<0.50	<0.25	
	10/19/2006	WPJ0883-37	1	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	10/29/2008	WRK0033-24	0.98	<0.050	<0.050	<0.25	-	<0.050	<0.050	<0.25	
	11/02/2009	WSK0160-34	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.25	
	09/15/2010	WTI0566-27	<0.20	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	
	05/24/2017	500-128753-29	3.2	<0.37	<0.67	<1.6	-	<0.15	<0.22	<0.34	
	04/12/2022	500-215109-22	1.4	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	

filters w

**TABLE 5
RESIDENTIAL VOC GROUNDWATER ANALYTICAL RESULTS
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

Sample Location	Sample Date	LAB ID	Analytical Compounds (ug/L)								
			<i>Trichloro-ethene</i>	<i>Tetrachloro-ethene</i>	<i>Dichlorodifluoromethane</i>	<i>Methylene Chloride</i>	<i>Bromoform</i>	<i>Toluene</i>	<i>Xylenes</i>	<i>Naphthalene</i>	
Hanson, 847 Polen Dr.	09/18/2001	452049	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
Well: XX025	01/11/2002	467350	<0.25	<0.25	<0.25	<u>0.56</u>	-	<0.10	<0.25	<0.25	
Risselman, 851 Polen Dr.	09/18/2001	452048	<0.25	<0.25	<0.25	<0.25	-	<0.10	<0.25	<0.25	
Well: XX026	08/26/2020	500-187022-4	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
852 Polen Dr.	01/12/2021	500-193754-1	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
Well: XX027											
874 Wyldwood Ln.	08/26/2020	500-187022-1	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
Well: XX028											
Thelan, 875 Wyldwood Ln.	01/11/2002	467348	<0.25	<0.25	<0.25	0.34	-	<0.10	<0.25	<0.25	
Well: MY961	08/26/2020	500-187133-3	<0.16	<0.37	<0.67	<1.6	5.1	<0.15	<0.22	<0.34	
860 Young Rd.	08/26/2020	500-187022-2	<0.16	<0.37	<0.67	<1.6	<0.48	<0.15	<0.22	<0.34	
Well: XX029											

* Common Lab Contaminant NF* Not Carbon Filtered (D) Deep Piezometer
 ** Results after 4/28/04 are post-injection. (M) Medium Depth Piezometer
 Contaminant concentrations in excess of NR 140 ES are in bold face font. # Split sampling completed during development.
 Contaminant concentrations in excess of NR 140 PAL are underlined. ## Sample collected with bailer after development.
 No other compounds were detected ### Sample collected during the purging process (while pumping).
 J Flag: Reported value was between the limit of detection and the limit of quantitation. B Flag: Compound was found in the blank and sample.
 red italic font indicates a post-filter sample

TABLE 6.a.
INJECTION SUMMARY - SEPTEMBER 2019
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

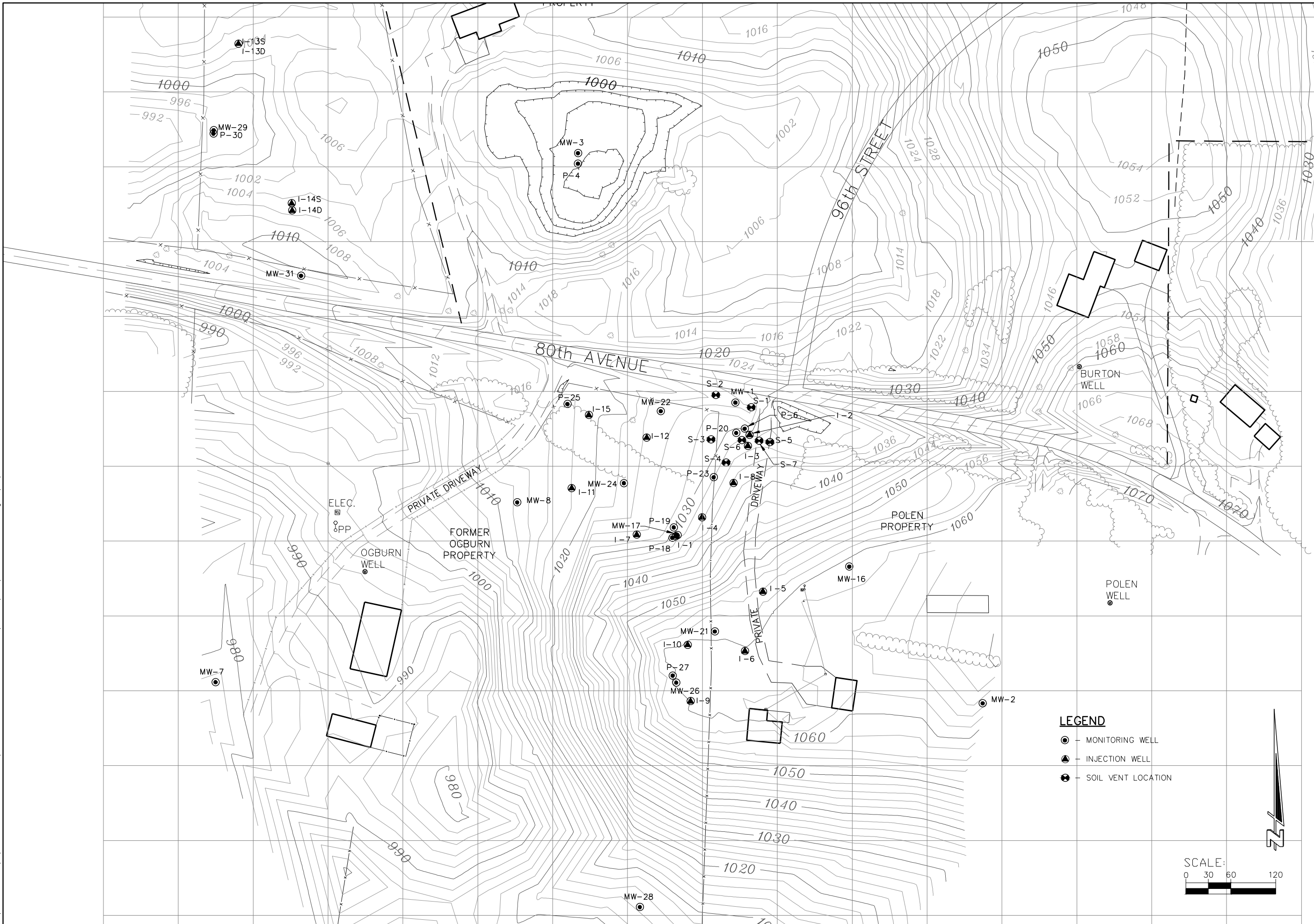
Injection Point	Date	Time On	Time Off	Injection Depth	Potassium Permanganate Concentration	Flow Rate (gpm)	Injection Pressure (psi)	Gallons Injected	Totals/Comments
I-4-S	9/24/19	8:46	9:48		2.5%	10.8	0	500	500
I-1-4.	9/24/19	8:52	12:30		2.5%	10.1	0	750	750
I-4-D	9/24/19	9:49	13:05		2.5%	9.8	0	500	500
I-1-2.	9/24/19	12:32	14:00		2.5%	9.7	0	750	750
I-7-S	9/24/19	13:06	15:41		2.5%	5.9	40-60	500	Taking out 1 of I-7 wells aim for 1000
	9/24/19	16:00	17:20		2.5%	5.1	40-60	975	1475
I-11	NA	NA	NA		2.5%	9.5	2	1000	1000
I-7-D	9/24/19	15:42	15:53		2.5%	8.7	10-60.	25	25 daylight around the casing
I-15	9/25/19	8:10	15:48		2.5%	7.1	20-70	1948	
		15:50	17:26		2.5%	7.1	20-70	552	2500
I-12	9/25/19	8:12	10:25		2.5%	8.6	2	1000	1000
I-9	9/25/19	12:26	15:30		2.5%	6.0	2	1000	1000
I-10	9/25/19	15:30	18:06		2.5%	6.0	2	1000	1000
I-6-D	9/26/19	8:39	11:12		2.5%	11.8	2	1000	1000
I-5-D	9/26/19	8:40	11:52		2.5%	5.3	56-80	1000	1000
I-6-S	9/26/19	11:15	14:20		2.5%	10.4	20	500	500
I-5-S	9/26/19	11:53	15:15		2.5%	11.5	2	1000	1000
I-14-S	9/26/19	16:40	18:06		2.5%	11.5	2	1000	
	9/27/19	8:30	10:05		2.5%	12.5	0	2000	3000
I-14-D	9/26/19	8:15	8:20		2.5%	100+	0	0	too much pressure on the well to inject
I-13-S	9/27/19	8:17	12:11		2.5%	6.5	30-50	1000	1000
I-13-D	9/27/19	12:12	14:30		2.5%	10.1	8	2000	2000
								Total	20,000 gallons

TABLE 6.b.
INJECTION SUMMARY - APRIL 2020
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

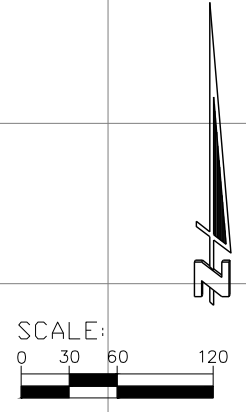
Injection Point	Date	Time On	Time Off	Injection Depth	Potassium Permanganate Concentration	Flow Rate (gpm)	Injection Pressure (psi)	Gallons Injected	Totals/Comments
I-6S	4/27/20	14:10	16:54		2.5%	2.2	40	202	
	4/28/20	7:33	11:30		2.5%	1.8	60	400	602 Pressure over 80 PSI so volume to be placed in I-5
I-6D	4/27/20	14:10	15:50		2.5%	12.4	0	1000	1000
I-10	4/27/20	14:10	16:54		2.5%	8.2	0	800	4/28 daylighting in the casing
	4/28/20	7:33	11:03		2.5%	10.4	2	1200	2000
I-12	4/28/20	11:42	18:08		2.5%	8.0	20	1600	
	4/29/20	7:55	9:40		2.5%	7.0	0	400	530 gallons from I-15
	4/30/20	12:57	14:02		2.5%	6.0	0	530	2530
I-5S	4/28/20	11:50	14:06		2.5%	12.0	0	1398	1398
I-11	4/29/20	7:55	12:28		2.5%	6.0	16	2000	2000
I-5-3	4/29/20	9:41	13:37		2.5%	6.8	0	1000	1000
I-5-5	4/29/20	13:40	17:00		2.5%	6.8	0	800	
	4/30/20	7:46	9:00		2.5%	6.0	0	200	1000
I-7D	4/29/20	12:30	13:48		2.5%	6.7	10	150	150 daylighting in well casing, remaining volume put in I-7S
I-7S	4/29/20	13:57	17:00		2.5%	5.0	20	700	
	4/30/20	8:30	12:36		2.5%	6.0	18	1150	1850
I-15	4/29/20	13:00	17:00		2.5%	5.6	20	750	
	4/30/20	7:36	12:55		2.5%	4.0	46	720	1470 remaining volume going in I-12 pressure over 80 PSI
I-13S	4/30/20	15:14	17:42		2.5%	5.0	22	410	
	5/1/2020	7:20	10:34		2.5%	6.0	24	590	1000
I-13D	4/30/20	15:14	17:42		2.5%	7.8	4	1000	1000
I-14D	4/30/20	16:30	17:15		2.5%	1.0	54	32	32 daylighting up well casing and over 80 PSI, remaining volume to I-14S
I-14S	4/30/20	17:16	17:42		2.5%	6.0	0	158	
	5/1/20	7:20	12:45		2.5%	13.0	2	2810	2968
								Total	20,000 gallons

Figures

I:\Clients-Memo\W\W2481 - Wis DNR - Baldwin\014 Town of Warren 2018 - 2019\100cad\DWG\00base_24810011.dwg 06/21/22 1:17:20 PM



- LEGEND**
- - MONITORING WELL
 - ▲ - INJECTION WELL
 - ⊙ - SOIL VENT LOCATION



NO.	DATE	DESCRIPTION

ARCHITECT/ENGINEER:

800.472.7272
www.cedarcorp.com

engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

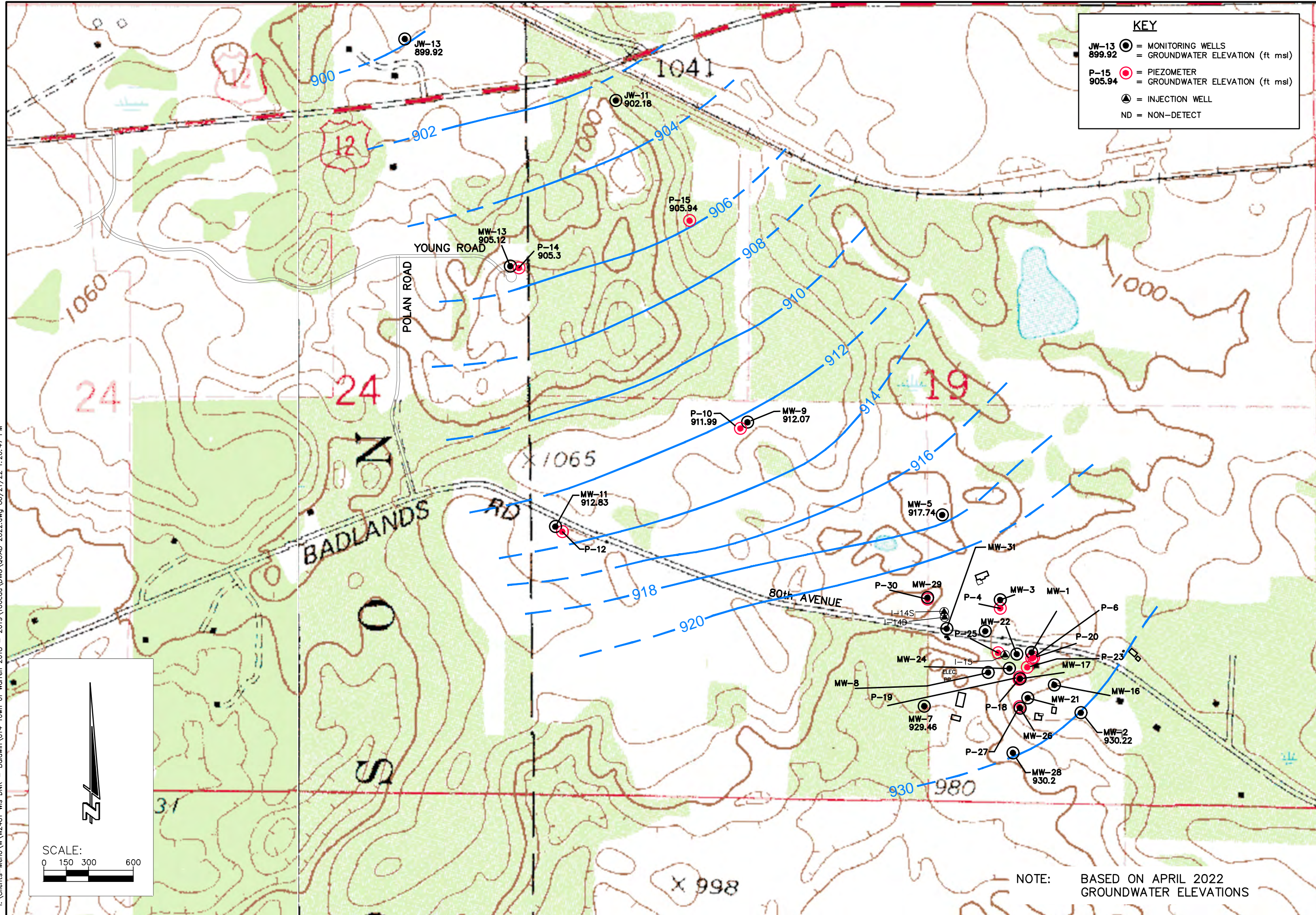
CONSULTANT:

**FIGURE 1:
DETAILED SITE MAP -
SOURCE AREA
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN**

JOB NO. W2481-0014	
DWG 00base...11	LAYOUT Fig1
DRAWN BY: KAT	CHECKED BY: AMB
ISSUE DATE JUNE 2022	
SET TYPE ENVIRO INVESTIGATION	

FIGURE 1

I:\Clients-Memo\W2481 Wfs DNR - Baldwin\014 Town of Warren 2018 - 2019\100cad\DWG\QUAD 2022.dwg 06/21/22 11:20:47 PM



KEY	
JW-13 899.92	● = MONITORING WELLS ○ = GROUNDWATER ELEVATION (ft msl)
P-15 905.94	● = PIEZOMETER ○ = GROUNDWATER ELEVATION (ft msl)
▲	= INJECTION WELL
ND	= NON-DETECT

NO.	DATE	DESCRIPTION

ARCHITECT/ENGINEER:



800-472-7372
www.cedarcorp.com

engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

CONSULTANT:

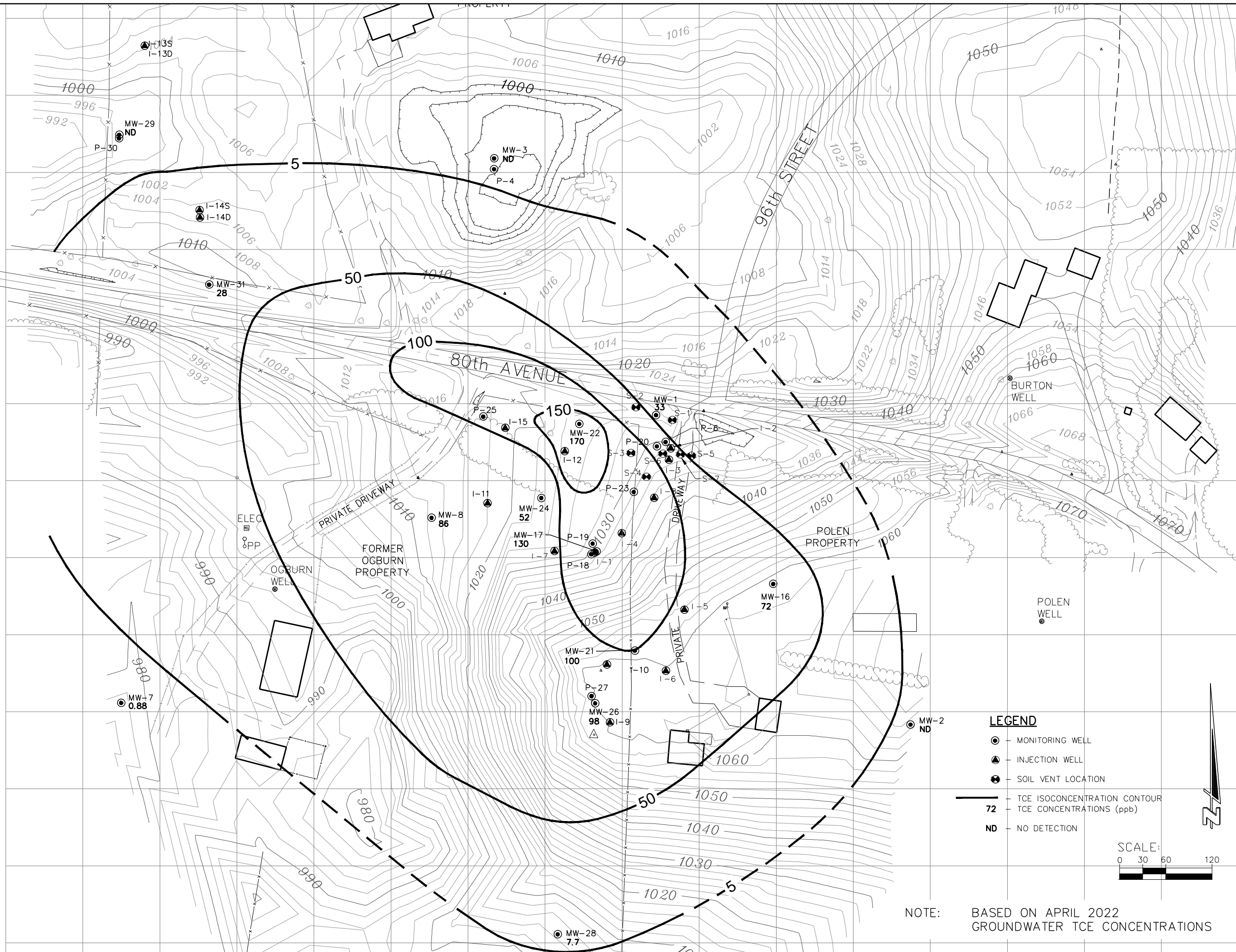
**FIGURE 2:
GENERALIZED GROUNDWATER
FLOW MAP**
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

JOB NO. W2481-0014	
DWG QUAD 2022	LAYOUT FIG2
DRAWN BY: KAT	CHECKED BY: AMB
ISSUE DATE JUNE 2022	
SET TYPE ENVIRO INVESTIGATION	

NOTE: BASED ON APRIL 2022
GROUNDWATER ELEVATIONS

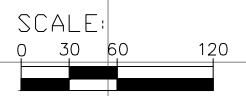
FIGURE 2

I:\Clients-Memo\W\W2481 - Wis DNR - Baldwin\014 Town of Warren 2018 - 2019\100cad\DWG\00base_24810011.dwg 06/21/22 1:17:40 PM



LEGEND

- MONITORING WELL
- ▲ INJECTION WELL
- ⊙ SOIL VENT LOCATION
- TCE ISOCONCENTRATION CONTOUR
- 72 TCE CONCENTRATIONS (ppb)
- ND NO DETECTION



NOTE: BASED ON APRIL 2022 GROUNDWATER TCE CONCENTRATIONS

NO.	DATE	DESCRIPTION

ARCHITECT/ENGINEER:

800.472.7272
www.cedarcorp.com

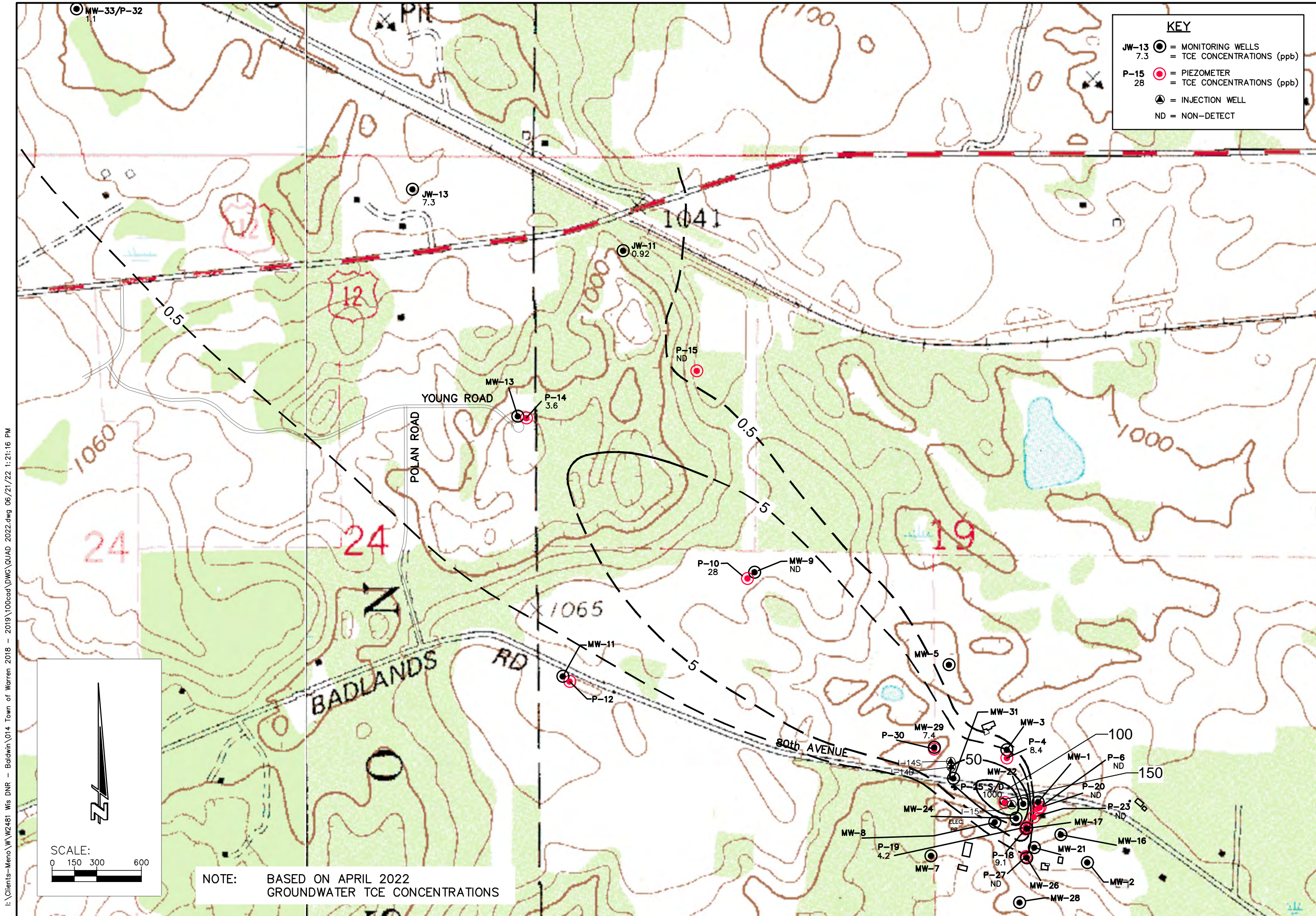
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

CONSULTANT:

**FIGURE 3:
ISOCONCENTRATION MAP -
WATER TABLE**
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

JOB NO. W2481-0014	
DWG 00base...11	LAYOUT Fig3
DRAWN BY: KAT	CHECKED BY: AMB
ISSUE DATE JUNE 2022	
SET TYPE ENVIRO INVESTIGATION	

FIGURE 3



NO.	DATE	DESCRIPTION

ARCHITECT/ENGINEER: **Cedar CORPORATION**
 800-472-7372
 www.cedarcorp.com

engineers • architects • planners • environmental specialists
 land surveyors • landscape architects • interior designers

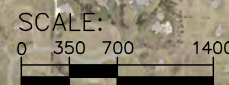
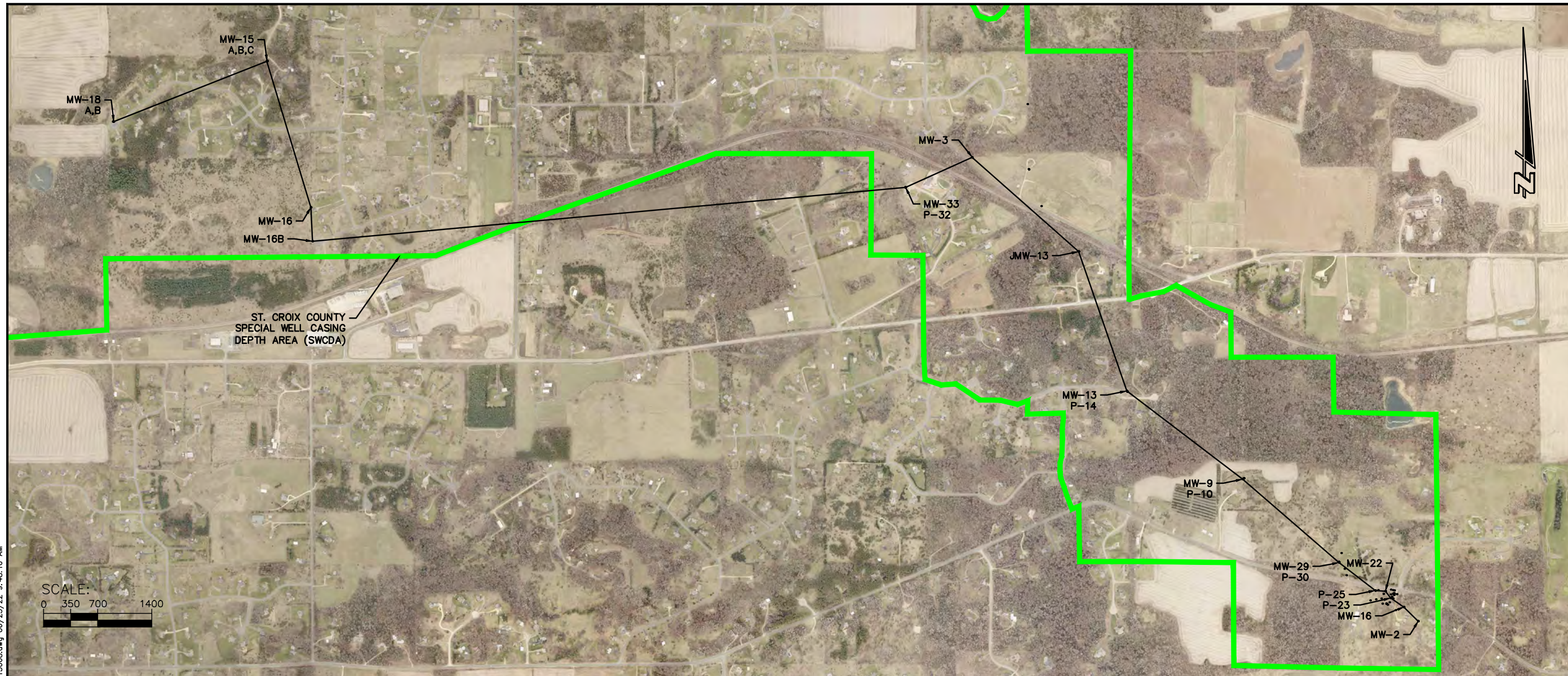
CONSULTANT:

FIGURE 4:
**ISOCONCENTRATION MAP -
 PIEZOMETERS**
 TOWN OF WARREN TCE INVESTIGATION
 ST. CROIX COUNTY, WISCONSIN

JOB NO. W2481-0014	
DWG QUAD 2022	LAYOUT FIG4
DRAWN BY: KAT	CHECKED BY: AMB
ISSUE DATE JUNE 2022	
SET TYPE ENVIRO INVESTIGATION	

FIGURE 4

I:\Clients-Memo\W2481 Wis DNR - Baldwin\014 Town of Warren 2018 - 2019\100cad\DWG\QUAD 2022.dwg 06/21/22 11:21:16 PM



JOB NO.	L5115-008
BOOK NO.	
DRAWN BY	CGA / RDJ
CHECKED BY	AB
DATE	JUNE 2022
REVISIONS	
REFERENCE FILE	00base_*.dwg
DRAWING FILE	00base_*.dwg

www.cedarcorp.com
800-472-7372

engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

Cedar
corporation

2820 Walton Commons W.
Madison, WI 53718
608-354-0037
FAX 608-298-5624

1635 Bellevue Street
Green Bay, WI 54311
920-491-9081
FAX 920-491-9020

604 Wilson Ave.
Menomonee, WI 54751
715-235-3081
FAX 715-235-3727

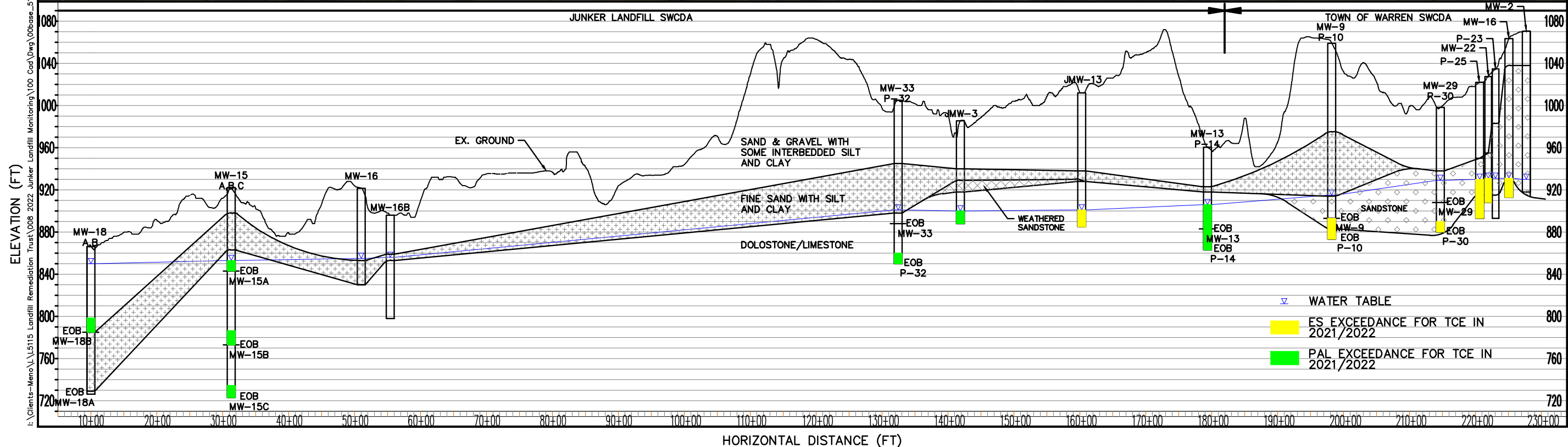


FIGURE 5: GEOLOGIC CROSS-SECTION
TOWN OF WARREN TCE INVESTIGATION
ST. CROIX COUNTY, WISCONSIN

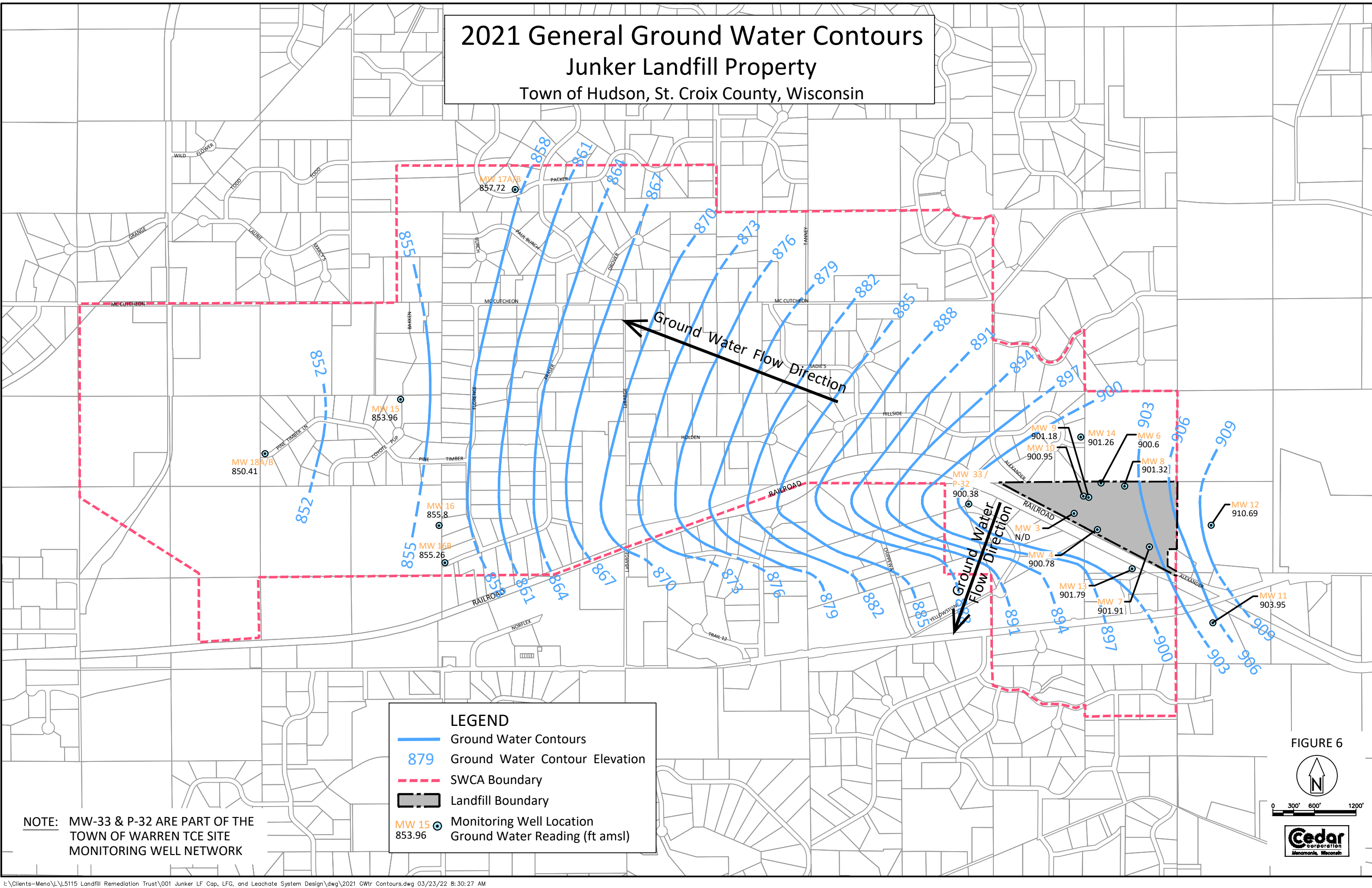
FIGURE 5

I:\Clients-Memo\U5115 Landfill Remediation Trust\008 2022 Junker Landfill Monitoring\100 Cad\Draw\00base_5115008.dwg 06/23/22 9:48:10 AM

2021 General Ground Water Contours

Junker Landfill Property

Town of Hudson, St. Croix County, Wisconsin



LEGEND

- Ground Water Contours
- 879 Ground Water Contour Elevation
- - - SWCA Boundary
- Landfill Boundary
- Monitoring Well Location
- MW 15
853.96 Ground Water Reading (ft amsl)

NOTE: MW-33 & P-32 ARE PART OF THE TOWN OF WARREN TCE SITE MONITORING WELL NETWORK

FIGURE 6

Appendix A

Standard Operating Procedures

Standard Operating Procedure

Collection of Quality Control Samples

Purpose

To describe the procedures used in the collection of quality control samples (masked duplicate samples, trip blanks, field blanks, and equipment blanks).

Applicability

This procedure applies to sample handling techniques used by both the technician(s) and the laboratory in regards to quality control.

Definitions

Masked Split Sample. This is the collection of a sample at the same time the original sample is being collected. Both samples are collected, preserved, and analyzed exactly the same. This is done to check laboratory and sampling precision.

Trip Blank. Is a water blank free of any contaminants, prepared prior to sampling events by the laboratory providing the sampling containers. The purpose of the trip blank is to determine if contamination has occurred from:

1. Improper sampling container cleaning.
2. Contaminated blank source water.
3. Sample contamination during storage and transportation due to exposure to contaminants.
4. Other environmental conditions during sampling.

Field Blank. A sample container prepared onsite by filling it with (analyte-free) water. These blanks are used to evaluate:

1. The effects of onsite environmental contaminants.
2. The purity of reagents used as preservative or additives.
3. General sample container filling/collecting techniques.

Equipment Blank. A sample collected from the final (analyte-free) rinse water. The water is rinsed on or through sampling equipment. The rinse water is collected for analysis. These blanks are used to determine:

1. The effectiveness of field cleaning procedures.
2. Any sources of contamination in a trip blank.

References

Wisconsin Department of Natural Resources Groundwater Sampling Procedures Field Manual ((PUBL- DG-038 96)

Procedure

Quality Control Samples

- C. Split duplicate sample:
1. Collect samples by rotating sampling containers from original sample to the split (using the same exact methods for both).
 2. Preserve, store, and transport the split duplicate sample in the same manner as the original sample.
 3. Submit the masked duplicate sample to the laboratory for the same analysis as the original sample.

Note: Ten percent of all samples are collected in duplicate (split).

D. Trip blank:

1. Trip blanks are sealed prior to sampling (prepared by the laboratory doing the analysis).
2. Transport trip blanks to the site in the sample storage cooler.
3. Trip blanks are not to be opened in the field.
4. Transport trip blanks back to the laboratory in the sample storage cooler.
5. The trip blanks should be listed on the chain-of-custody along with the other samples and the analysis required. (Generally, VOCs are the only requirement for trip blanks).

Note: Labeling of all sample blank containers follow the SOP for the collection of groundwater samples.

E. Field blank:

1. Get the appropriate sampling containers. (Generally, field blanks are taken for each parameter.)
2. Prepare field blanks onsite by filling sample containers with the (analyte-free) water.
3. Seal the field blank sample containers and store with other samples collected (should be handled exactly the same).

Note: One field blank should be prepared per day or at a frequency of 10 percent of the samples per sampling event, whichever is greater.

4. Transport all of the samples to the laboratory for analysis. The analysis on both field blanks and samples should be exactly the same.

F. Equipment Blank:

Bailer blank:

1. Pour (analyte-free) water into a clean bailer.
2. Pour this water into the appropriate sampling containers.
3. Store and transport the equipment blank with the appropriate samples for laboratory analysis.

Filtered equipment blank:

1. Pour (analyte-free) water into the groundwater sampling filter.
2. Begin filtering.
3. After filtering is completed, pour water into the appropriate sampling container.
4. Store and transport the equipment blank with the appropriate samples for laboratory analysis.

Note: The filtered equipment blank is usually conducted for filtered metals samples.

Documentation

The quality control samples are documented on the chain-of-custody record and the field log data sheet. The technician(s) are required to document any such quality control samples.

Standard Operating Procedure
Collection of Soil and Groundwater
Samples and Field Parameters

Purpose

To describe the procedures necessary for preparing and shipping soil and groundwater samples to be laboratory analyzed.

Soils

When a soil sample is to be laboratory analyzed, a sample is taken and sealed in a laboratory provided glass jar having a Teflon lined septum. Sampling analytical guidance is provided from “Modified GRO Method for Determining Gasoline Range Organics”, Wis. DNR publication, PUBL-SW-140, September 1995. For modified GRO, VOC, and PVOC analyses, a minimum of 25 grams and up to a maximum of 70 grams of samples are preserved in methanol in a 120 ml capacity sample containers. Alternatively, a laboratory provided soil syringe is used to collect a standard volume of soil for placement into a 40 ml vial pre-filled at the laboratory with 10 ml of methanol. For DRO analysis, a minimum of 25 grams and up to a maximum of 70 grams of sample are collected in 120 ml capacity sample containers. Additional soil samples are collected in four ounce sample jars to determine dry weights for GRO, DRO, and VOC analyses. All cyanide, metals, and PAH samples are collected in four ounce jars with Teflon lined septums. The pertinent sample data is recorded on the label and on the chain-of-custody document and is then transported to an analytical laboratory with the completed chain-of-custody document. The sample is transported in a cooler at a maintained temperature of 4°C.

Groundwater

Monitoring wells being sampled after development must be purged. According to the Wisconsin Department of Natural Resources Groundwater Sampling Field Manual (PUBL-DG-038-96), the monitoring well to be sampled must have three well volumes purged by use of a pump or bailer and transferred to a laboratory acquired bottle by a bottom emptying device. Field parameters including temperature, pH, dissolved oxygen, turbidity, and specific conductance, are recorded immediately following purging of the well using field instruments with the following indicator parameter accuracy limits, per manufacturer’s operating procedures and the Wisconsin Department of Natural Resources Groundwater Sampling Field Manual:

Parameter	Accuracy Limits
Dissolved Oxygen	+/- 10%
Specific Conductance	+/- 3%
pH	+/- 0.1 pH standard units
Temperature	+/- 3%
Turbidity	+/- 10%
Eh	N/A
Water Level	+/- 1/100 ft.

Nitrile disposable gloves are worn throughout the purging and collection process. Sampling analytical guidance is provided from Table C-3, Appendix C, Interim Guidance on Natural Attenuation for Petroleum Releases, Wis. DNR publication, Pub-RR-614, January 2014. GRO samples are collected in 40 ml glass vials, DRO and PAH samples in one liter amber glass containers, and VOC and PVOC samples in three 40 ml glass vials. All vials and containers have Teflon lined septums. All DRO, GRO, VOC, and PVOC samples are preserved with HCl as the method requires. Samples collected for metals are field filtered per EPA requirements and collected in HNO₃, preserved containers. Samples collected for cyanide are filtered and preserved with NaOH. All other parameters are collected in containers provided by the analytical laboratory appropriate for the parameter being analyzed. The samples are preserved on ice at or below a temperature of 4°C throughout handling and shipment to the laboratory.

Sample Preservation during Shipping

Samples to be laboratory analyzed are placed in a cooler with ice to preserve the sample temperature at or just below 4°C. Samples are shipped in an insulated sealed cooler with ice and vermiculite to maintain the 4°C temperature. When opened in the laboratory, the sample custodian notes sample conditions and temperature or notes “on ice” on the chain-of-custody record to verify sample preservation. In the laboratory, samples are stored in a refrigerated location.

Laboratory Procedures

For this project, the samples were sent to a Wisconsin Department of Natural Resources certified laboratory, Test America, Inc., University Park, IL (Certification Number 999580010). Analytical procedures follow the guidelines and methods identified in Wis. Adm. Code NR149 and/or the EPA Methods Manual (EPA SW-846), which fully describes the procedures for each method. These procedures include specific quality control criteria as associated with the particular method. The requirements include instrument calibration and quality control samples and require daily laboratory performance tests as well as demonstrations of instrument precision and accuracy.

Standard Operating Procedure

Laboratory Analytical Sample Documentation on a Chain-of-Custody

Purpose

This section describes procedures to identify samples and document handling of the sample by chain-of-custody. The purpose of these procedures is to ensure that the integrity of the samples is maintained during collection, transportation, storage and analysis.

Sample Identification

Sample identification documents are carefully prepared so that sample identification and chain-of-custody is maintained and sample disposition controlled.

Sample identification documents include:

- field notebooks
- sample labels
- chain-of-custody (DNR Form 4400-151) or equivalent

Each sample is labeled, physically preserved, and sealed immediately after collection. To minimize handling of sample containers, labels are completed immediately prior to sample collection. The sample label is completed using waterproof ink and is firmly affixed to the sample containers. The sample label provides the following information:

- location
- sample number
- date and time of collection
- analysis required
- name of sampler

A chain-of-custody record is fully completed in duplicate by the sampler immediately following sample collection.

Shipping Transfer of Custody

The coolers in which the samples are packed are accompanied by the chain-of-custody record. When transferring samples, the individuals relinquishing and receiving them sign, date, and note the time of transfer on the chain-of-custody record.

Laboratory Custody Procedures

A designated sample custodian accepts custody of the shipped samples and verifies that the sample identification number matches that on the chain-of-custody record. This individual also records the temperature of the received samples on the chain-of-custody records. Any discrepancies are immediately noted to the sampler. A copy of the completed chain-of-custody record is retained by the laboratory until analyses are completed. The record is returned to the project file with the analytical results.

Standard Operating Procedures

Decontamination of Monitoring Well Sampling Equipment

Purpose

All sampling-related equipment including pumps, meters, and materials coming into contact with actual sampling equipment or with sampling personnel will be decontaminated as described below. Disposable bailers, protective gear, and filtration devices will be discarded after one use. Non-disposable bailers are used once and are then decontaminated as described below.

Responsibilities

The field technicians are responsible for decontamination in the field at each individual sampling point. Decontamination will be performed before sampling and after working at each sampling point. All equipment will be handled in a manner that minimizes cross-contamination between points. After cleaning, the equipment will be visibly inspected to detect any residues or other substances that may exist after normal cleaning. If inspection reveals that decontamination was insufficient, the decontamination procedures will be repeated.

Procedures for Monitoring Well Equipment

Equipment will be decontaminated in the following manner:

1. Equipment that does not contact sample water or the inside of the well:
 - a. Rinse with clean control water.
 - b. Inspect for remaining particles or surface film and repeat cleaning and rinse procedures if necessary.
2. Equipment that contacts sample water or the inside of the well:
 - a. Clean (inside and outside where possible) with an Alconox/clean water solution applied with a scrub brush made of inert materials.
 - b. Rinse with clean water.
 - c. Inspect for remaining particles or surface film and repeat cleaning and rinse procedures if necessary.
 - d. Shake off remaining water and allow to air dry.

The internal surfaces of pumps and tubing that cannot be adequately cleaned by the above methods alone will be cleaned by circulating decontamination fluids through them. The fluids will be circulated through this equipment in the order shown above. Special care will be exercised to ensure that the "rinse" fluids will be circulated in sufficient quantities to completely flush out contaminants and detergents.

When transporting or storing equipment after cleaning, the equipment will be protected in a manner that minimizes the potential for contamination.

Standard Operating Procedure

Measuring Static Water Level and Total Well Depth

Purpose

Describe the instruments and techniques for measuring static water level and total well depth.

References

Wisconsin Department of Natural Resources Groundwater Sampling Procedures Field Manual (PUBL-DG-038 96)

Discussion

Types of water level measurement devices:

Electric Water Level Indicator. This instrument consists of a spool of wire or steel tape graduated in hundredths with a probe attached to the end. When the probe comes in contact with the water, the circuit is complete and the light and/or buzzer on the instrument signals the contact. The instrument's power source is AA or 9-volt batteries.

Popper. A popper consists of a hollow weight, usually a deep socket with an eye bolt attached. This is secured to the end of a measuring tape. When the socket strikes the water surface, a "popping" sound is made. The accurate reading can be made by lifting and lowering the socket in short strokes, reading the tape at contact. Poppers have a correction factor because of the way they are made. Always check the unit's correction factor and record the corrected water level. Poppers are ineffective in wells where the water level is within the well screen.

Note: The "popping" sound cannot be heard if made in the well screen.

Tape and Chalk. This consists of a steel measuring tape and chalk or water indicating paste. To determine the water level, the first two to three feet of the metal tape are coated with chalk or paste. Lower the tape into the well to the approximate groundwater depth and retrieved. Subtract the water contact area from the total length for the depth to groundwater .

Standard Operating Procedure

Measuring LNAPL/DNAPL Levels in Wells

LNAPL/DNAPL (free product) level measurements are made in reference to an established point on the well casing. Measurements are made from the high side of the riser pipe or well casing unless otherwise specified. All level measurements are made and recorded to the nearest 0.01 foot.

Measuring LNAPL/DNAPL elevations can be accomplished using an interface probe or the rope method. Measuring devices will be cleaned between wells with tap water and tri-sodium phosphate (TSP) and rinsed with tap water.

Interface probe

An interface probe consists of a flat measuring tape cable, a probe attached to the end, and an indicator. After grounding the instrument, the probe is slowly lowered into the well casing. The indicator signals when the probe contacts LNAPL. The probe depth is recorded. The probe is then lowered further into the well until the water / LNAPL interface is encountered. This interface is also recorded. If DNAPL is present, the probe is lowered further into the well until the probe contacts the water / DNAPL interface. The depth of DNAPL is recorded and the total depth of the well is also recorded.

Rope Method

The rope method will be used if an interface probe is not compatible with the LNAPL/DNAPL. A rope with a weight attached is lowered into the LNAPL/DNAPL. The LNAPL/DNAPL will stain the rope and the DNAPL elevation can be measured. The procedures are as follows:

- a. Attach a weight to the end of a nylon rope.
- b. Lower the rope to the expected depth of the LNAPL/DNAPL and mark the rope against the high side of the well casing.
- c. Remove the rope from the well and measure the length of rope from the mark to the highest point of the LNAPL/DNAPL.
- d. Remove the weight and discard the stained section of rope.

Standard Operating Procedure

Calculation of Purge Volumes for Groundwater Sampling Wells

Purpose

The purpose of this procedure is to describe the methods used in calculating and measuring purge volumes.

Applicability

The procedure applies to the amount of water that is purged out of a well before sampling can occur.

Definition

Purge volume is a specific amount of water taken out of a well before sampling.

Reference

Wisconsin Department of Natural Resources Groundwater Sampling Procedures Field Manual (PUBL-DG-038-96)

Procedure

Calculating and Measuring Purge Volumes

1. Calculate the volume of standing water in the well (using the following equation):

Note: Please see Table 1 for volume calculations for standard well casing and borehole diameters.

- a. $V = (\pi) \cdot (r^2) \cdot (h)$
V = Volume in cubic feet of standing water
= 3.14
r = Radius of the well casing or hole (in feet)
h = Height of the column of water in the well (in feet)
(h = water level - total well depth)

2. Convert the volume of standing water in the well from cubic feet to gallons using the following equation:

- a. $WV = (V) \cdot (7.48 \text{ gallons per cubic foot})$
WV = Well volume in gallons

3. Determine the amount of water to be purged (using this equation):

- a. $VP = (WV)(NWV)$
VP = Volume of water pumped
WV = Well volume in gallons
NWV = Number of well volumes that monitoring plan requires to be purged

Documentation

The technicians will document flow rate, well volume, time pumped/bailed, volume removed, water level, and total well depth on the field log data sheet.

Table 1
Water Volume in Well Casing or Borehole

Diameter of Casing or Hole (In)	Gallons per Foot of Depth	Cubic Feet per Foot Depth	Liters per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.507	0.507 x 10 ⁻³
1 1/2	0.092	0.0123	1.140	1.140 x 10 ⁻³
2	0.163	0.0218	2.027	2.027 x 10 ⁻³
2 1/2	0.255	0.0341	3.167	3.167 x 10 ⁻³
3	0.367	0.0491	4.560	4.560 x 10 ⁻³
3 1/2	0.500	0.0668	6.206	6.206 x 10 ⁻³
4	0.653	0.0873	8.106	8.106 x 10 ⁻³
4 1/2	0.826	0.1104	10.26	10.26 x 10 ⁻³
5	1.020	0.1364	12.67	12.67 x 10 ⁻³
5 1/2	1.234	0.1650	15.33	15.33 x 10 ⁻³
6	1.469	0.1963	18.24	18.24 x 10 ⁻³
7	2.000	0.2673	24.83	24.83 x 10 ⁻³
8	2.611	0.3491	32.43	32.43 x 10 ⁻³
9	3.305	0.4418	41.04	41.04 x 10 ⁻³
10	4.080	0.5454	50.66	50.66 x 10 ⁻³
11	4.937	0.6600	61.30	61.30 x 10 ⁻³
12	5.875	0.7854	72.96	72.96 x 10 ⁻³
14	8.000	1.069	99.30	99.3 x 10 ⁻³
16	10.44	1.396	129.70	129.7 x 10 ⁻³
18	13.22	1.767	164.15	164.2 x 10 ⁻³
20	16.32	2.182	202.66	202.7 x 10 ⁻³
22	19.75	2.640	245.21	245.3 x 10 ⁻³
24	23.50	3.142	291.83	291.9 x 10 ⁻³
26	27.58	3.687	342.49	342.6 x 10 ⁻³
28	32.00	4.276	397.21	397.3 x 10 ⁻³
30	36.72	4.909	455.98	456.1 x 10 ⁻³
32	41.78	5.585	518.80	519.0 x 10 ⁻³
34	47.16	6.305	585.68	585.8 x 10 ⁻³
36	52.88	6.069	656.61	656.8 x 10 ⁻³

1 gallon = 3.785 liters

1 meter = 3.281 feet

1 gallon water weight 8.33 lbs. = 3.785 kilograms

1 liter water weight 1 kilogram = 2.205 lbs.

1 gallon per foot of depth = 12.419 liters per foot of depth

1 gallon per meter of depth = 12.419 x 10⁻³ cubic meters per meter of

Appendix B

Geologic Borehole Logs, Well Construction Forms

Route To: Watershed/Wastewater Waste Management
Remediation/Revelopment Other

Page 1 of 2

Facility/Project Name <u>Town of Warren</u>		License/Permit/Monitoring Number	Boring Number <u>I-1451D</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Robbie</u> Last Name: _____ Firm: <u>Truitt</u>		Date Drilling Started <u>08/15/2019</u> m m d d y y y y	Date Drilling Completed <u>08/15/2019</u> m m d d y y y y
WI Unique Well No.	DNR Well ID No.	Well Name	Drilling Method <u>HSA Rotary</u>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/>		Final Static Water Level _____ Feet MSL	Surface Elevation _____ Feet MSL
State Plane _____ N, _____ E		Lat _____ ' "	Borehole Diameter _____ inches
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____		Long _____ ' "	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W
Facility ID	County <u>St. Croix</u>	County Code	Civil Town/City/ or Village <u>Town of Warren</u>

Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			-5	Topsoil											
			-10	sf, poorly graded sand, med, fine fines/gravel, brown, moist	SP										
			-15												
			-20												
			-25	SAA											
			-30												
			-35												
			-40												
			-45	SAA gravel lens between 40-60											
			-50												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [Signature] Firm Leduc Corporation

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Sample		Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Air. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			55 60 65 70 75 80 85 90 95 100 105 110 115 120	<p>SAA</p> <p>Drillers utilizing water during drilling</p> <p>poorly poorly graded yellow-ish brown fine sand,</p> <p>— bottom of I-14S @ 95' bgs</p> <p>— bottom of I-14D set @ 109' bgs, ^{fine} sand at bottom (assumed)</p> <p>end of borehole</p>								5' 0.020 slot screens		

Route To: Watershed/Wastewater Waste Management
Remediation/Revelopment Other

Page 1 of 2

Facility/Project Name <u>Town of Warren</u>		License/Permit/Monitoring Number	Boring Number <u>I-15</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Robbie</u> Last Name: Firm: <u>Trawt</u>		Date Drilling Started <u>08/16/2019</u> m m d d y y y y	Date Drilling Completed <u>08/19/2019</u> m m d d y y y y
WI Unique Well No.	DNR Well ID No.	Well Name	Drilling Method <u>HSA</u> <u>Rotary</u>
Local Grid Origin <input type="checkbox"/> (estimated; <input type="checkbox"/>) or Boring Location <input type="checkbox"/>		Final Static Water Level _____ Feet MSL	Surface Elevation _____ Feet MSL
State Plane _____ N, _____ E		Lat _____ " _____ "	Borehole Diameter _____ inches
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____		Long _____ " _____ "	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W
Facility ID	County <u>St. Croix</u>	County Code	Civil Town/City/ or Village <u>Town of Warren</u>

Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			5	Topsoil										
			10	SP, poorly graded sand, brown, trace fines + gravel										
			15											
			20											
			25											
			30	SAA										
			35											
			40											
			45	SAA										
			50											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
-----------	------

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Sample		Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments				
Number and Type	Length Air. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200					
			55	SRA														
			60															
			65	Driller indicated bedrock (approx)														
			70	yellowish-brown fine sand silty														
			75															
			80															
			85	same, light color (white w gray)														injection well set
			90	SRA														
			95															
			100	Driller indicated void at														
			105	101-103. water no longer being purged														
			110	from borehole when bit is past 103'														
			115	by.														
			120															
			125															
			130															
			135															
			140															
			145	End of borehole 131 bys														

5' 0.020
slot
screen

Route To: Watershed/Wastewater Waste Management
Remediation/Revelopment Other

Page 1 of 2

Facility/Project Name <u>Town of Warren</u>		License/Permit/Monitoring Number	Boring Number <u>MW-31</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Robbie</u> Last Name: <u>Trant</u> Firm: <u>Trant</u>		Date Drilling Started <u>08/12/2019</u> m m d d y y y y	Date Drilling Completed <u>08/15/2019</u> m m d d y y y y
WI Unique Well No.	DNR Well ID No.	Well Name <u>MW-31</u>	Drilling Method <u>HSA Air Rotary</u>
		Final Static Water Level ____ Feet MSL	Surface Elevation ____ Feet MSL
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane _____ N, _____ E		Lat <u>0</u> ' "	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W
1/4 of _____ 1/4 of Section _____, T _____ N, R _____		Long <u>0</u> ' "	Feet _____ Feet _____
Facility ID	County <u>St. Croix</u>	County Code	Civil Town/City/ or Village <u>Town of Warren</u>

Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			5	Topsoil											
			10	silty sand, brown, med sand, moist, trace fines and gravel,	SP										
			15												
			20	SAA											
			25												
			30												
			35	SAA											
			40												
			45	some gravel noted											
			50												
			55	SAA											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [Signature] Firm Ledar Corporation

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Sample		Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length An. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
				<p>SAA</p> <p>approx. top of bedrock @ 66' bgs</p> <p>cuttings appear to be fine sand yellowish-brown, moist</p> <p>stop auger @ 73'</p> <p>Air rotary to 100'</p> <p>Very limited recovery w air rotary, appears to be the same</p> <p>End of borehole</p>										

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name Town of Warren TCE Investigation			License/Permit/Monitoring Number		Boring Number P-32		
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: Dan Last Name: Pflipsen			Date Drilling Started 5/17/2021		Date Drilling Completed 5/17/2021		
Firm: Traut Companies			M M D D Y Y Y Y 5 1 7 2 0 2 1		M M D D Y Y Y Y 5 1 7 2 0 2 1		
WI Unique Well No.		DNR Well ID No.	Common Well Name P-32		Final Static Water Level 897.86 Feet MSL		
					Surface Elevation 1004.96 Feet MSL		
					Borehole Diameter 7 inches		
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane 349598.88904 N, 543730.26597 E S/C/N			Local Grid Location				
SW 1/4 of SE 1/4 of Section 13 , T 29 N, R 19 W			Lat _____ Long _____		Feet <input type="checkbox"/> N <input type="checkbox"/> E Feet <input type="checkbox"/> S <input type="checkbox"/> W		
Facility ID 656004800		County St. Croix		DNR County Code 15		City Roberts	


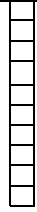
Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID / FID	Soil Properties					ROD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			0	Dark brown top soil											
			10	Dark tan, fine to medium sand with small to medium cobbles											
			20												
			30	Tan, fine to medium sand											
			40												
			50	Tan, medium to large, poorly sorted sand and cobbles with silty sand interbeds											
			60												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature *Kristen Lee*

Firm



Sample		Blow Counts	Depth in Feet		USCS	Graphic Log	Well Diagram	PID / FID	Soil Properties					RQD/Comments
Number	Length Recovered								STD Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
				<p style="text-align: center;">Dolomite</p> <hr/> <p style="text-align: center;">E.O.B. Set well at 155'</p>										

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name Town of Warren TCE Investigation			License/Permit/Monitoring Number		Boring Number MW-33	
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: Dan Last Name: Pflipsen			Date Drilling Started 5/17/2021		Date Drilling Completed 5/17/2021	
Firm: Traut Companies			M M D D Y Y Y Y 5 1 7 2 0 2 1		M M D D Y Y Y Y 5 1 7 2 0 2 1	
WI Unique Well No.		DNR Well ID No.	Common Well Name MW-33		Final Static Water Level 900.38 Feet MSL	Surface Elevation 1004.88 Feet MSL
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/>		State Plane 349598.26175 N, 543736.65287 E S/C/N		Local Grid Location		
SW 1/4 of SE 1/4 of Section 13 , T 29 N, R 19 W		Lat _____		Feet <input type="checkbox"/> N <input type="checkbox"/> E Feet <input type="checkbox"/> S <input type="checkbox"/> W		
Facility ID 656004800		County St. Croix		DNR County Code 15	City Roberts	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID / FID	Soil Properties					ROD/ Comments		
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200			
			0	Dark brown top soil												
			10	Dark tan, fine to medium sand with small to medium cobbles												
			20													
			30	Tan, fine to medium sand												
			40													
			50	Tan, medium to large, poorly sorted sand and cobbles with silty sand interbeds												
			60													

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Kristen Lee

Firm



This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this report is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the form should be sent.

Facility/Project Name <u>Town of Warren</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. <input type="checkbox"/> S. <input type="checkbox"/> W.	Well Name <u>I-140</u>
Facility License, Permit or Monitoring No.	Local Grid Origin (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. " Long. " or	Wis. Unique Well No. DNR Well ID No.
Facility ID	St. Plane ft. N. ft. E. S/C/N	Date Well Installed <u>08/15/2019</u> m m d d y y y y
Type of Well	Section Location of Waste/Source 1/4 of 1/4 of Sec. T. N, R. <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm <u>Robbie Trout</u>
Well Code /	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidgradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	
Distance from Waste/Source ft.	Gov. Lot Number	

A. Protective pipe, top elevation	ft. MSL	1. Cap and lock?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	ft. MSL	2. Protective cover pipe:	
C. Land surface elevation	ft. MSL	a. Inside diameter:	in.
D. Surface seal, bottom	ft. MSL or ft.	b. Length:	<u>6</u> ft.
		c. Material:	Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
12. USCS classification of soil near screen:		d. Additional protection?	<input type="checkbox"/> Yes <input type="checkbox"/> No
GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/>		If yes, describe:	
SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/>			
Bedrock <input checked="" type="checkbox"/>		3. Surface seal:	Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/>
13. Sieve analysis performed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Material between well casing and protective pipe:	Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
14. Drilling method used:	Rotary <input checked="" type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	5. Annular space seal:	a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. Lbs/gal mud weight... Bentonite-sand slurry <input type="checkbox"/> 35 c. Lbs/gal mud weight... Bentonite slurry <input type="checkbox"/> 31 d. % Bentonite... Bentonite-cement grout <input type="checkbox"/> 50 e. Ft ³ volume added for any of the above
15. Drilling fluid used: Water <input checked="" type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99		f. How installed:	Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		6. Bentonite seal:	a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input type="checkbox"/> 32 c. Other <input type="checkbox"/>
Describe		7. Fine sand material: Manufacturer, product name & mesh size	
17. Source of water (attach analysis, if required): <u>Municipal water</u>		a. _____	
		b. Volume added _____ ft ³	
E. Bentonite seal, top	ft. MSL or <u>0</u> ft.	8. Filter pack material: Manufacturer, product name & mesh size	
F. Fine sand, top	ft. MSL or _____ ft.	a. <u>Red Flint #40</u>	
G. Filter pack, top	ft. MSL or <u>98.0</u> ft.	b. Volume added _____ ft ³	
H. Screen joint, top	ft. MSL or <u>100.0</u> ft.	9. Well casing:	Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input checked="" type="checkbox"/> 24 Other <input type="checkbox"/>
I. Well bottom	ft. MSL or <u>105.0</u> ft.	10. Screen material: <u>PVC</u>	
J. Filter pack, bottom	ft. MSL or <u>105.0</u> ft.	a. Screen type:	Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
K. Borehole, bottom	ft. MSL or <u>105.5</u> ft.	b. Manufacturer _____	
L. Borehole, diameter	<u>8 1/4</u> in.	c. Slot size:	0. <u>020</u> in.
M. O.D. well casing	in.	d. Slotted length:	<u>5</u> ft.
N. I.D. well casing	<u>2.0</u> in.	11. Backfill material (below filter pack):	None <input type="checkbox"/> 14 Other <input type="checkbox"/>

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [Signature] Firm Cedar Logistics

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Facility/Project Name <u>Town of Warren</u>		Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W.		Well Name <u>I-14S</u>	
Facility License, Permit or Monitoring No.		Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or		Wis. Unique Well No. _____ DNR Well ID No. _____	
Facility ID		St. Plane _____ ft. N. _____ ft. E. S/C/N		Date Well Installed <u>08/15/2019</u> m m d d y y y y	
Type of Well Well Code _____ / _____		Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N, R. <input type="checkbox"/> E <input type="checkbox"/> W		Well Installed By: Name (first, last) and Firm <u>Robbie Trant</u>	
Distance from Waste/Source _____ ft.		Enf. Stds. Apply <input type="checkbox"/>		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	
		Gov. Lot Number _____			

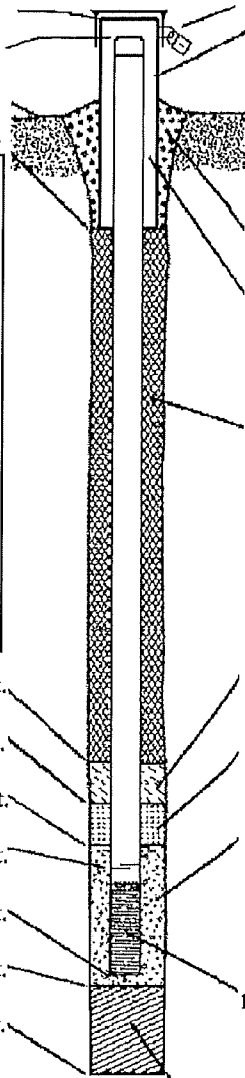
A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation _____ ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: <u>6</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation _____ ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or _____ ft.	3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input checked="" type="checkbox"/>	
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
14. Drilling method used: Rotary <input checked="" type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	
15. Drilling fluid used: Water <input checked="" type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99	
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	
17. Source of water (attach analysis, if required): <u>Municipal water</u>	
E. Bentonite seal, top _____ ft. MSL or <u>0</u> ft.	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
F. Fine sand, top _____ ft. MSL or _____ ft.	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
G. Filter pack, top _____ ft. MSL or <u>89.0</u> ft.	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
H. Screen joint, top _____ ft. MSL or <u>91.0</u> ft.	7. Fine sand material: Manufacturer, product name & mesh size a. <u>Red Flint 40</u> b. Volume added _____ ft ³
I. Well bottom _____ ft. MSL or <u>96.0</u> ft.	8. Filter pack material: Manufacturer, product name & mesh size a. <u>Red Flint 40</u> b. Volume added _____ ft ³
J. Filter pack, bottom _____ ft. MSL or <u>96.0</u> ft.	9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input checked="" type="checkbox"/> 24 Other <input type="checkbox"/>
K. Borehole, bottom _____ ft. MSL or <u>96.39</u> ft.	10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
L. Borehole, diameter <u>8 1/4</u> in.	b. Manufacturer _____ c. Slot size: <u>0.020</u> in. d. Slotted length: <u>5</u> ft.
M. O.D. well casing _____ in.	11. Backfill material (below filter pack): <u>assumed sand</u> None <input type="checkbox"/> 14 Other <input type="checkbox"/>
N. I.D. well casing <u>2.0</u> in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature [Signature] Firm Cedar Corporation

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Facility/Project Name <u>Town of Waupun</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <u>I-15</u>
Facility License, Permit or Monitoring No.	Local Grid Origin (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or _____ " or _____ "	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed <u>08/19/2019</u> m m d d y y v v y
Type of Well <u>Injection</u> Well Code _____	Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N, R. <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm <u>Robbie Traut</u>
Distance from Waste/Source _____ ft.	Enf. Stds. Apply <input type="checkbox"/>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation _____ ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: <u>6</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation _____ ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or _____ ft.	3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input checked="" type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above
14. Drilling method used: Rotary <input checked="" type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	f. How installed: Tremie <input checked="" type="checkbox"/> 01 Tremie pumped <input checked="" type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
15. Drilling fluid used: Water <input checked="" type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	7. Fine sand material: Manufacturer, product name & mesh size a. _____ b. Volume added _____ ft ³
17. Source of water (attach analysis, if required): <u>Municipal water</u>	8. Filter pack material: Manufacturer, product name & mesh size a. <u>Red Flint #40</u> b. Volume added _____ ft ³
E. Bentonite seal, top _____ ft. MSL or <u>0</u> ft.	9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input checked="" type="checkbox"/> 24 Other <input type="checkbox"/>
F. Fine sand, top _____ ft. MSL or _____ ft.	10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
G. Filter pack, top _____ ft. MSL or <u>122</u> ft.	b. Manufacturer _____ c. Slot size: <u>0.020</u> in. d. Slotted length: <u>5</u> ft.
H. Screen joint, top _____ ft. MSL or <u>124</u> ft.	11. Backfill material (below filter pack): None <input type="checkbox"/> 14 Other <input type="checkbox"/>
I. Well bottom _____ ft. MSL or <u>129</u> ft.	
J. Filter pack, bottom _____ ft. MSL or <u>129</u> ft.	
K. Borehole, bottom _____ ft. MSL or <u>129.1</u> ft.	
L. Borehole, diameter <u>8 1/4</u> in.	
M. O.D. well casing _____ in.	
N. I.D. well casing <u>2.0</u> in.	



I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature [Signature] Firm cedar corporation

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Facility/Project Name <u>Town of Warren</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <u>MW-31</u>
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed <u>08/15/2009</u> m m d d y y y y
Type of Well Well Code _____ / _____	Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N, R. <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm <u>Robbie Truitt</u>
Distance from Waste/Source _____ ft.	Enf. Stds. Apply <input type="checkbox"/>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input checked="" type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known
		Gov. Lot Number _____

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation _____ ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: <u>6</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation _____ ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or _____ ft.	3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input checked="" type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
14. Drilling method used: Rotary <input checked="" type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input checked="" type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99	7. Fine sand material: Manufacturer, product name & mesh size a. _____ b. Volume added _____ ft ³
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	8. Filter pack material: Manufacturer, product name & mesh size a. <u>Red flint # 40</u> b. Volume added _____ ft ³
17. Source of water (attach analysis, if required): <u>Municipal source</u>	9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input checked="" type="checkbox"/> 24 Other <input type="checkbox"/>
E. Bentonite seal, top _____ ft. MSL or <u>0</u> ft.	10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top _____ ft. MSL or _____ ft.	b. Manufacturer _____ c. Slot size: <u>0.010</u> in. d. Slotted length: <u>1.5</u> ft.
G. Filter pack, top _____ ft. MSL or <u>78.4</u> ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
H. Screen joint, top _____ ft. MSL or <u>80.4</u> ft.	
I. Well bottom _____ ft. MSL or <u>95.4</u> ft.	
J. Filter pack, bottom _____ ft. MSL or <u>96</u> ft.	
K. Borehole, bottom _____ ft. MSL or <u>100</u> ft.	
L. Borehole, diameter <u>6 1/4</u> in.	
M. O.D. well casing _____ in.	
N. I.D. well casing <u>2</u> in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [Signature] Firm Loder Corporation

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Facility/Project Name Town of Warentice Inv.	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name P-32
Facility License, Permit or Monitoring No. 656004800	Local Grid Origin <input checked="" type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID 656004800	St. Plane 349598.88 ft. N, 543730.27 ft. E. S/C/N	Date Well Installed 5/17/2021 m m d d y y v y
Type of Well Well Code 12/PZ	Section Location of Waste/Source SW 1/4 of SE 1/4 of Sec. 13, T. 29 N, R. 9 E W	Well Installed By: Name (first, last) and Firm Dan Pflipsen Trout Companies
Distance from Waste/ Source _____ ft.	Enf. Stds. Apply <input checked="" type="checkbox"/>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input checked="" type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known

<p>A. Protective pipe, top elevation - 1007.36 ft. MSL</p> <p>B. Well casing, top elevation - 1006.56 ft. MSL</p> <p>C. Land surface elevation - 1004.96 ft. MSL</p> <p>D. Surface seal, bottom _____ ft. MSL or _____ ft.</p>		<p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: a. Inside diameter: 6 in. b. Length: 5 ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/></p> <p>d. Additional protection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/></p> <p>4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/></p> <p>5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. 35.18 Ft³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08</p> <p>6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/></p> <p>7. Fine sand material: Manufacturer, product name & mesh size a. _____ b. Volume added _____ ft³</p> <p>8. Filter pack material: Manufacturer, product name & mesh size a. Red Flint #40 b. Volume added 2.95 ft³</p> <p>9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input checked="" type="checkbox"/> 24 Other <input type="checkbox"/></p> <p>10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/></p> <p>b. Manufacturer Johnson c. Slot size: 0.01 in. d. Slotted length: 10 ft.</p> <p>11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/></p>
---	--	--

12. USCS classification of soil near screen:
GP GM GC GW SW SP
SM SC ML MH CL CH
Bedrock

13. Sieve analysis performed? Yes No

14. Drilling method used: Rotary 50
Hollow Stem Auger 41
Sonic Other

15. Drilling fluid used: Water 02 Air 01
Drilling Mud 03 None 99

16. Drilling additives used? Yes No
Describe _____

17. Source of water (attach analysis, if required):
City of Hudson

E. Bentonite seal, top - **1004.96** ft. MSL or **0** ft.

F. Fine sand, top _____ ft. MSL or _____ ft.

G. Filter pack, top - **861.96** ft. MSL or **143** ft.

H. Screen joint, top - **859.96** ft. MSL or **145** ft.

I. Well bottom - **849.96** ft. MSL or **155** ft.

J. Filter pack, bottom - **849.96** ft. MSL or **155** ft.

K. Borehole, bottom - **849.96** ft. MSL or **155** ft.

L. Borehole, diameter - **7.0** in.

M. O.D. well casing - **2.37** in.

N. I.D. well casing - **1.91** in.

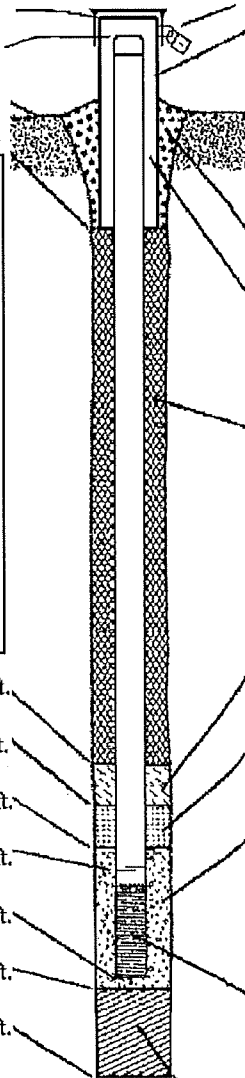
I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature **W. J. ...** Firm **Cedar Corp**

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Facility/Project Name <u>Town of Warren TCEM</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. <input type="checkbox"/> S. <input type="checkbox"/> W.	Well Name <u>MW-33</u>
Facility License, Permit or Monitoring No.	Local Grid Origin <input checked="" type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. " Long. " or "	Wis. Unique Well No. DNR Well ID No.
Facility ID <u>656004800</u>	St. Plane <u>349518.26</u> ft. N. <u>54330.65</u> ft. E. S/C/N	Date Well Installed <u>5/17/2021</u> m m d d y y v v y y
Type of Well Well Code <u>11 / mw</u>	Section Location of Waste/Source <u>SW 1/4 of SE 1/4 of Sec. 13, T. 29 N, R. 19 E W</u>	Well Installed By: Name (first, last) and Firm <u>Dan Phippen</u> <u>Trout Companies</u>
Distance from Waste/Source _____ ft.	Enf. Stds. Apply <input checked="" type="checkbox"/>	
	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input checked="" type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	

A. Protective pipe, top elevation <u>1007.35</u> ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation <u>1006.63</u> ft. MSL	2. Protective cover pipe: a. Inside diameter: <u>6</u> in. b. Length: <u>5</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation <u>1004.88</u> ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or _____ ft.	3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. <u>24.11</u> Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 <u>Sonic</u> Other <input checked="" type="checkbox"/>	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input checked="" type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99	7. Fine sand material: Manufacturer, product name & mesh size a. _____ b. Volume added _____ ft ³
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	8. Filter pack material: Manufacturer, product name & mesh size a. <u>Red Flint #40</u> b. Volume added <u>5.41</u> ft ³
17. Source of water (attach analysis, if required): <u>City of Hudson</u>	9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input checked="" type="checkbox"/> 24 Other <input type="checkbox"/>
E. Bentonite seal, top <u>1004.88</u> ft. MSL or <u>0</u> ft.	10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top _____ ft. MSL or _____ ft.	b. Manufacturer <u>Johnson</u> c. Slot size: <u>0.01</u> in. d. Slotted length: <u>20</u> ft.
G. Filter pack, top <u>906.88</u> ft. MSL or <u>98</u> ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
H. Screen joint, top <u>904.88</u> ft. MSL or <u>100</u> ft.	
I. Well bottom <u>884.88</u> ft. MSL or <u>120</u> ft.	
J. Filter pack, bottom <u>884.88</u> ft. MSL or <u>120</u> ft.	
K. Borehole, bottom <u>884.88</u> ft. MSL or <u>120</u> ft.	
L. Borehole, diameter <u>7.0</u> in.	
M. O.D. well casing <u>2.37</u> in.	
N. I.D. well casing <u>1.91</u> in.	



I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Kristen Du Firm Cedar Corp

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Appendix C.1.

Laboratory Analytical Reports-VOCs

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-167232-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
8/5/2019 2:11:45 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	6
Sample Summary	7
Client Sample Results	8
Definitions	50
QC Association	51
Surrogate Summary	52
QC Sample Results	53
Chronicle	63
Certification Summary	67
Chain of Custody	68
Receipt Checklists	72
Field Data Sheets	73

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Job ID: 500-167232-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-167232-1

Comments

No additional comments.

Receipt

The samples were received on 7/26/2019 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.4° C and 2.8° C.

GC/MS VOA

The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-28 (500-167232-20).

The following samples were collected in ascorbic acid for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-1 (500-167232-1), P-6 (500-167232-2), MW-17 (500-167232-9), P-19 (500-167232-11), P-20 (500-167232-12), P-23 (500-167232-15), MW-26 (500-167232-18) and P-27 (500-167232-19).

Acetone was detected in the following samples: P-6 (500-167232-2), P-23 (500-167232-15), MW-26 (500-167232-18) and P-27 (500-167232-19). The method blank associated with these samples were non-detect for Acetone. Acetone is known lab contaminant; therefore all low level detects for this compound should be suspected as lab contamination.

The following sample was diluted to bring the concentration of target analytes within the calibration range: P-25D (500-167232-17). Elevated reporting limits (RLs) are provided.

The method blank for analytical batch 497483 contained Naphthalene above the Method detection limit (MDL) but below reporting limit (RL). Naphthalene was non-detect in the sample: therefore, no re-analysis was done and the data has been reported.

The laboratory control sample (LCS) for 497483 recovered outside control limits for the following analytes: Bromoform and 1,2-Dibromo-3-chloropropane. These analytes were biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

The MS/ MSD (matrix spike/ matrix spike duplicate) in batch 497483 were analyzed 25 minutes and 56 minutes outside the method specified 12 hour tune time. MW-1 (500-167232-1), P-6 (500-167232-2), MW-7 (500-167232-3), MW-8 (500-167232-4), MW-9 (500-167232-5), P-10 (500-167232-6), MW-11 (500-167232-7), MW-16 (500-167232-8), MW-17 (500-167232-9), P-18 (500-167232-10), P-19 (500-167232-11), P-20 (500-167232-12), MW-21 (500-167232-13), MW-22 (500-167232-14), P-23 (500-167232-15), P-25S (500-167232-16) and P-25D (500-167232-17)

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for 497483 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was outside acceptance limits for Bromoform and 1,2-Dibromo-3-chloropropane.

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-1

Lab Sample ID: 500-167232-1

No Detections.

Client Sample ID: P-6

Lab Sample ID: 500-167232-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	19		10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 500-167232-3

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.34	J	0.50	0.15	ug/L	1		8260B	Total/NA

Client Sample ID: MW-8

Lab Sample ID: 500-167232-4

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	93		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 500-167232-5

No Detections.

Client Sample ID: P-10

Lab Sample ID: 500-167232-6

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	44		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 500-167232-7

No Detections.

Client Sample ID: MW-16

Lab Sample ID: 500-167232-8

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.39	J	0.50	0.15	ug/L	1		8260B	Total/NA
Trichloroethylene	85		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 500-167232-9

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.39	J	0.50	0.15	ug/L	1		8260B	Total/NA
Trichloroethylene	28		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-18

Lab Sample ID: 500-167232-10

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	2.8		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-19

Lab Sample ID: 500-167232-11

No Detections.

Client Sample ID: P-20

Lab Sample ID: 500-167232-12

No Detections.

Client Sample ID: MW-21

Lab Sample ID: 500-167232-13

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	140		0.50	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-22

Lab Sample ID: 500-167232-14

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	13		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-23

Lab Sample ID: 500-167232-15

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	10		10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: P-25S

Lab Sample ID: 500-167232-16

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	64		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-25D

Lab Sample ID: 500-167232-17

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.39	J	0.50	0.15	ug/L	1		8260B	Total/NA
Trichloroethylene - DL	260		5.0	1.6	ug/L	10		8260B	Total/NA

Client Sample ID: MW-26

Lab Sample ID: 500-167232-18

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.8	J	10	1.7	ug/L	1		8260B	Total/NA
Trichloroethylene	50		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-27

Lab Sample ID: 500-167232-19

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	19		10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: MW-28

Lab Sample ID: 500-167232-20

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	0.26	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 500-167232-21

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	15		10	1.7	ug/L	1		8260B	Total/NA
Naphthalene	0.41	J B	1.0	0.34	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-167232-1	MW-1	Ground Water	07/23/19 09:15	07/26/19 09:35	
500-167232-2	P-6	Ground Water	07/23/19 09:00	07/26/19 09:35	
500-167232-3	MW-7	Ground Water	07/23/19 13:15	07/26/19 09:35	
500-167232-4	MW-8	Ground Water	07/23/19 13:00	07/26/19 09:35	
500-167232-5	MW-9	Ground Water	07/24/19 14:00	07/26/19 09:35	
500-167232-6	P-10	Ground Water	07/24/19 14:15	07/26/19 09:35	
500-167232-7	MW-11	Ground Water	07/24/19 11:00	07/26/19 09:35	
500-167232-8	MW-16	Ground Water	07/24/19 08:45	07/26/19 09:35	
500-167232-9	MW-17	Ground Water	07/23/19 11:30	07/26/19 09:35	
500-167232-10	P-18	Ground Water	07/23/19 11:00	07/26/19 09:35	
500-167232-11	P-19	Ground Water	07/23/19 11:45	07/26/19 09:35	
500-167232-12	P-20	Ground Water	07/23/19 09:30	07/26/19 09:35	
500-167232-13	MW-21	Ground Water	07/23/19 16:00	07/26/19 09:35	
500-167232-14	MW-22	Ground Water	07/23/19 14:20	07/26/19 09:35	
500-167232-15	P-23	Ground Water	07/23/19 10:50	07/26/19 09:35	
500-167232-16	P-25S	Ground Water	07/23/19 13:40	07/26/19 09:35	
500-167232-17	P-25D	Ground Water	07/23/19 13:50	07/26/19 09:35	
500-167232-18	MW-26	Ground Water	07/23/19 15:45	07/26/19 09:35	
500-167232-19	P-27	Ground Water	07/23/19 15:30	07/26/19 09:35	
500-167232-20	MW-28	Ground Water	07/24/19 08:45	07/26/19 09:35	
500-167232-21	Trip Blank	Water	07/24/19 00:00	07/26/19 09:35	

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-1

Lab Sample ID: 500-167232-1

Date Collected: 07/23/19 09:15

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 14:34	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 14:34	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 14:34	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 14:34	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 14:34	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 14:34	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 14:34	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 14:34	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 14:34	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 14:34	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 14:34	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 14:34	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 14:34	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 14:34	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 14:34	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 14:34	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 14:34	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 14:34	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 14:34	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 14:34	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 14:34	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 14:34	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 14:34	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 14:34	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 14:34	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 14:34	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 14:34	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 14:34	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 14:34	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 14:34	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 14:34	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 14:34	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 14:34	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 14:34	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 14:34	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 14:34	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 14:34	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 14:34	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 14:34	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 14:34	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 14:34	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 14:34	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 14:34	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 14:34	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 14:34	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 14:34	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 14:34	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 14:34	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 14:34	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-1

Lab Sample ID: 500-167232-1

Date Collected: 07/23/19 09:15

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 14:34	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 14:34	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 14:34	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 14:34	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 14:34	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 14:34	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 14:34	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 14:34	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 14:34	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 14:34	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 14:34	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 14:34	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 14:34	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 14:34	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		07/31/19 14:34	1
Dibromofluoromethane	101		75 - 120		07/31/19 14:34	1
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		07/31/19 14:34	1
Toluene-d8 (Surr)	97		75 - 120		07/31/19 14:34	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-6

Lab Sample ID: 500-167232-2

Date Collected: 07/23/19 09:00

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	19		10	1.7	ug/L			07/31/19 15:05	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 15:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 15:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 15:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 15:05	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 15:05	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 15:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 15:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 15:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 15:05	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 15:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 15:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 15:05	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 15:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 15:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 15:05	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 15:05	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 15:05	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 15:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 15:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 15:05	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 15:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 15:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 15:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 15:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 15:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 15:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 15:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 15:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 15:05	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 15:05	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 15:05	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 15:05	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 15:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 15:05	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 15:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 15:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 15:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 15:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 15:05	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 15:05	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 15:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 15:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 15:05	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 15:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 15:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 15:05	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 15:05	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 15:05	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-6

Lab Sample ID: 500-167232-2

Date Collected: 07/23/19 09:00

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 15:05	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 15:05	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 15:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 15:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 15:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 15:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 15:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 15:05	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 15:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 15:05	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 15:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 15:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 15:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 15:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		07/31/19 15:05	1
Dibromofluoromethane	104		75 - 120		07/31/19 15:05	1
1,2-Dichloroethane-d4 (Surr)	101		75 - 126		07/31/19 15:05	1
Toluene-d8 (Surr)	96		75 - 120		07/31/19 15:05	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-7

Lab Sample ID: 500-167232-3

Date Collected: 07/23/19 13:15

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 15:36	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 15:36	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 15:36	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 15:36	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 15:36	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 15:36	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 15:36	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 15:36	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 15:36	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 15:36	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 15:36	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 15:36	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 15:36	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 15:36	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 15:36	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 15:36	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 15:36	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 15:36	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 15:36	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 15:36	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 15:36	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 15:36	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 15:36	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 15:36	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 15:36	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 15:36	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 15:36	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 15:36	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 15:36	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 15:36	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 15:36	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 15:36	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 15:36	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 15:36	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 15:36	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 15:36	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 15:36	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 15:36	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 15:36	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 15:36	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 15:36	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 15:36	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 15:36	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 15:36	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 15:36	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 15:36	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 15:36	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 15:36	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 15:36	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-7
Date Collected: 07/23/19 13:15
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-3
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 15:36	1
Toluene	0.34	J	0.50	0.15	ug/L			07/31/19 15:36	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 15:36	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 15:36	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 15:36	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 15:36	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 15:36	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 15:36	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 15:36	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 15:36	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 15:36	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 15:36	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 15:36	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 15:36	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 15:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124					07/31/19 15:36	1
Dibromofluoromethane	100		75 - 120					07/31/19 15:36	1
1,2-Dichloroethane-d4 (Surr)	98		75 - 126					07/31/19 15:36	1
Toluene-d8 (Surr)	98		75 - 120					07/31/19 15:36	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-8
Date Collected: 07/23/19 13:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-4
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 16:07	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 16:07	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:07	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 16:07	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 16:07	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 16:07	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 16:07	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 16:07	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:07	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 16:07	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 16:07	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 16:07	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 16:07	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 16:07	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 16:07	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 16:07	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 16:07	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 16:07	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 16:07	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 16:07	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 16:07	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 16:07	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 16:07	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 16:07	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 16:07	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 16:07	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 16:07	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 16:07	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:07	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 16:07	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:07	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 16:07	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 16:07	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 16:07	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 16:07	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 16:07	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 16:07	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 16:07	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:07	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 16:07	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 16:07	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:07	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 16:07	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:07	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 16:07	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:07	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 16:07	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 16:07	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 16:07	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-8
Date Collected: 07/23/19 13:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-4
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 16:07	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 16:07	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 16:07	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 16:07	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 16:07	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 16:07	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 16:07	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 16:07	1
Trichloroethylene	93		0.50	0.16	ug/L			07/31/19 16:07	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 16:07	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 16:07	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:07	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 16:07	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 16:07	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 16:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>4-Bromofluorobenzene (Surr)</i>	97		72 - 124					07/31/19 16:07	1
<i>Dibromofluoromethane</i>	100		75 - 120					07/31/19 16:07	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	98		75 - 126					07/31/19 16:07	1
<i>Toluene-d8 (Surr)</i>	97		75 - 120					07/31/19 16:07	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-9
Date Collected: 07/24/19 14:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-5
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 16:38	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 16:38	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:38	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 16:38	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 16:38	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 16:38	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 16:38	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 16:38	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:38	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 16:38	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 16:38	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 16:38	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 16:38	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 16:38	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 16:38	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 16:38	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 16:38	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 16:38	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 16:38	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 16:38	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 16:38	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 16:38	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 16:38	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 16:38	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 16:38	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 16:38	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 16:38	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 16:38	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:38	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 16:38	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:38	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 16:38	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 16:38	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 16:38	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 16:38	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 16:38	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 16:38	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 16:38	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:38	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 16:38	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 16:38	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:38	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 16:38	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:38	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 16:38	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:38	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 16:38	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 16:38	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 16:38	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-9

Lab Sample ID: 500-167232-5

Date Collected: 07/24/19 14:00

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 16:38	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 16:38	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 16:38	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 16:38	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 16:38	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 16:38	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 16:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 16:38	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 16:38	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 16:38	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 16:38	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:38	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 16:38	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 16:38	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 16:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124					07/31/19 16:38	1
Dibromofluoromethane	103		75 - 120					07/31/19 16:38	1
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					07/31/19 16:38	1
Toluene-d8 (Surr)	96		75 - 120					07/31/19 16:38	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-10

Lab Sample ID: 500-167232-6

Date Collected: 07/24/19 14:15

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 17:09	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 17:09	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:09	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 17:09	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 17:09	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 17:09	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 17:09	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 17:09	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:09	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 17:09	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 17:09	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 17:09	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 17:09	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 17:09	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 17:09	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 17:09	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 17:09	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 17:09	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 17:09	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 17:09	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 17:09	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 17:09	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 17:09	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 17:09	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 17:09	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 17:09	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 17:09	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 17:09	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:09	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 17:09	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:09	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 17:09	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 17:09	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 17:09	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 17:09	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 17:09	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 17:09	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 17:09	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:09	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 17:09	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 17:09	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:09	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 17:09	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:09	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 17:09	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:09	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 17:09	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 17:09	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 17:09	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-10

Lab Sample ID: 500-167232-6

Date Collected: 07/24/19 14:15

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 17:09	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 17:09	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 17:09	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 17:09	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 17:09	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 17:09	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 17:09	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 17:09	1
Trichloroethylene	44		0.50	0.16	ug/L			07/31/19 17:09	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 17:09	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 17:09	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:09	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 17:09	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 17:09	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124		07/31/19 17:09	1
Dibromofluoromethane	107		75 - 120		07/31/19 17:09	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/31/19 17:09	1
Toluene-d8 (Surr)	95		75 - 120		07/31/19 17:09	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-11

Lab Sample ID: 500-167232-7

Date Collected: 07/24/19 11:00

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 17:39	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 17:39	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:39	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 17:39	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 17:39	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 17:39	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 17:39	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 17:39	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:39	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 17:39	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 17:39	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 17:39	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 17:39	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 17:39	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 17:39	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 17:39	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 17:39	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 17:39	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 17:39	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 17:39	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 17:39	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 17:39	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 17:39	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 17:39	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 17:39	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 17:39	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 17:39	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 17:39	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:39	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 17:39	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:39	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 17:39	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 17:39	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 17:39	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 17:39	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 17:39	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 17:39	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 17:39	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:39	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 17:39	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 17:39	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:39	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 17:39	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:39	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 17:39	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:39	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 17:39	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 17:39	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 17:39	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-11
Date Collected: 07/24/19 11:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-7
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 17:39	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 17:39	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 17:39	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 17:39	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 17:39	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 17:39	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 17:39	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 17:39	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 17:39	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 17:39	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 17:39	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:39	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 17:39	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 17:39	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 17:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		72 - 124		07/31/19 17:39	1
Dibromofluoromethane	105		75 - 120		07/31/19 17:39	1
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		07/31/19 17:39	1
Toluene-d8 (Surr)	98		75 - 120		07/31/19 17:39	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-16

Lab Sample ID: 500-167232-8

Date Collected: 07/24/19 08:45

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 18:10	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 18:10	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:10	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 18:10	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 18:10	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 18:10	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 18:10	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 18:10	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:10	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 18:10	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 18:10	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 18:10	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 18:10	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 18:10	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 18:10	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 18:10	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 18:10	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 18:10	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 18:10	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 18:10	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 18:10	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 18:10	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 18:10	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 18:10	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 18:10	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 18:10	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 18:10	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 18:10	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:10	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 18:10	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:10	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 18:10	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 18:10	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 18:10	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 18:10	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 18:10	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 18:10	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 18:10	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:10	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 18:10	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 18:10	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:10	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 18:10	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:10	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 18:10	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:10	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 18:10	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 18:10	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 18:10	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-16

Lab Sample ID: 500-167232-8

Date Collected: 07/24/19 08:45

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 18:10	1
Toluene	0.39	J	0.50	0.15	ug/L			07/31/19 18:10	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 18:10	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 18:10	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 18:10	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 18:10	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 18:10	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 18:10	1
Trichloroethylene	85		0.50	0.16	ug/L			07/31/19 18:10	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 18:10	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 18:10	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:10	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 18:10	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 18:10	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 18:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124					07/31/19 18:10	1
Dibromofluoromethane	104		75 - 120					07/31/19 18:10	1
1,2-Dichloroethane-d4 (Surr)	105		75 - 126					07/31/19 18:10	1
Toluene-d8 (Surr)	96		75 - 120					07/31/19 18:10	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-17

Lab Sample ID: 500-167232-9

Date Collected: 07/23/19 11:30

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 18:41	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 18:41	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:41	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 18:41	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 18:41	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 18:41	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 18:41	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 18:41	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:41	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 18:41	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 18:41	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 18:41	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 18:41	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 18:41	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 18:41	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 18:41	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 18:41	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 18:41	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 18:41	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 18:41	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 18:41	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 18:41	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 18:41	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 18:41	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 18:41	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 18:41	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 18:41	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 18:41	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:41	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 18:41	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:41	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 18:41	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 18:41	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 18:41	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 18:41	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 18:41	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 18:41	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 18:41	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:41	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 18:41	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 18:41	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:41	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 18:41	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:41	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 18:41	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:41	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 18:41	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 18:41	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 18:41	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-17

Lab Sample ID: 500-167232-9

Date Collected: 07/23/19 11:30

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 18:41	1
Toluene	0.39	J	0.50	0.15	ug/L			07/31/19 18:41	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 18:41	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 18:41	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 18:41	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 18:41	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 18:41	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 18:41	1
Trichloroethylene	28		0.50	0.16	ug/L			07/31/19 18:41	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 18:41	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 18:41	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:41	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 18:41	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 18:41	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124		07/31/19 18:41	1
Dibromofluoromethane	108		75 - 120		07/31/19 18:41	1
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		07/31/19 18:41	1
Toluene-d8 (Surr)	94		75 - 120		07/31/19 18:41	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-18

Lab Sample ID: 500-167232-10

Date Collected: 07/23/19 11:00

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 19:12	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 19:12	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 19:12	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 19:12	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 19:12	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 19:12	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 19:12	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 19:12	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 19:12	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 19:12	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 19:12	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 19:12	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 19:12	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 19:12	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 19:12	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 19:12	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 19:12	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 19:12	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 19:12	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 19:12	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 19:12	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 19:12	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 19:12	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 19:12	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 19:12	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 19:12	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 19:12	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 19:12	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 19:12	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 19:12	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 19:12	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 19:12	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 19:12	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 19:12	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 19:12	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 19:12	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 19:12	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 19:12	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 19:12	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 19:12	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 19:12	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 19:12	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 19:12	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 19:12	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 19:12	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 19:12	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 19:12	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 19:12	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 19:12	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-18

Lab Sample ID: 500-167232-10

Date Collected: 07/23/19 11:00

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 19:12	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 19:12	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 19:12	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 19:12	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 19:12	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 19:12	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 19:12	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 19:12	1
Trichloroethylene	2.8		0.50	0.16	ug/L			07/31/19 19:12	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 19:12	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 19:12	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 19:12	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 19:12	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 19:12	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 19:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/31/19 19:12	1
Dibromofluoromethane	107		75 - 120		07/31/19 19:12	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126		07/31/19 19:12	1
Toluene-d8 (Surr)	95		75 - 120		07/31/19 19:12	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-19

Lab Sample ID: 500-167232-11

Date Collected: 07/23/19 11:45

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 19:43	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 19:43	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 19:43	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 19:43	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 19:43	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 19:43	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 19:43	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 19:43	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 19:43	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 19:43	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 19:43	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 19:43	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 19:43	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 19:43	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 19:43	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 19:43	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 19:43	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 19:43	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 19:43	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 19:43	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 19:43	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 19:43	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 19:43	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 19:43	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 19:43	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 19:43	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 19:43	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 19:43	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 19:43	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 19:43	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 19:43	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 19:43	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 19:43	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 19:43	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 19:43	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 19:43	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 19:43	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 19:43	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 19:43	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 19:43	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 19:43	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 19:43	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 19:43	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 19:43	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 19:43	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 19:43	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 19:43	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 19:43	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 19:43	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-19

Lab Sample ID: 500-167232-11

Date Collected: 07/23/19 11:45

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 19:43	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 19:43	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 19:43	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 19:43	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 19:43	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 19:43	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 19:43	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 19:43	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 19:43	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 19:43	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 19:43	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 19:43	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 19:43	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 19:43	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 19:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124					07/31/19 19:43	1
Dibromofluoromethane	107		75 - 120					07/31/19 19:43	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126					07/31/19 19:43	1
Toluene-d8 (Surr)	97		75 - 120					07/31/19 19:43	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-20

Lab Sample ID: 500-167232-12

Date Collected: 07/23/19 09:30

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 20:14	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 20:14	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 20:14	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 20:14	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 20:14	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 20:14	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 20:14	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 20:14	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 20:14	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 20:14	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 20:14	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 20:14	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 20:14	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 20:14	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 20:14	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 20:14	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 20:14	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 20:14	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 20:14	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 20:14	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 20:14	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 20:14	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 20:14	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 20:14	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 20:14	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 20:14	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 20:14	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 20:14	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 20:14	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 20:14	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 20:14	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 20:14	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 20:14	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 20:14	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 20:14	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 20:14	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 20:14	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 20:14	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 20:14	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 20:14	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 20:14	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 20:14	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 20:14	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 20:14	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 20:14	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 20:14	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 20:14	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 20:14	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 20:14	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-20

Lab Sample ID: 500-167232-12

Date Collected: 07/23/19 09:30

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 20:14	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 20:14	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 20:14	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 20:14	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 20:14	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 20:14	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 20:14	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 20:14	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 20:14	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 20:14	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 20:14	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 20:14	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 20:14	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 20:14	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 20:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124					07/31/19 20:14	1
Dibromofluoromethane	108		75 - 120					07/31/19 20:14	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126					07/31/19 20:14	1
Toluene-d8 (Surr)	94		75 - 120					07/31/19 20:14	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-21

Lab Sample ID: 500-167232-13

Date Collected: 07/23/19 16:00

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 20:44	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 20:44	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 20:44	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 20:44	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 20:44	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 20:44	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 20:44	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 20:44	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 20:44	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 20:44	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 20:44	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 20:44	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 20:44	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 20:44	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 20:44	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 20:44	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 20:44	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 20:44	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 20:44	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 20:44	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 20:44	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 20:44	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 20:44	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 20:44	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 20:44	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 20:44	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 20:44	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 20:44	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 20:44	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 20:44	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 20:44	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 20:44	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 20:44	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 20:44	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 20:44	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 20:44	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 20:44	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 20:44	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 20:44	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 20:44	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 20:44	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 20:44	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 20:44	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 20:44	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 20:44	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 20:44	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 20:44	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 20:44	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 20:44	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-21
Date Collected: 07/23/19 16:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-13
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 20:44	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 20:44	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 20:44	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 20:44	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 20:44	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 20:44	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 20:44	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 20:44	1
Trichloroethylene	140		0.50	0.16	ug/L			07/31/19 20:44	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 20:44	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 20:44	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 20:44	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 20:44	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 20:44	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 20:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		72 - 124		07/31/19 20:44	1
Dibromofluoromethane	110		75 - 120		07/31/19 20:44	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126		07/31/19 20:44	1
Toluene-d8 (Surr)	94		75 - 120		07/31/19 20:44	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-22

Lab Sample ID: 500-167232-14

Date Collected: 07/23/19 14:20

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 21:15	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 21:15	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 21:15	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 21:15	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 21:15	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 21:15	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 21:15	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 21:15	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 21:15	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 21:15	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 21:15	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 21:15	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 21:15	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 21:15	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 21:15	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 21:15	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 21:15	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 21:15	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 21:15	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 21:15	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 21:15	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 21:15	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 21:15	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 21:15	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 21:15	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 21:15	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 21:15	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 21:15	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 21:15	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 21:15	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 21:15	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 21:15	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 21:15	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 21:15	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 21:15	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 21:15	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 21:15	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 21:15	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 21:15	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 21:15	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 21:15	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 21:15	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 21:15	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 21:15	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 21:15	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 21:15	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 21:15	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 21:15	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 21:15	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-22
Date Collected: 07/23/19 14:20
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-14
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 21:15	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 21:15	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 21:15	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 21:15	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 21:15	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 21:15	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 21:15	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 21:15	1
Trichloroethylene	13		0.50	0.16	ug/L			07/31/19 21:15	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 21:15	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 21:15	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 21:15	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 21:15	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 21:15	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 21:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124		07/31/19 21:15	1
Dibromofluoromethane	109		75 - 120		07/31/19 21:15	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		07/31/19 21:15	1
Toluene-d8 (Surr)	93		75 - 120		07/31/19 21:15	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-23

Lab Sample ID: 500-167232-15

Date Collected: 07/23/19 10:50

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10		10	1.7	ug/L			07/31/19 21:46	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 21:46	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 21:46	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 21:46	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 21:46	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 21:46	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 21:46	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 21:46	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 21:46	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 21:46	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 21:46	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 21:46	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 21:46	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 21:46	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 21:46	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 21:46	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 21:46	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 21:46	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 21:46	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 21:46	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 21:46	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 21:46	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 21:46	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 21:46	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 21:46	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 21:46	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 21:46	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 21:46	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 21:46	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 21:46	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 21:46	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 21:46	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 21:46	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 21:46	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 21:46	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 21:46	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 21:46	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 21:46	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 21:46	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 21:46	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 21:46	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 21:46	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 21:46	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 21:46	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 21:46	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 21:46	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 21:46	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 21:46	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 21:46	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-23

Lab Sample ID: 500-167232-15

Date Collected: 07/23/19 10:50

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 21:46	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 21:46	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 21:46	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 21:46	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 21:46	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 21:46	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 21:46	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 21:46	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 21:46	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 21:46	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 21:46	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 21:46	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 21:46	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 21:46	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 21:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124					07/31/19 21:46	1
Dibromofluoromethane	108		75 - 120					07/31/19 21:46	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126					07/31/19 21:46	1
Toluene-d8 (Surr)	94		75 - 120					07/31/19 21:46	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-25S

Lab Sample ID: 500-167232-16

Date Collected: 07/23/19 13:40

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 22:17	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 22:17	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 22:17	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 22:17	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 22:17	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 22:17	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 22:17	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 22:17	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 22:17	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 22:17	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 22:17	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 22:17	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 22:17	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 22:17	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 22:17	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 22:17	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 22:17	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 22:17	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 22:17	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 22:17	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 22:17	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 22:17	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 22:17	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 22:17	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 22:17	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 22:17	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 22:17	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 22:17	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 22:17	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 22:17	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 22:17	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 22:17	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 22:17	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 22:17	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 22:17	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 22:17	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 22:17	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 22:17	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 22:17	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 22:17	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 22:17	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 22:17	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 22:17	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 22:17	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 22:17	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 22:17	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 22:17	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 22:17	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 22:17	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-25S

Lab Sample ID: 500-167232-16

Date Collected: 07/23/19 13:40

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 22:17	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 22:17	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 22:17	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 22:17	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 22:17	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 22:17	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 22:17	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 22:17	1
Trichloroethylene	64		0.50	0.16	ug/L			07/31/19 22:17	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 22:17	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 22:17	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 22:17	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 22:17	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 22:17	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 22:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124					07/31/19 22:17	1
Dibromofluoromethane	105		75 - 120					07/31/19 22:17	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126					07/31/19 22:17	1
Toluene-d8 (Surr)	94		75 - 120					07/31/19 22:17	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-25D

Lab Sample ID: 500-167232-17

Date Collected: 07/23/19 13:50

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 22:48	1
Benzene	0.39	J	0.50	0.15	ug/L			07/31/19 22:48	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 22:48	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 22:48	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 22:48	1
Bromoform	<0.48	* F1	1.0	0.48	ug/L			07/31/19 22:48	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 22:48	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 22:48	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 22:48	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 22:48	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 22:48	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 22:48	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 22:48	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 22:48	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 22:48	1
Dibromochloromethane	<0.49	F1	1.0	0.49	ug/L			07/31/19 22:48	1
1,2-Dibromo-3-Chloropropane	<2.0	* F1	5.0	2.0	ug/L			07/31/19 22:48	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 22:48	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 22:48	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 22:48	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 22:48	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 22:48	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 22:48	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 22:48	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 22:48	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 22:48	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 22:48	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 22:48	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 22:48	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 22:48	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 22:48	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 22:48	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 22:48	1
Methylene bromide	<0.27	F1	1.0	0.27	ug/L			07/31/19 22:48	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 22:48	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 22:48	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 22:48	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 22:48	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 22:48	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 22:48	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 22:48	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 22:48	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 22:48	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 22:48	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 22:48	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 22:48	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 22:48	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 22:48	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 22:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-25D
Date Collected: 07/23/19 13:50
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-17
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 22:48	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 22:48	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 22:48	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 22:48	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 22:48	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 22:48	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 22:48	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 22:48	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 22:48	1
1,2,3-Trichloropropane	<0.41	F1	2.0	0.41	ug/L			07/31/19 22:48	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 22:48	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 22:48	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 22:48	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 22:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		07/31/19 22:48	1
Dibromofluoromethane	109		75 - 120		07/31/19 22:48	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		07/31/19 22:48	1
Toluene-d8 (Surr)	94		75 - 120		07/31/19 22:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethylene	260		5.0	1.6	ug/L			08/03/19 07:03	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		72 - 124		08/03/19 07:03	10
Dibromofluoromethane	100		75 - 120		08/03/19 07:03	10
1,2-Dichloroethane-d4 (Surr)	98		75 - 126		08/03/19 07:03	10
Toluene-d8 (Surr)	93		75 - 120		08/03/19 07:03	10

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-26

Lab Sample ID: 500-167232-18

Date Collected: 07/23/19 15:45

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	J	10	1.7	ug/L			08/03/19 01:15	1
Benzene	<0.15		0.50	0.15	ug/L			08/03/19 01:15	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/03/19 01:15	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/03/19 01:15	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/03/19 01:15	1
Bromoform	<0.48		1.0	0.48	ug/L			08/03/19 01:15	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/03/19 01:15	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/03/19 01:15	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/03/19 01:15	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/03/19 01:15	1
Chloroform	<0.37		2.0	0.37	ug/L			08/03/19 01:15	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/03/19 01:15	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/03/19 01:15	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			08/03/19 01:15	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/03/19 01:15	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/03/19 01:15	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/03/19 01:15	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/03/19 01:15	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/03/19 01:15	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/03/19 01:15	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/03/19 01:15	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			08/03/19 01:15	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/03/19 01:15	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/03/19 01:15	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/03/19 01:15	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/03/19 01:15	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/03/19 01:15	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/03/19 01:15	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/03/19 01:15	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/03/19 01:15	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/03/19 01:15	1
Methyl bromide	<0.80		3.0	0.80	ug/L			08/03/19 01:15	1
Methyl chloride	<0.32		1.0	0.32	ug/L			08/03/19 01:15	1
Methylene bromide	<0.27		1.0	0.27	ug/L			08/03/19 01:15	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/03/19 01:15	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/03/19 01:15	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/03/19 01:15	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/03/19 01:15	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/03/19 01:15	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/03/19 01:15	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/03/19 01:15	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/03/19 01:15	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/03/19 01:15	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/03/19 01:15	1
Styrene	<0.39		1.0	0.39	ug/L			08/03/19 01:15	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/03/19 01:15	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/03/19 01:15	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/03/19 01:15	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			08/03/19 01:15	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-26

Lab Sample ID: 500-167232-18

Date Collected: 07/23/19 15:45

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/03/19 01:15	1
Toluene	<0.15		0.50	0.15	ug/L			08/03/19 01:15	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			08/03/19 01:15	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/03/19 01:15	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/03/19 01:15	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/03/19 01:15	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/03/19 01:15	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/03/19 01:15	1
Trichloroethylene	50		0.50	0.16	ug/L			08/03/19 01:15	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/03/19 01:15	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/03/19 01:15	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/03/19 01:15	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/03/19 01:15	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/03/19 01:15	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/03/19 01:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		72 - 124		08/03/19 01:15	1
Dibromofluoromethane	96		75 - 120		08/03/19 01:15	1
1,2-Dichloroethane-d4 (Surr)	99		75 - 126		08/03/19 01:15	1
Toluene-d8 (Surr)	95		75 - 120		08/03/19 01:15	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-27

Lab Sample ID: 500-167232-19

Date Collected: 07/23/19 15:30

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	19		10	1.7	ug/L			08/03/19 01:40	1
Benzene	<0.15		0.50	0.15	ug/L			08/03/19 01:40	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/03/19 01:40	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/03/19 01:40	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/03/19 01:40	1
Bromoform	<0.48		1.0	0.48	ug/L			08/03/19 01:40	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/03/19 01:40	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/03/19 01:40	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/03/19 01:40	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/03/19 01:40	1
Chloroform	<0.37		2.0	0.37	ug/L			08/03/19 01:40	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/03/19 01:40	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/03/19 01:40	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			08/03/19 01:40	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/03/19 01:40	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/03/19 01:40	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/03/19 01:40	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/03/19 01:40	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/03/19 01:40	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/03/19 01:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/03/19 01:40	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			08/03/19 01:40	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/03/19 01:40	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/03/19 01:40	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/03/19 01:40	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/03/19 01:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/03/19 01:40	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/03/19 01:40	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/03/19 01:40	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/03/19 01:40	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/03/19 01:40	1
Methyl bromide	<0.80		3.0	0.80	ug/L			08/03/19 01:40	1
Methyl chloride	<0.32		1.0	0.32	ug/L			08/03/19 01:40	1
Methylene bromide	<0.27		1.0	0.27	ug/L			08/03/19 01:40	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/03/19 01:40	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/03/19 01:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/03/19 01:40	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/03/19 01:40	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/03/19 01:40	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/03/19 01:40	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/03/19 01:40	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/03/19 01:40	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/03/19 01:40	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/03/19 01:40	1
Styrene	<0.39		1.0	0.39	ug/L			08/03/19 01:40	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/03/19 01:40	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/03/19 01:40	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/03/19 01:40	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			08/03/19 01:40	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-27

Lab Sample ID: 500-167232-19

Date Collected: 07/23/19 15:30

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/03/19 01:40	1
Toluene	<0.15		0.50	0.15	ug/L			08/03/19 01:40	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			08/03/19 01:40	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/03/19 01:40	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/03/19 01:40	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/03/19 01:40	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/03/19 01:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/03/19 01:40	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			08/03/19 01:40	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/03/19 01:40	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/03/19 01:40	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/03/19 01:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/03/19 01:40	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/03/19 01:40	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/03/19 01:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		72 - 124		08/03/19 01:40	1
Dibromofluoromethane	95		75 - 120		08/03/19 01:40	1
1,2-Dichloroethane-d4 (Surr)	95		75 - 126		08/03/19 01:40	1
Toluene-d8 (Surr)	96		75 - 120		08/03/19 01:40	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-28

Lab Sample ID: 500-167232-20

Date Collected: 07/24/19 08:45

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			08/03/19 02:05	1
Benzene	<0.15		0.50	0.15	ug/L			08/03/19 02:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/03/19 02:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/03/19 02:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/03/19 02:05	1
Bromoform	<0.48		1.0	0.48	ug/L			08/03/19 02:05	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/03/19 02:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/03/19 02:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/03/19 02:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/03/19 02:05	1
Chloroform	<0.37		2.0	0.37	ug/L			08/03/19 02:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/03/19 02:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/03/19 02:05	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			08/03/19 02:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/03/19 02:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/03/19 02:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/03/19 02:05	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/03/19 02:05	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/03/19 02:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/03/19 02:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/03/19 02:05	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			08/03/19 02:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/03/19 02:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/03/19 02:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/03/19 02:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/03/19 02:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/03/19 02:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/03/19 02:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/03/19 02:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/03/19 02:05	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/03/19 02:05	1
Methyl bromide	<0.80		3.0	0.80	ug/L			08/03/19 02:05	1
Methyl chloride	<0.32		1.0	0.32	ug/L			08/03/19 02:05	1
Methylene bromide	<0.27		1.0	0.27	ug/L			08/03/19 02:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/03/19 02:05	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/03/19 02:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/03/19 02:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/03/19 02:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/03/19 02:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/03/19 02:05	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/03/19 02:05	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/03/19 02:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/03/19 02:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/03/19 02:05	1
Styrene	<0.39		1.0	0.39	ug/L			08/03/19 02:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/03/19 02:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/03/19 02:05	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/03/19 02:05	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			08/03/19 02:05	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-28

Lab Sample ID: 500-167232-20

Date Collected: 07/24/19 08:45

Matrix: Ground Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/03/19 02:05	1
Toluene	<0.15		0.50	0.15	ug/L			08/03/19 02:05	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			08/03/19 02:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/03/19 02:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/03/19 02:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/03/19 02:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/03/19 02:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/03/19 02:05	1
Trichloroethylene	0.26	J	0.50	0.16	ug/L			08/03/19 02:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/03/19 02:05	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/03/19 02:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/03/19 02:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/03/19 02:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/03/19 02:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/03/19 02:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		72 - 124		08/03/19 02:05	1
Dibromofluoromethane	98		75 - 120		08/03/19 02:05	1
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		08/03/19 02:05	1
Toluene-d8 (Surr)	96		75 - 120		08/03/19 02:05	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-167232-21

Date Collected: 07/24/19 00:00

Matrix: Water

Date Received: 07/26/19 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	15		10	1.7	ug/L			07/31/19 14:04	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 14:04	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 14:04	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 14:04	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 14:04	1
Bromoform	<0.48 *		1.0	0.48	ug/L			07/31/19 14:04	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 14:04	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 14:04	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 14:04	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 14:04	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 14:04	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 14:04	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 14:04	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 14:04	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 14:04	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 14:04	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			07/31/19 14:04	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 14:04	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 14:04	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 14:04	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 14:04	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 14:04	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 14:04	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 14:04	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 14:04	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 14:04	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 14:04	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 14:04	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 14:04	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 14:04	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 14:04	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 14:04	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 14:04	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 14:04	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 14:04	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 14:04	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 14:04	1
Naphthalene	0.41	J B	1.0	0.34	ug/L			07/31/19 14:04	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 14:04	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 14:04	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 14:04	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 14:04	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 14:04	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 14:04	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 14:04	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 14:04	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 14:04	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 14:04	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 14:04	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-167232-21

Date Collected: 07/24/19 00:00

Matrix: Water

Date Received: 07/26/19 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 14:04	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 14:04	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 14:04	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 14:04	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 14:04	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 14:04	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 14:04	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 14:04	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 14:04	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 14:04	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 14:04	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 14:04	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 14:04	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 14:04	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/31/19 14:04	1
Dibromofluoromethane	104		75 - 120		07/31/19 14:04	1
1,2-Dichloroethane-d4 (Surr)	99		75 - 126		07/31/19 14:04	1
Toluene-d8 (Surr)	95		75 - 120		07/31/19 14:04	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

GC/MS VOA

Analysis Batch: 497483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167232-1	MW-1	Total/NA	Ground Water	8260B	
500-167232-2	P-6	Total/NA	Ground Water	8260B	
500-167232-3	MW-7	Total/NA	Ground Water	8260B	
500-167232-4	MW-8	Total/NA	Ground Water	8260B	
500-167232-5	MW-9	Total/NA	Ground Water	8260B	
500-167232-6	P-10	Total/NA	Ground Water	8260B	
500-167232-7	MW-11	Total/NA	Ground Water	8260B	
500-167232-8	MW-16	Total/NA	Ground Water	8260B	
500-167232-9	MW-17	Total/NA	Ground Water	8260B	
500-167232-10	P-18	Total/NA	Ground Water	8260B	
500-167232-11	P-19	Total/NA	Ground Water	8260B	
500-167232-12	P-20	Total/NA	Ground Water	8260B	
500-167232-13	MW-21	Total/NA	Ground Water	8260B	
500-167232-14	MW-22	Total/NA	Ground Water	8260B	
500-167232-15	P-23	Total/NA	Ground Water	8260B	
500-167232-16	P-25S	Total/NA	Ground Water	8260B	
500-167232-17	P-25D	Total/NA	Ground Water	8260B	
500-167232-21	Trip Blank	Total/NA	Water	8260B	
MB 500-497483/6	Method Blank	Total/NA	Water	8260B	
LCS 500-497483/4	Lab Control Sample	Total/NA	Water	8260B	
500-167232-17 MS	P-25D	Total/NA	Ground Water	8260B	
500-167232-17 MSD	P-25D	Total/NA	Ground Water	8260B	

Analysis Batch: 498039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167232-17 - DL	P-25D	Total/NA	Ground Water	8260B	
500-167232-18	MW-26	Total/NA	Ground Water	8260B	
500-167232-19	P-27	Total/NA	Ground Water	8260B	
500-167232-20	MW-28	Total/NA	Ground Water	8260B	
MB 500-498039/6	Method Blank	Total/NA	Water	8260B	
LCS 500-498039/4	Lab Control Sample	Total/NA	Water	8260B	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Ground Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (72-124)	DBFM (75-120)	DCA (75-126)	TOL (75-120)
500-167232-1	MW-1	96	101	97	97
500-167232-2	P-6	96	104	101	96
500-167232-3	MW-7	97	100	98	98
500-167232-4	MW-8	97	100	98	97
500-167232-5	MW-9	93	103	103	96
500-167232-6	P-10	94	107	106	95
500-167232-7	MW-11	98	105	103	98
500-167232-8	MW-16	97	104	105	96
500-167232-9	MW-17	97	108	107	94
500-167232-10	P-18	95	107	109	95
500-167232-11	P-19	96	107	109	97
500-167232-12	P-20	95	108	109	94
500-167232-13	MW-21	100	110	109	94
500-167232-14	MW-22	97	109	110	93
500-167232-15	P-23	96	108	106	94
500-167232-16	P-25S	97	105	106	94
500-167232-17	P-25D	96	109	108	94
500-167232-17 - DL	P-25D	117	100	98	93
500-167232-17 MS	P-25D	99	108	108	97
500-167232-17 MSD	P-25D	98	107	106	96
500-167232-18	MW-26	114	96	99	95
500-167232-19	P-27	115	95	95	96
500-167232-20	MW-28	116	98	97	96

Surrogate Legend

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

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (72-124)	DBFM (75-120)	DCA (75-126)	TOL (75-120)
500-167232-21	Trip Blank	95	104	99	95
LCS 500-497483/4	Lab Control Sample	95	107	108	97
LCS 500-498039/4	Lab Control Sample	105	99	95	95
MB 500-497483/6	Method Blank	98	108	108	93
MB 500-498039/6	Method Blank	122	97	96	98

Surrogate Legend

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

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-497483/6
Matrix: Water
Analysis Batch: 497483

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

Analyte	MB	MB	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<1.7		10	1.7	ug/L			07/31/19 13:33	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 13:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 13:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 13:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 13:33	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/19 13:33	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 13:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 13:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 13:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 13:33	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 13:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 13:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 13:33	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 13:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 13:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 13:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/19 13:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 13:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 13:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 13:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 13:33	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 13:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 13:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 13:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 13:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 13:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 13:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 13:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 13:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 13:33	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 13:33	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 13:33	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 13:33	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 13:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 13:33	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 13:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 13:33	1
Naphthalene	0.556	J	1.0	0.34	ug/L			07/31/19 13:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 13:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 13:33	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 13:33	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 13:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 13:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 13:33	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 13:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 13:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 13:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 13:33	1

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

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

Lab Sample ID: MB 500-497483/6
Matrix: Water
Analysis Batch: 497483

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 13:33	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 13:33	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 13:33	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 13:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 13:33	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 13:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 13:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 13:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 13:33	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 13:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 13:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 13:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 13:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 13:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 13:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		72 - 124		07/31/19 13:33	1
Dibromofluoromethane	108		75 - 120		07/31/19 13:33	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		07/31/19 13:33	1
Toluene-d8 (Surr)	93		75 - 120		07/31/19 13:33	1

Lab Sample ID: LCS 500-497483/4
Matrix: Water
Analysis Batch: 497483

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	48.8		ug/L		98	40 - 143
Benzene	50.0	48.5		ug/L		97	70 - 120
Bromobenzene	50.0	49.7		ug/L		99	70 - 122
Bromochloromethane	50.0	53.2		ug/L		106	65 - 122
Bromodichloromethane	50.0	52.4		ug/L		105	69 - 120
Bromoform	50.0	70.6	*	ug/L		141	56 - 132
Carbon disulfide	50.0	45.9		ug/L		92	66 - 120
Carbon tetrachloride	50.0	54.9		ug/L		110	59 - 133
Chlorobenzene	50.0	48.3		ug/L		97	70 - 120
Chloroethane	50.0	37.8		ug/L		76	48 - 136
Chloroform	50.0	47.0		ug/L		94	70 - 120
2-Chlorotoluene	50.0	47.5		ug/L		95	70 - 125
4-Chlorotoluene	50.0	47.7		ug/L		95	68 - 124
cis-1,2-Dichloroethylene	50.0	50.2		ug/L		100	70 - 125
cis-1,3-Dichloropropene	50.0	51.3		ug/L		103	64 - 127
Dibromochloromethane	50.0	57.8		ug/L		116	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	66.7	*	ug/L		133	56 - 123
1,2-Dibromoethane	50.0	53.6		ug/L		107	70 - 125
Dichlorodifluoromethane	50.0	35.7		ug/L		71	40 - 159
1,1-Dichloroethane	50.0	46.8		ug/L		94	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

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

Lab Sample ID: LCS 500-497483/4

Matrix: Water

Analysis Batch: 497483

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	49.5		ug/L		99	68 - 127
1,1-Dichloroethylene	50.0	47.8		ug/L		96	67 - 122
1,2-Dichloropropane	50.0	49.6		ug/L		99	67 - 130
1,3-Dichloropropane	50.0	56.7		ug/L		113	62 - 136
2,2-Dichloropropane	50.0	48.4		ug/L		97	58 - 139
1,1-Dichloropropene	50.0	47.9		ug/L		96	70 - 121
Ethylbenzene	50.0	48.1		ug/L		96	70 - 123
Hexachlorobutadiene	50.0	40.2		ug/L		80	51 - 150
Isopropylbenzene	50.0	45.5		ug/L		91	70 - 126
m-Dichlorobenzene	50.0	47.8		ug/L		96	70 - 125
Methyl bromide	50.0	43.4		ug/L		87	40 - 152
Methyl chloride	50.0	42.1		ug/L		84	56 - 152
Methylene bromide	50.0	56.9		ug/L		114	70 - 120
Methylene Chloride	50.0	49.6		ug/L		99	69 - 125
Methyl ethyl ketone (MEK)	50.0	54.1		ug/L		108	46 - 144
Methyl tert-butyl ether	50.0	53.5		ug/L		107	55 - 123
Naphthalene	50.0	52.4		ug/L		105	53 - 144
n-Butylbenzene	50.0	46.4		ug/L		93	68 - 125
N-Propylbenzene	50.0	47.2		ug/L		94	69 - 127
o-Dichlorobenzene	50.0	47.9		ug/L		96	70 - 125
p-Dichlorobenzene	50.0	48.8		ug/L		98	70 - 120
p-Isopropyltoluene	50.0	44.5		ug/L		89	70 - 125
sec-Butylbenzene	50.0	45.4		ug/L		91	70 - 123
Styrene	50.0	49.2		ug/L		98	70 - 120
tert-Butylbenzene	50.0	43.9		ug/L		88	70 - 121
1,1,1,2-Tetrachloroethane	50.0	53.9		ug/L		108	70 - 125
1,1,2,2-Tetrachloroethane	50.0	57.9		ug/L		116	62 - 140
Tetrachloroethylene	50.0	45.5		ug/L		91	70 - 128
Tetrahydrofuran	100	117		ug/L		117	59 - 139
Toluene	50.0	45.7		ug/L		91	70 - 125
1,2-trans-Dichloroethylene	50.0	48.2		ug/L		96	70 - 125
trans-1,3-Dichloropropene	50.0	53.7		ug/L		107	62 - 128
1,2,3-Trichlorobenzene	50.0	47.1		ug/L		94	51 - 145
1,2,4-Trichlorobenzene	50.0	44.7		ug/L		89	57 - 137
1,1,1-Trichloroethane	50.0	47.3		ug/L		95	70 - 125
1,1,2-Trichloroethane	50.0	52.1		ug/L		104	71 - 130
Trichloroethylene	50.0	48.0		ug/L		96	70 - 125
Trichlorofluoromethane	50.0	45.7		ug/L		91	55 - 128
1,2,3-Trichloropropane	50.0	60.8		ug/L		122	50 - 133
1,2,4-Trimethylbenzene	50.0	45.8		ug/L		92	70 - 123
1,3,5-Trimethylbenzene	50.0	45.7		ug/L		91	70 - 123
Vinyl chloride	50.0	38.7		ug/L		77	64 - 126
Xylenes, Total	100	95.8		ug/L		96	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane	107		75 - 120
1,2-Dichloroethane-d4 (Surr)	108		75 - 126

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

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

Lab Sample ID: LCS 500-497483/4
Matrix: Water
Analysis Batch: 497483

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		75 - 120

Lab Sample ID: 500-167232-17 MS
Matrix: Ground Water
Analysis Batch: 497483

Client Sample ID: P-25D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	<1.7		50.0	52.7		ug/L		105	40 - 143
Benzene	0.39	J	50.0	50.6		ug/L		101	70 - 120
Bromobenzene	<0.36		50.0	51.1		ug/L		102	70 - 122
Bromochloromethane	<0.43		50.0	54.6		ug/L		109	65 - 122
Bromodichloromethane	<0.37		50.0	54.5		ug/L		109	69 - 120
Bromoform	<0.48	* F1	50.0	72.0	F1	ug/L		144	56 - 132
Carbon disulfide	<0.45		50.0	46.8		ug/L		94	66 - 120
Carbon tetrachloride	<0.38		50.0	55.6		ug/L		111	59 - 133
Chlorobenzene	<0.39		50.0	50.2		ug/L		100	70 - 120
Chloroethane	<0.51		50.0	35.0		ug/L		70	48 - 136
Chloroform	<0.37		50.0	49.0		ug/L		98	70 - 120
2-Chlorotoluene	<0.31		50.0	49.3		ug/L		99	70 - 125
4-Chlorotoluene	<0.35		50.0	50.0		ug/L		100	68 - 124
cis-1,2-Dichloroethylene	<0.41		50.0	52.9		ug/L		106	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	52.5		ug/L		105	64 - 127
Dibromochloromethane	<0.49	F1	50.0	62.0		ug/L		124	68 - 125
1,2-Dibromo-3-Chloropropane	<2.0	* F1	50.0	70.5	F1	ug/L		141	56 - 123
1,2-Dibromoethane	<0.39		50.0	57.1		ug/L		114	70 - 125
Dichlorodifluoromethane	<0.67		50.0	29.5		ug/L		59	40 - 159
1,1-Dichloroethane	<0.41		50.0	47.5		ug/L		95	70 - 125
1,2-Dichloroethane	<0.39		50.0	51.6		ug/L		103	68 - 127
1,1-Dichloroethylene	<0.39		50.0	46.8		ug/L		94	67 - 122
1,2-Dichloropropane	<0.43		50.0	51.2		ug/L		102	67 - 130
1,3-Dichloropropane	<0.36		50.0	58.5		ug/L		117	62 - 136
2,2-Dichloropropane	<0.44		50.0	43.9		ug/L		88	58 - 139
1,1-Dichloropropene	<0.30		50.0	48.4		ug/L		97	70 - 121
Ethylbenzene	<0.18		50.0	49.6		ug/L		99	70 - 123
Hexachlorobutadiene	<0.45		50.0	40.2		ug/L		80	51 - 150
Isopropylbenzene	<0.39		50.0	46.5		ug/L		93	70 - 126
m-Dichlorobenzene	<0.40		50.0	49.1		ug/L		98	70 - 125
Methyl bromide	<0.80		50.0	41.8		ug/L		84	40 - 152
Methyl chloride	<0.32		50.0	36.4		ug/L		73	56 - 152
Methylene bromide	<0.27	F1	50.0	59.0		ug/L		118	70 - 120
Methylene Chloride	<1.6		50.0	51.2		ug/L		102	69 - 125
Methyl ethyl ketone (MEK)	<2.1		50.0	52.7		ug/L		105	46 - 144
Methyl tert-butyl ether	<0.39		50.0	54.9		ug/L		110	55 - 123
Naphthalene	<0.34		50.0	53.3		ug/L		107	53 - 144
n-Butylbenzene	<0.39		50.0	45.9		ug/L		92	68 - 125
N-Propylbenzene	<0.41		50.0	48.0		ug/L		96	69 - 127
o-Dichlorobenzene	<0.33		50.0	50.8		ug/L		102	70 - 125
p-Dichlorobenzene	<0.36		50.0	49.1		ug/L		98	70 - 120

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

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

Lab Sample ID: 500-167232-17 MS

Matrix: Ground Water

Analysis Batch: 497483

Client Sample ID: P-25D

Prep Type: Total/NA

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result			Result	Qualifier				
p-Isopropyltoluene	<0.36		50.0	45.7		ug/L		91	70 - 125
sec-Butylbenzene	<0.40		50.0	46.0		ug/L		92	70 - 123
Styrene	<0.39		50.0	50.9		ug/L		102	70 - 120
tert-Butylbenzene	<0.40		50.0	44.7		ug/L		89	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	55.9		ug/L		112	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	62.1		ug/L		124	62 - 140
Tetrachloroethylene	<0.37		50.0	45.3		ug/L		91	70 - 128
Tetrahydrofuran	<1.9		100	124		ug/L		124	59 - 139
Toluene	<0.15		50.0	47.8		ug/L		96	70 - 125
1,2-trans-Dichloroethylene	<0.35		50.0	50.1		ug/L		100	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	54.0		ug/L		108	62 - 128
1,2,3-Trichlorobenzene	<0.46		50.0	45.5		ug/L		91	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	44.0		ug/L		88	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	48.7		ug/L		97	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	56.2		ug/L		112	71 - 130
Trichloroethylene	230	E	50.0	266	E 4	ug/L		79	70 - 125
Trichlorofluoromethane	<0.43		50.0	43.3		ug/L		87	55 - 128
1,2,3-Trichloropropane	<0.41	F1	50.0	62.5		ug/L		125	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	47.3		ug/L		95	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	46.8		ug/L		94	70 - 123
Vinyl chloride	<0.20		50.0	37.6		ug/L		75	64 - 126
Xylenes, Total	<0.22		100	99.3		ug/L		99	70 - 125

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		72 - 124
Dibromofluoromethane	108		75 - 120
1,2-Dichloroethane-d4 (Surr)	108		75 - 126
Toluene-d8 (Surr)	97		75 - 120

Lab Sample ID: 500-167232-17 MSD

Matrix: Ground Water

Analysis Batch: 497483

Client Sample ID: P-25D

Prep Type: Total/NA

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result			Result	Qualifier						
Acetone	<1.7		50.0	60.6		ug/L		121	40 - 143	14	20
Benzene	0.39	J	50.0	54.5		ug/L		108	70 - 120	7	20
Bromobenzene	<0.36		50.0	54.0		ug/L		108	70 - 122	6	20
Bromochloromethane	<0.43		50.0	59.3		ug/L		119	65 - 122	8	20
Bromodichloromethane	<0.37		50.0	57.5		ug/L		115	69 - 120	5	20
Bromoform	<0.48	* F1	50.0	77.1	F1	ug/L		154	56 - 132	7	20
Carbon disulfide	<0.45		50.0	49.4		ug/L		99	66 - 120	5	20
Carbon tetrachloride	<0.38		50.0	56.7		ug/L		113	59 - 133	2	20
Chlorobenzene	<0.39		50.0	52.8		ug/L		106	70 - 120	5	20
Chloroethane	<0.51		50.0	35.4		ug/L		71	48 - 136	1	20
Chloroform	<0.37		50.0	52.1		ug/L		104	70 - 120	6	20
2-Chlorotoluene	<0.31		50.0	52.6		ug/L		105	70 - 125	7	20
4-Chlorotoluene	<0.35		50.0	53.0		ug/L		106	68 - 124	6	20
cis-1,2-Dichloroethylene	<0.41		50.0	54.3		ug/L		109	70 - 125	3	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

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

Lab Sample ID: 500-167232-17 MSD
Matrix: Ground Water
Analysis Batch: 497483

Client Sample ID: P-25D
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier		Result	Qualifier				Limits		Limit
cis-1,3-Dichloropropene	<0.42		50.0	54.2		ug/L		108	64 - 127	3	20
Dibromochloromethane	<0.49	F1	50.0	65.7	F1	ug/L		131	68 - 125	6	20
1,2-Dibromo-3-Chloropropane	<2.0	* F1	50.0	79.1	F1	ug/L		158	56 - 123	11	20
1,2-Dibromoethane	<0.39		50.0	60.9		ug/L		122	70 - 125	7	20
Dichlorodifluoromethane	<0.67		50.0	30.7		ug/L		61	40 - 159	4	20
1,1-Dichloroethane	<0.41		50.0	51.7		ug/L		103	70 - 125	8	20
1,2-Dichloroethane	<0.39		50.0	55.3		ug/L		111	68 - 127	7	20
1,1-Dichloroethylene	<0.39		50.0	50.3		ug/L		101	67 - 122	7	20
1,2-Dichloropropane	<0.43		50.0	53.8		ug/L		108	67 - 130	5	20
1,3-Dichloropropane	<0.36		50.0	62.6		ug/L		125	62 - 136	7	20
2,2-Dichloropropane	<0.44		50.0	47.8		ug/L		96	58 - 139	9	20
1,1-Dichloropropene	<0.30		50.0	51.0		ug/L		102	70 - 121	5	20
Ethylbenzene	<0.18		50.0	51.9		ug/L		104	70 - 123	5	20
Hexachlorobutadiene	<0.45		50.0	42.5		ug/L		85	51 - 150	6	20
Isopropylbenzene	<0.39		50.0	49.4		ug/L		99	70 - 126	6	20
m-Dichlorobenzene	<0.40		50.0	52.0		ug/L		104	70 - 125	6	20
Methyl bromide	<0.80		50.0	44.4		ug/L		89	40 - 152	6	20
Methyl chloride	<0.32		50.0	40.1		ug/L		80	56 - 152	10	20
Methylene bromide	<0.27	F1	50.0	62.2	F1	ug/L		124	70 - 120	5	20
Methylene Chloride	<1.6		50.0	55.6		ug/L		111	69 - 125	8	20
Methyl ethyl ketone (MEK)	<2.1		50.0	60.9		ug/L		122	46 - 144	14	20
Methyl tert-butyl ether	<0.39		50.0	57.8		ug/L		116	55 - 123	5	20
Naphthalene	<0.34		50.0	58.6		ug/L		117	53 - 144	10	20
n-Butylbenzene	<0.39		50.0	49.3		ug/L		99	68 - 125	7	20
N-Propylbenzene	<0.41		50.0	51.2		ug/L		102	69 - 127	7	20
o-Dichlorobenzene	<0.33		50.0	52.6		ug/L		105	70 - 125	3	20
p-Dichlorobenzene	<0.36		50.0	53.6		ug/L		107	70 - 120	9	20
p-Isopropyltoluene	<0.36		50.0	48.1		ug/L		96	70 - 125	5	20
sec-Butylbenzene	<0.40		50.0	48.5		ug/L		97	70 - 123	5	20
Styrene	<0.39		50.0	53.6		ug/L		107	70 - 120	5	20
tert-Butylbenzene	<0.40		50.0	47.5		ug/L		95	70 - 121	6	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	59.2		ug/L		118	70 - 125	6	20
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	66.6		ug/L		133	62 - 140	7	20
Tetrachloroethylene	<0.37		50.0	48.8		ug/L		98	70 - 128	7	20
Tetrahydrofuran	<1.9		100	133		ug/L		133	59 - 139	7	20
Toluene	<0.15		50.0	49.5		ug/L		99	70 - 125	3	20
1,2-trans-Dichloroethylene	<0.35		50.0	53.6		ug/L		107	70 - 125	7	20
trans-1,3-Dichloropropene	<0.36		50.0	57.3		ug/L		115	62 - 128	6	20
1,2,3-Trichlorobenzene	<0.46		50.0	49.3		ug/L		99	51 - 145	8	20
1,2,4-Trichlorobenzene	<0.34		50.0	46.2		ug/L		92	57 - 137	5	20
1,1,1-Trichloroethane	<0.38		50.0	51.0		ug/L		102	70 - 125	5	20
1,1,2-Trichloroethane	<0.35		50.0	59.0		ug/L		118	71 - 130	5	20
Trichloroethylene	230	E	50.0	277	E 4	ug/L		101	70 - 125	4	20
Trichlorofluoromethane	<0.43		50.0	44.9		ug/L		90	55 - 128	4	20
1,2,3-Trichloropropane	<0.41	F1	50.0	67.9	F1	ug/L		136	50 - 133	8	20
1,2,4-Trimethylbenzene	<0.36		50.0	49.7		ug/L		99	70 - 123	5	20
1,3,5-Trimethylbenzene	<0.25		50.0	49.9		ug/L		100	70 - 123	6	20
Vinyl chloride	<0.20		50.0	39.9		ug/L		80	64 - 126	6	20
Xylenes, Total	<0.22		100	105		ug/L		105	70 - 125	6	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

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

Surrogate	MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		72 - 124
Dibromofluoromethane	107		75 - 120
1,2-Dichloroethane-d4 (Surr)	106		75 - 126
Toluene-d8 (Surr)	96		75 - 120

Lab Sample ID: MB 500-498039/6
Matrix: Water
Analysis Batch: 498039

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

Analyte	MB MB		LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<1.7		10	1.7	ug/L			08/02/19 22:22	1
Benzene	<0.15		0.50	0.15	ug/L			08/02/19 22:22	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/02/19 22:22	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/02/19 22:22	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/02/19 22:22	1
Bromoform	<0.48		1.0	0.48	ug/L			08/02/19 22:22	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/02/19 22:22	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/02/19 22:22	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/02/19 22:22	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/02/19 22:22	1
Chloroform	<0.37		2.0	0.37	ug/L			08/02/19 22:22	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/02/19 22:22	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/02/19 22:22	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			08/02/19 22:22	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/02/19 22:22	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/02/19 22:22	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/02/19 22:22	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/02/19 22:22	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/02/19 22:22	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/02/19 22:22	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/02/19 22:22	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			08/02/19 22:22	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/02/19 22:22	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/02/19 22:22	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/02/19 22:22	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/02/19 22:22	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/02/19 22:22	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/02/19 22:22	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/02/19 22:22	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/02/19 22:22	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/02/19 22:22	1
Methyl bromide	<0.80		3.0	0.80	ug/L			08/02/19 22:22	1
Methyl chloride	<0.32		1.0	0.32	ug/L			08/02/19 22:22	1
Methylene bromide	<0.27		1.0	0.27	ug/L			08/02/19 22:22	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/02/19 22:22	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/02/19 22:22	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/02/19 22:22	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/02/19 22:22	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/02/19 22:22	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/02/19 22:22	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/02/19 22:22	1

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

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

Lab Sample ID: MB 500-498039/6
Matrix: Water
Analysis Batch: 498039

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/02/19 22:22	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/02/19 22:22	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/02/19 22:22	1
Styrene	<0.39		1.0	0.39	ug/L			08/02/19 22:22	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/02/19 22:22	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/02/19 22:22	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/02/19 22:22	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			08/02/19 22:22	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/02/19 22:22	1
Toluene	<0.15		0.50	0.15	ug/L			08/02/19 22:22	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			08/02/19 22:22	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/02/19 22:22	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/02/19 22:22	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/02/19 22:22	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/02/19 22:22	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/02/19 22:22	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			08/02/19 22:22	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/02/19 22:22	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/02/19 22:22	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/02/19 22:22	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/02/19 22:22	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/02/19 22:22	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/02/19 22:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		72 - 124		08/02/19 22:22	1
Dibromofluoromethane	97		75 - 120		08/02/19 22:22	1
1,2-Dichloroethane-d4 (Surr)	96		75 - 126		08/02/19 22:22	1
Toluene-d8 (Surr)	98		75 - 120		08/02/19 22:22	1

Lab Sample ID: LCS 500-498039/4
Matrix: Water
Analysis Batch: 498039

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	42.0		ug/L		84	40 - 143
Benzene	50.0	44.6		ug/L		89	70 - 120
Bromobenzene	50.0	44.9		ug/L		90	70 - 122
Bromochloromethane	50.0	46.4		ug/L		93	65 - 122
Bromodichloromethane	50.0	40.9		ug/L		82	69 - 120
Bromoform	50.0	39.7		ug/L		79	56 - 132
Carbon disulfide	50.0	48.3		ug/L		97	66 - 120
Carbon tetrachloride	50.0	47.7		ug/L		95	59 - 133
Chlorobenzene	50.0	43.7		ug/L		87	70 - 120
Chloroethane	50.0	49.7		ug/L		99	48 - 136
Chloroform	50.0	43.3		ug/L		87	70 - 120
2-Chlorotoluene	50.0	47.2		ug/L		94	70 - 125
4-Chlorotoluene	50.0	46.2		ug/L		92	68 - 124

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

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

Lab Sample ID: LCS 500-498039/4

Matrix: Water

Analysis Batch: 498039

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethylene	50.0	46.6		ug/L		93	70 - 125
cis-1,3-Dichloropropene	50.0	39.8		ug/L		80	64 - 127
Dibromochloromethane	50.0	40.8		ug/L		82	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	36.3		ug/L		73	56 - 123
1,2-Dibromoethane	50.0	41.8		ug/L		84	70 - 125
Dichlorodifluoromethane	50.0	44.9		ug/L		90	40 - 159
1,1-Dichloroethane	50.0	46.8		ug/L		94	70 - 125
1,2-Dichloroethane	50.0	42.0		ug/L		84	68 - 127
1,1-Dichloroethylene	50.0	46.6		ug/L		93	67 - 122
1,2-Dichloropropane	50.0	44.9		ug/L		90	67 - 130
1,3-Dichloropropane	50.0	41.3		ug/L		83	62 - 136
2,2-Dichloropropane	50.0	53.8		ug/L		108	58 - 139
1,1-Dichloropropene	50.0	46.0		ug/L		92	70 - 121
Ethylbenzene	50.0	46.5		ug/L		93	70 - 123
Hexachlorobutadiene	50.0	45.8		ug/L		92	51 - 150
Isopropylbenzene	50.0	47.6		ug/L		95	70 - 126
m-Dichlorobenzene	50.0	45.9		ug/L		92	70 - 125
Methyl bromide	50.0	50.8		ug/L		102	40 - 152
Methyl chloride	50.0	49.0		ug/L		98	56 - 152
Methylene bromide	50.0	42.5		ug/L		85	70 - 120
Methylene Chloride	50.0	45.0		ug/L		90	69 - 125
Methyl ethyl ketone (MEK)	50.0	39.3		ug/L		79	46 - 144
Methyl tert-butyl ether	50.0	44.1		ug/L		88	55 - 123
Naphthalene	50.0	41.0		ug/L		82	53 - 144
n-Butylbenzene	50.0	47.8		ug/L		96	68 - 125
N-Propylbenzene	50.0	48.0		ug/L		96	69 - 127
o-Dichlorobenzene	50.0	44.9		ug/L		90	70 - 125
p-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 120
p-Isopropyltoluene	50.0	48.3		ug/L		97	70 - 125
sec-Butylbenzene	50.0	48.2		ug/L		96	70 - 123
Styrene	50.0	44.6		ug/L		89	70 - 120
tert-Butylbenzene	50.0	47.3		ug/L		95	70 - 121
1,1,1,2-Tetrachloroethane	50.0	41.2		ug/L		82	70 - 125
1,1,2,2-Tetrachloroethane	50.0	43.8		ug/L		88	62 - 140
Tetrachloroethylene	50.0	44.5		ug/L		89	70 - 128
Tetrahydrofuran	100	82.4		ug/L		82	59 - 139
Toluene	50.0	41.5		ug/L		83	70 - 125
1,2-trans-Dichloroethylene	50.0	48.2		ug/L		96	70 - 125
trans-1,3-Dichloropropene	50.0	39.7		ug/L		79	62 - 128
1,2,3-Trichlorobenzene	50.0	41.1		ug/L		82	51 - 145
1,2,4-Trichlorobenzene	50.0	43.1		ug/L		86	57 - 137
1,1,1-Trichloroethane	50.0	49.7		ug/L		99	70 - 125
1,1,2-Trichloroethane	50.0	39.6		ug/L		79	71 - 130
Trichloroethylene	50.0	45.0		ug/L		90	70 - 125
Trichlorofluoromethane	50.0	45.3		ug/L		91	55 - 128
1,2,3-Trichloropropane	50.0	43.5		ug/L		87	50 - 133
1,2,4-Trimethylbenzene	50.0	46.6		ug/L		93	70 - 123
1,3,5-Trimethylbenzene	50.0	47.7		ug/L		95	70 - 123
Vinyl chloride	50.0	50.2		ug/L		100	64 - 126

Eurolins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

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

Lab Sample ID: LCS 500-498039/4

Matrix: Water

Analysis Batch: 498039

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	100	87.0		ug/L		87	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		72 - 124
Dibromofluoromethane	99		75 - 120
1,2-Dichloroethane-d4 (Surr)	95		75 - 126
Toluene-d8 (Surr)	95		75 - 120



Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-1

Date Collected: 07/23/19 09:15

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 14:34	PMF	TAL CHI

Client Sample ID: P-6

Date Collected: 07/23/19 09:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 15:05	PMF	TAL CHI

Client Sample ID: MW-7

Date Collected: 07/23/19 13:15

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 15:36	PMF	TAL CHI

Client Sample ID: MW-8

Date Collected: 07/23/19 13:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 16:07	PMF	TAL CHI

Client Sample ID: MW-9

Date Collected: 07/24/19 14:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 16:38	PMF	TAL CHI

Client Sample ID: P-10

Date Collected: 07/24/19 14:15

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 17:09	PMF	TAL CHI

Client Sample ID: MW-11

Date Collected: 07/24/19 11:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 17:39	PMF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: MW-16

Date Collected: 07/24/19 08:45

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-8

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 18:10	PMF	TAL CHI

Client Sample ID: MW-17

Date Collected: 07/23/19 11:30

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-9

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 18:41	PMF	TAL CHI

Client Sample ID: P-18

Date Collected: 07/23/19 11:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-10

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 19:12	PMF	TAL CHI

Client Sample ID: P-19

Date Collected: 07/23/19 11:45

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-11

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 19:43	PMF	TAL CHI

Client Sample ID: P-20

Date Collected: 07/23/19 09:30

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-12

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 20:14	PMF	TAL CHI

Client Sample ID: MW-21

Date Collected: 07/23/19 16:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-13

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 20:44	PMF	TAL CHI

Client Sample ID: MW-22

Date Collected: 07/23/19 14:20

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-14

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 21:15	PMF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Client Sample ID: P-23

Date Collected: 07/23/19 10:50

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-15

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 21:46	PMF	TAL CHI

Client Sample ID: P-25S

Date Collected: 07/23/19 13:40

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-16

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 22:17	PMF	TAL CHI

Client Sample ID: P-25D

Date Collected: 07/23/19 13:50

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-17

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	10	498039	08/03/19 07:03	JDD	TAL CHI
Total/NA	Analysis	8260B		1	497483	07/31/19 22:48	PMF	TAL CHI

Client Sample ID: MW-26

Date Collected: 07/23/19 15:45

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-18

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	498039	08/03/19 01:15	JDD	TAL CHI

Client Sample ID: P-27

Date Collected: 07/23/19 15:30

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-19

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	498039	08/03/19 01:40	JDD	TAL CHI

Client Sample ID: MW-28

Date Collected: 07/24/19 08:45

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-20

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	498039	08/03/19 02:05	JDD	TAL CHI

Client Sample ID: Trip Blank

Date Collected: 07/24/19 00:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497483	07/31/19 14:04	PMF	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-19 *

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: Mitch Evenson +
 Company: Anna Beckman
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____ 500-167232 COC
 Fax: _____
 PO#/Reference# _____



Chain of Custody Record

Lab Job #: 500-167232
 Chain of Custody Number: _____
 Page 1 of 2
 Temperature °C of Cooler: 2.8, 0.4

Client		Client Project #		Preservative		Parameter		Comments	
<u>Cedar Corp</u>									
Project Name		Lab Project #		# of Containers		Matrix		Preservative Key	
<u>Town of Warren</u>								1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Location/State		Lab PM		Date		Time		Matrix	
<u>Hudson, WI</u>		<u>Sandie Fredrick</u>							
Sampler		Sample ID		Date		Time		Matrix	
<u>AMB + LCS</u>									
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Matrix	Matrix	Matrix
<u>1</u>		<u>mw-1</u>	<u>7/23</u>	<u>0915</u>	<u>5</u>	<u>GW</u>	<u>VOCS</u>	<u>PFAS</u>	
<u>2</u>		<u>P-10</u>	<u>7/23</u>	<u>0900</u>					
<u>3</u>		<u>mw-7</u>	<u>7/23</u>	<u>1315</u>					
<u>4</u>		<u>mw-8</u>	<u>7/23</u>	<u>1300</u>					
<u>5</u>		<u>mw-9</u>	<u>7/24</u>	<u>1400</u>					
<u>6</u>		<u>P-10</u>	<u>7/24</u>	<u>1415</u>					
<u>7</u>		<u>mw-11</u>	<u>7/24</u>	<u>1100</u>					
<u>8</u>		<u>mw-16</u>	<u>7/24</u>	<u>0845</u>					
<u>9</u>		<u>mw-17</u>	<u>7/23</u>	<u>1130</u>					
<u>10</u>		<u>P-18</u>	<u>7/23</u>	<u>1100</u>					

Turnaround Time Required (Business Days) _____
 Requested Due Date _____
 Sample Disposal: Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>Anna Beckman</u> Company: <u>Cedar</u> Date: <u>7/25/19</u> Time: <u>0700</u>	Received By: <u>[Signature]</u> Company: <u>[Signature]</u> Date: <u>7/26/19</u> Time: <u>0935</u>	Lab Courier: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Shipped: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments:
Trio Blanks included
1 cooler for VOCS
1 cooler for PFAS

Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: Mitch Evenson +
Company: Anna Beckman
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference#: _____

Chain of Custody Record

Lab Job # 500-167232
Chain of Custody Number: _____
Page 2 of 2
Temperature °C of Cooler: 2.8, 0.4

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
Project Name		Lab Project #		Sampling		Matrix		Comments		
Project Location/State		Lab PM		Date	Time	# of Containers	Matrix			
Cedar Corp										
Town of Warren										
Hudson, WI		Sandie Fredrick								
Sampler AMB & LCS										
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Matrix	Matrix	Matrix	Matrix
11		P-19	7/23	1145	5	GW	X	X		
12		P-20	7/23	0930						
13		MW-21	7/23	1600						
14		MW-22	7/23	1420						
15		P-23	7/23	1050						
16		P-253	7/23	1340						
17		P-250	7/23	1350						
18		MW-26	7/23	1545						
19		P-27	7/23	1530						
20		MW-28	7/24	0845						
21		Trip Blank	7/23	1430			X	X		

Turnaround Time Required (Business Days)
 1 Day 2 Days 3 Days 4 Days 5 Days 7 Days 10 Days 15 Days Other _____
 Requested Due Date _____
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>Anna Beckman</u> Company Cedar	Date <u>7/25/19</u>	Time <u>0700</u>	Received By <u>[Signature]</u> Company TA	Date <u>7/26/19</u>	Time <u>[Signature]</u>	Lab Courier
Relinquished By	Date	Time	Received By	Date	Time	Shipped
Relinquished By	Date	Time	Received By	Date	Time	Hand Delivered

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments
Trip Blank included
1 cooler for VOCs
1 cooler for PFAS

Lab Comments:

ORIGIN ID:PHDA (716) 235-9081
MITCH EVENSON
CEDAR CORPORATION
604 WILSON AVENUE

SHIP DATE: 20MAY19
ACTWGT: 10.00 LB MAN
CAD: US62071/CAFE3211

MENOMONIE, WI 54751
UNITED STATES US

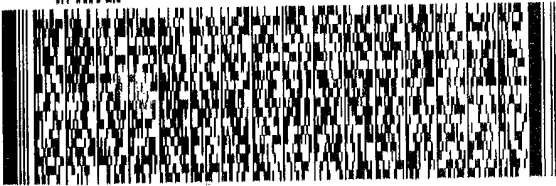
TO **SAMPLE RECEIVING**
TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 604843101

(708) 634-6200

REF: **S600-72414**

RMA: ||| |||| ||



FedEx
Express



500-167232 Waybill

TRK# 4931 8202 9651
0221

RETURNS MON-SAT
PRIORITY OVERNIGHT

FRI - 26 JUL 10:30A
PRIORITY OVERNIGHT 484

60484
IL-US
ORD

EX.
21 4931 8202 9651

GE JOTA



48qt.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

ORIGIN ID:PHDA (715) 235-8081
MITCH EVENSON
CEDAR CORPORATION
604 WILSON AVENUE

SHIP DATE: 15 JUL 19
ACTWGT: 10.00 LB MAN
CAD: 0662066/CAFE3211

MENOMONIE, WI 54751
UNITED STATES US

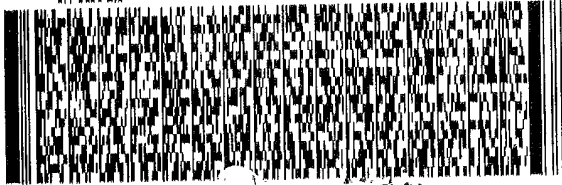
TO **SAMPLE RECEIVING**
TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 604843101

(708) 634-6200

REF: S600-73815

RMA: ||| ||| |||



TRK# 1054
0221

GE JOTA



RETURNS MON-SAT
PRIORITY OVERNIGHT

60484

FRI - 26 JUL 10
PRIORITY OVERNIGHT

60484
IL-US
ORD

FID 543899-25JUL19 ENVA-568C2/16F9/0F3A

30qt

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-167232-1

Login Number: 167232

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4, 2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing
TestAmerica

Sacramento
Sample Receiving Notes



500-167232 Field Sheet

Job: _____

Tracking #: 4059 7182 0840

PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Notes: _____

Therm. ID: A160 Corr. Factor: _____

Ice Wet Gel _____ Other _____

Cooler Custody Seal: 768164

Sample Custody Seal: _____

Cooler ID: _____

Temp Observed: 2.2 Corrected: 2.2

From: Temp Blank Sample
NCM Filed: Yes No

	Yes	No	NA
Perchlorate has headspace? (Methods 314, 331, 6850)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alkalinity has no headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CoC is complete w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample preservatives verified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cooler compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample containers have legible labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Containers are not broken or leaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample date/times are provided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate containers are used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample bottles are completely filled?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zero headspace?*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Multiphasic samples are not present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample temp OK?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample out of temp?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Initials: ST Date: 7/27/19

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

WHD

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-167423-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
8/5/2019 3:14:50 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	21
QC Association	22
Surrogate Summary	23
QC Sample Results	24
Chronicle	28
Certification Summary	29
Chain of Custody	30
Receipt Checklists	32
Field Data Sheets	33

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Job ID: 500-167423-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-167423-1

Comments

No additional comments.

Receipt

The samples were received on 7/27/2019 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

GC/MS VOA

Acetone was detected in the following sample: TRIP BLANK (500-167423-7). The method blank associated with this sample was non-detect for Acetone. Acetone is known lab contaminant; therefore all low level detects for this compound should be suspected as lab contamination.

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



Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: MW-3

Lab Sample ID: 500-167423-1

No Detections.

Client Sample ID: P-4

Lab Sample ID: 500-167423-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	8.5		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 500-167423-3

No Detections.

Client Sample ID: P-15

Lab Sample ID: 500-167423-4

No Detections.

Client Sample ID: MW-29

Lab Sample ID: 500-167423-5

No Detections.

Client Sample ID: P-30

Lab Sample ID: 500-167423-6

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethylene	0.51	J	1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethylene	10		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 500-167423-7

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	22		10	1.7	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-167423-1	MW-3	Water	07/25/19 09:00	07/27/19 09:10	
500-167423-2	P-4	Water	07/25/19 09:15	07/27/19 09:10	
500-167423-3	MW-5	Water	07/25/19 10:00	07/27/19 09:10	
500-167423-4	P-15	Water	07/25/19 08:30	07/27/19 09:10	
500-167423-5	MW-29	Water	07/25/19 10:30	07/27/19 09:10	
500-167423-6	P-30	Water	07/25/19 10:45	07/27/19 09:10	
500-167423-7	TRIP BLANK	Water	07/25/19 00:00	07/27/19 09:10	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: MW-3

Lab Sample ID: 500-167423-1

Date Collected: 07/25/19 09:00

Matrix: Water

Date Received: 07/27/19 09:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 16:24	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 16:24	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:24	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 16:24	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 16:24	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/19 16:24	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 16:24	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 16:24	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:24	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 16:24	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 16:24	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 16:24	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 16:24	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 16:24	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 16:24	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 16:24	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/19 16:24	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 16:24	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 16:24	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 16:24	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 16:24	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 16:24	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 16:24	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 16:24	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 16:24	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 16:24	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 16:24	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 16:24	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:24	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 16:24	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:24	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 16:24	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 16:24	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 16:24	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 16:24	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 16:24	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 16:24	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 16:24	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:24	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 16:24	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 16:24	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:24	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 16:24	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:24	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 16:24	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:24	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 16:24	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 16:24	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 16:24	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: MW-3
Date Collected: 07/25/19 09:00
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 16:24	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 16:24	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 16:24	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 16:24	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 16:24	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 16:24	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 16:24	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 16:24	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 16:24	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 16:24	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 16:24	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:24	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 16:24	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 16:24	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 16:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124					07/31/19 16:24	1
Dibromofluoromethane	102		75 - 120					07/31/19 16:24	1
1,2-Dichloroethane-d4 (Surr)	105		75 - 126					07/31/19 16:24	1
Toluene-d8 (Surr)	100		75 - 120					07/31/19 16:24	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: P-4

Lab Sample ID: 500-167423-2

Date Collected: 07/25/19 09:15

Matrix: Water

Date Received: 07/27/19 09:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 16:50	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 16:50	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:50	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 16:50	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 16:50	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/19 16:50	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 16:50	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 16:50	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:50	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 16:50	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 16:50	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 16:50	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 16:50	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 16:50	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 16:50	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 16:50	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/19 16:50	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 16:50	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 16:50	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 16:50	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 16:50	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 16:50	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 16:50	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 16:50	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 16:50	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 16:50	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 16:50	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 16:50	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:50	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 16:50	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:50	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 16:50	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 16:50	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 16:50	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 16:50	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 16:50	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 16:50	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 16:50	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 16:50	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 16:50	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 16:50	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:50	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 16:50	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:50	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 16:50	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 16:50	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 16:50	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 16:50	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 16:50	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: P-4

Lab Sample ID: 500-167423-2

Date Collected: 07/25/19 09:15

Matrix: Water

Date Received: 07/27/19 09:10

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 16:50	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 16:50	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 16:50	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 16:50	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 16:50	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 16:50	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 16:50	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 16:50	1
Trichloroethylene	8.5		0.50	0.16	ug/L			07/31/19 16:50	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 16:50	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 16:50	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 16:50	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 16:50	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 16:50	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		07/31/19 16:50	1
Dibromofluoromethane	106		75 - 120		07/31/19 16:50	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126		07/31/19 16:50	1
Toluene-d8 (Surr)	97		75 - 120		07/31/19 16:50	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: MW-5
Date Collected: 07/25/19 10:00
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 17:16	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 17:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 17:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 17:16	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/19 17:16	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 17:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 17:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 17:16	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 17:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 17:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 17:16	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 17:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 17:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 17:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/19 17:16	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 17:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 17:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 17:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 17:16	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 17:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 17:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 17:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 17:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 17:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 17:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 17:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 17:16	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:16	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 17:16	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 17:16	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 17:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 17:16	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 17:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 17:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 17:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 17:16	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 17:16	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 17:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:16	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 17:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:16	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 17:16	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 17:16	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 17:16	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: MW-5
Date Collected: 07/25/19 10:00
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-3
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 17:16	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 17:16	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 17:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 17:16	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 17:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 17:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 17:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 17:16	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 17:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 17:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 17:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 17:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 17:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 17:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124					07/31/19 17:16	1
Dibromofluoromethane	105		75 - 120					07/31/19 17:16	1
1,2-Dichloroethane-d4 (Surr)	107		75 - 126					07/31/19 17:16	1
Toluene-d8 (Surr)	97		75 - 120					07/31/19 17:16	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: P-15

Lab Sample ID: 500-167423-4

Date Collected: 07/25/19 08:30

Matrix: Water

Date Received: 07/27/19 09:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 17:42	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 17:42	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:42	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 17:42	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 17:42	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/19 17:42	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 17:42	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 17:42	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:42	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 17:42	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 17:42	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 17:42	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 17:42	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 17:42	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 17:42	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 17:42	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/19 17:42	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 17:42	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 17:42	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 17:42	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 17:42	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 17:42	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 17:42	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 17:42	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 17:42	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 17:42	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 17:42	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 17:42	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:42	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 17:42	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:42	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 17:42	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 17:42	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 17:42	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 17:42	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 17:42	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 17:42	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 17:42	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 17:42	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 17:42	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 17:42	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:42	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 17:42	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:42	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 17:42	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 17:42	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 17:42	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 17:42	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 17:42	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: P-15

Lab Sample ID: 500-167423-4

Date Collected: 07/25/19 08:30

Matrix: Water

Date Received: 07/27/19 09:10

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 17:42	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 17:42	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 17:42	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 17:42	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 17:42	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 17:42	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 17:42	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 17:42	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 17:42	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 17:42	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 17:42	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 17:42	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 17:42	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 17:42	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 17:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124					07/31/19 17:42	1
Dibromofluoromethane	104		75 - 120					07/31/19 17:42	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126					07/31/19 17:42	1
Toluene-d8 (Surr)	97		75 - 120					07/31/19 17:42	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: MW-29

Lab Sample ID: 500-167423-5

Date Collected: 07/25/19 10:30

Matrix: Water

Date Received: 07/27/19 09:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 18:08	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 18:08	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:08	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 18:08	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 18:08	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/19 18:08	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 18:08	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 18:08	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:08	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 18:08	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 18:08	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 18:08	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 18:08	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 18:08	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 18:08	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 18:08	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/19 18:08	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 18:08	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 18:08	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 18:08	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 18:08	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 18:08	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 18:08	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 18:08	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 18:08	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 18:08	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 18:08	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 18:08	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:08	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 18:08	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:08	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 18:08	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 18:08	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 18:08	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 18:08	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 18:08	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 18:08	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 18:08	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:08	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 18:08	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 18:08	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:08	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 18:08	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:08	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 18:08	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:08	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 18:08	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 18:08	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 18:08	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: MW-29
Date Collected: 07/25/19 10:30
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-5
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 18:08	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 18:08	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 18:08	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 18:08	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 18:08	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 18:08	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 18:08	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 18:08	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 18:08	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 18:08	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 18:08	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:08	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 18:08	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 18:08	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 18:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124					07/31/19 18:08	1
Dibromofluoromethane	109		75 - 120					07/31/19 18:08	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126					07/31/19 18:08	1
Toluene-d8 (Surr)	96		75 - 120					07/31/19 18:08	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: P-30

Lab Sample ID: 500-167423-6

Date Collected: 07/25/19 10:45

Matrix: Water

Date Received: 07/27/19 09:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 18:33	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 18:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 18:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 18:33	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/19 18:33	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 18:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 18:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 18:33	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 18:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 18:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 18:33	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 18:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 18:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 18:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/19 18:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 18:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 18:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 18:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 18:33	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 18:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 18:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 18:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 18:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 18:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 18:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 18:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 18:33	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:33	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 18:33	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 18:33	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 18:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 18:33	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 18:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 18:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 18:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 18:33	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 18:33	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 18:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:33	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 18:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 18:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 18:33	1
Tetrachloroethylene	0.51	J	1.0	0.37	ug/L			07/31/19 18:33	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: P-30

Lab Sample ID: 500-167423-6

Date Collected: 07/25/19 10:45

Matrix: Water

Date Received: 07/27/19 09:10

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 18:33	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 18:33	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 18:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 18:33	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 18:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 18:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 18:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 18:33	1
Trichloroethylene	10		0.50	0.16	ug/L			07/31/19 18:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 18:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 18:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 18:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 18:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		07/31/19 18:33	1
Dibromofluoromethane	106		75 - 120		07/31/19 18:33	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		07/31/19 18:33	1
Toluene-d8 (Surr)	96		75 - 120		07/31/19 18:33	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 500-167423-7

Date Collected: 07/25/19 00:00

Matrix: Water

Date Received: 07/27/19 09:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	22		10	1.7	ug/L			07/31/19 18:59	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 18:59	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:59	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 18:59	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 18:59	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/19 18:59	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 18:59	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 18:59	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:59	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 18:59	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 18:59	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 18:59	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 18:59	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 18:59	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 18:59	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 18:59	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/19 18:59	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 18:59	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 18:59	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 18:59	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 18:59	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 18:59	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 18:59	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 18:59	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 18:59	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 18:59	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 18:59	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 18:59	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:59	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 18:59	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:59	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 18:59	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 18:59	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 18:59	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 18:59	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 18:59	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 18:59	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 18:59	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 18:59	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 18:59	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 18:59	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:59	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 18:59	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:59	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 18:59	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 18:59	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 18:59	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 18:59	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 18:59	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 500-167423-7

Date Collected: 07/25/19 00:00

Matrix: Water

Date Received: 07/27/19 09:10

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 18:59	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 18:59	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 18:59	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 18:59	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 18:59	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 18:59	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 18:59	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 18:59	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 18:59	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 18:59	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 18:59	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 18:59	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 18:59	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 18:59	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 18:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/31/19 18:59	1
Dibromofluoromethane	105		75 - 120		07/31/19 18:59	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		07/31/19 18:59	1
Toluene-d8 (Surr)	96		75 - 120		07/31/19 18:59	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

GC/MS VOA

Analysis Batch: 497531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167423-1	MW-3	Total/NA	Water	8260B	
500-167423-2	P-4	Total/NA	Water	8260B	
500-167423-3	MW-5	Total/NA	Water	8260B	
500-167423-4	P-15	Total/NA	Water	8260B	
500-167423-5	MW-29	Total/NA	Water	8260B	
500-167423-6	P-30	Total/NA	Water	8260B	
500-167423-7	TRIP BLANK	Total/NA	Water	8260B	
MB 500-497531/6	Method Blank	Total/NA	Water	8260B	
LCS 500-497531/4	Lab Control Sample	Total/NA	Water	8260B	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-167423-1	MW-3	96	102	105	100
500-167423-2	P-4	96	106	109	97
500-167423-3	MW-5	97	105	107	97
500-167423-4	P-15	96	104	106	97
500-167423-5	MW-29	97	109	109	96
500-167423-6	P-30	96	106	108	96
500-167423-7	TRIP BLANK	95	105	110	96
LCS 500-497531/4	Lab Control Sample	99	106	106	96
MB 500-497531/6	Method Blank	97	103	105	98

Surrogate Legend

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

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-497531/6
Matrix: Water
Analysis Batch: 497531

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/31/19 11:38	1
Benzene	<0.15		0.50	0.15	ug/L			07/31/19 11:38	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/19 11:38	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/19 11:38	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/19 11:38	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/19 11:38	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/31/19 11:38	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/19 11:38	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/19 11:38	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/19 11:38	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/19 11:38	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/19 11:38	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/19 11:38	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/31/19 11:38	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/19 11:38	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/19 11:38	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/19 11:38	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/19 11:38	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/19 11:38	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/19 11:38	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/19 11:38	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/31/19 11:38	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/19 11:38	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/19 11:38	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/19 11:38	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/19 11:38	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/19 11:38	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/19 11:38	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 11:38	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/19 11:38	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/19 11:38	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/31/19 11:38	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/31/19 11:38	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/31/19 11:38	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/19 11:38	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/31/19 11:38	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/19 11:38	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/19 11:38	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/19 11:38	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/19 11:38	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/19 11:38	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/19 11:38	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/19 11:38	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 11:38	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/19 11:38	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/19 11:38	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/19 11:38	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/19 11:38	1

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

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

Lab Sample ID: MB 500-497531/6
Matrix: Water
Analysis Batch: 497531

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/31/19 11:38	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/31/19 11:38	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/19 11:38	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/31/19 11:38	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/19 11:38	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/19 11:38	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/19 11:38	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/19 11:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/19 11:38	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/31/19 11:38	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/19 11:38	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/19 11:38	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/19 11:38	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/19 11:38	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/19 11:38	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/19 11:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124		07/31/19 11:38	1
Dibromofluoromethane	103		75 - 120		07/31/19 11:38	1
1,2-Dichloroethane-d4 (Surr)	105		75 - 126		07/31/19 11:38	1
Toluene-d8 (Surr)	98		75 - 120		07/31/19 11:38	1

Lab Sample ID: LCS 500-497531/4
Matrix: Water
Analysis Batch: 497531

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	40.3		ug/L		81	40 - 143
Benzene	50.0	45.2		ug/L		90	70 - 120
Bromobenzene	50.0	44.7		ug/L		89	70 - 122
Bromochloromethane	50.0	48.3		ug/L		97	65 - 122
Bromodichloromethane	50.0	45.3		ug/L		91	69 - 120
Bromoform	50.0	40.4		ug/L		81	56 - 132
Carbon disulfide	50.0	42.6		ug/L		85	66 - 120
Carbon tetrachloride	50.0	45.9		ug/L		92	59 - 133
Chlorobenzene	50.0	45.4		ug/L		91	70 - 120
Chloroethane	50.0	52.2		ug/L		104	48 - 136
Chloroform	50.0	47.0		ug/L		94	70 - 120
2-Chlorotoluene	50.0	42.8		ug/L		86	70 - 125
4-Chlorotoluene	50.0	43.5		ug/L		87	68 - 124
cis-1,2-Dichloroethylene	50.0	47.9		ug/L		96	70 - 125
cis-1,3-Dichloropropene	50.0	41.7		ug/L		83	64 - 127
Dibromochloromethane	50.0	43.4		ug/L		87	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	36.5		ug/L		73	56 - 123
1,2-Dibromoethane	50.0	45.4		ug/L		91	70 - 125
Dichlorodifluoromethane	50.0	36.1		ug/L		72	40 - 159
1,1-Dichloroethane	50.0	46.1		ug/L		92	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

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

Lab Sample ID: LCS 500-497531/4

Matrix: Water

Analysis Batch: 497531

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	48.6		ug/L		97	68 - 127
1,1-Dichloroethylene	50.0	44.7		ug/L		89	67 - 122
1,2-Dichloropropane	50.0	46.6		ug/L		93	67 - 130
1,3-Dichloropropane	50.0	44.9		ug/L		90	62 - 136
2,2-Dichloropropane	50.0	44.1		ug/L		88	58 - 139
1,1-Dichloropropene	50.0	45.8		ug/L		92	70 - 121
Ethylbenzene	50.0	43.4		ug/L		87	70 - 123
Hexachlorobutadiene	50.0	47.1		ug/L		94	51 - 150
Isopropylbenzene	50.0	42.6		ug/L		85	70 - 126
m-Dichlorobenzene	50.0	44.2		ug/L		88	70 - 125
Methyl bromide	50.0	51.8		ug/L		104	40 - 152
Methyl chloride	50.0	37.8		ug/L		76	56 - 152
Methylene bromide	50.0	47.8		ug/L		96	70 - 120
Methylene Chloride	50.0	46.3		ug/L		93	69 - 125
Methyl ethyl ketone (MEK)	50.0	36.3		ug/L		73	46 - 144
Methyl tert-butyl ether	50.0	46.1		ug/L		92	55 - 123
Naphthalene	50.0	41.6		ug/L		83	53 - 144
n-Butylbenzene	50.0	43.2		ug/L		86	68 - 125
N-Propylbenzene	50.0	43.3		ug/L		87	69 - 127
o-Dichlorobenzene	50.0	43.9		ug/L		88	70 - 125
p-Dichlorobenzene	50.0	43.6		ug/L		87	70 - 120
p-Isopropyltoluene	50.0	43.8		ug/L		88	70 - 125
sec-Butylbenzene	50.0	42.3		ug/L		85	70 - 123
Styrene	50.0	45.0		ug/L		90	70 - 120
tert-Butylbenzene	50.0	42.3		ug/L		85	70 - 121
1,1,1,2-Tetrachloroethane	50.0	43.4		ug/L		87	70 - 125
1,1,2,2-Tetrachloroethane	50.0	41.3		ug/L		83	62 - 140
Tetrachloroethylene	50.0	44.4		ug/L		89	70 - 128
Tetrahydrofuran	100	81.9		ug/L		82	59 - 139
Toluene	50.0	41.6		ug/L		83	70 - 125
1,2-trans-Dichloroethylene	50.0	45.7		ug/L		91	70 - 125
trans-1,3-Dichloropropene	50.0	42.2		ug/L		84	62 - 128
1,2,3-Trichlorobenzene	50.0	44.8		ug/L		90	51 - 145
1,2,4-Trichlorobenzene	50.0	46.1		ug/L		92	57 - 137
1,1,1-Trichloroethane	50.0	46.9		ug/L		94	70 - 125
1,1,2-Trichloroethane	50.0	44.1		ug/L		88	71 - 130
Trichloroethylene	50.0	49.9		ug/L		100	70 - 125
Trichlorofluoromethane	50.0	45.3		ug/L		91	55 - 128
1,2,3-Trichloropropane	50.0	44.4		ug/L		89	50 - 133
1,2,4-Trimethylbenzene	50.0	43.1		ug/L		86	70 - 123
1,3,5-Trimethylbenzene	50.0	42.8		ug/L		86	70 - 123
Vinyl chloride	50.0	39.0		ug/L		78	64 - 126
Xylenes, Total	100	85.3		ug/L		85	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		72 - 124
Dibromofluoromethane	106		75 - 120
1,2-Dichloroethane-d4 (Surr)	106		75 - 126

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

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

Lab Sample ID: LCS 500-497531/4
Matrix: Water
Analysis Batch: 497531

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

<i>Surrogate</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>
<i>Toluene-d8 (Surr)</i>	96		75 - 120

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Client Sample ID: MW-3
Date Collected: 07/25/19 09:00
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497531	07/31/19 16:24	JDD	TAL CHI

Client Sample ID: P-4
Date Collected: 07/25/19 09:15
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497531	07/31/19 16:50	JDD	TAL CHI

Client Sample ID: MW-5
Date Collected: 07/25/19 10:00
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497531	07/31/19 17:16	JDD	TAL CHI

Client Sample ID: P-15
Date Collected: 07/25/19 08:30
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497531	07/31/19 17:42	JDD	TAL CHI

Client Sample ID: MW-29
Date Collected: 07/25/19 10:30
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497531	07/31/19 18:08	JDD	TAL CHI

Client Sample ID: P-30
Date Collected: 07/25/19 10:45
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497531	07/31/19 18:33	JDD	TAL CHI

Client Sample ID: TRIP BLANK
Date Collected: 07/25/19 00:00
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	497531	07/31/19 18:59	JDD	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Eurofins TestAmerica, Chicago

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-19 *

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)

Contact: Mitch Evenson & Anna Beckman
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)

Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-167423
Chain of Custody Number: _____
Page 1 of 1
Temperature °C of Cooler: 3.9

Client		Client Project #		Preservative		Parameter										Preservative Key	
<u>Cedar Corp</u>																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		# of Containers		Matrix										Comments	
<u>Town of Warren</u>																	
Project Location/State		Sampler		Date		Time											
<u>Hudson, WI</u>		<u>AMB & LCS</u>															
MS/MSD		Sample ID		Sampling													
				Date		Time											
1		<u>mw-3</u>		<u>7/25/19</u>	<u>0900</u>	<u>5</u>	<u>GW</u>	<u>X</u>	<u>X</u>								
2		<u>P-4</u>			<u>0915</u>												
3		<u>mw-5</u>			<u>1000</u>												
4		<u>P-15</u>			<u>0830</u>												
5		<u>mw-29</u>			<u>1030</u>												
6		<u>P-30</u>			<u>1045</u>												
7		<u>Trip Blank</u>															



Turnaround Time Required (Business Days): 1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Requested Due Date: _____

Sample Disposal: Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>Anna Beckman Cedar</u>	Company <u>Cedar</u>	Date <u>7/26/19</u>	Time <u>0730</u>	Received By <u>Paul Buckley TACH</u>	Company <u>TACH</u>	Date <u>7/27/19</u>	Time <u>0910</u>	Lab Courier
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped <input checked="" type="checkbox"/>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

ofins

Environment Testing
TestAmerica

Pat # 159470-434 RIT2 EXP 05/20



500-167423 Waybill

ORIGIN ID:PHDA (715) 235-8081
MITCH EVENSON
CEDAR CORPORATION
804 WILSON AVENUE

SHIP DATE: 16JUL19
ACTWT: 10.00 LB MAN
CAD: 0562065/CAFE9211

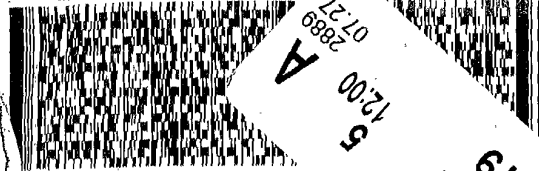
MENOMONIE, WI 54751
UNITED STATES US

TO **SAMPLE RECEIVING**
TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 604843101

(708) 634-6200
REF: 5600-73815

RMA: WI 1111 07



FedEx
Express



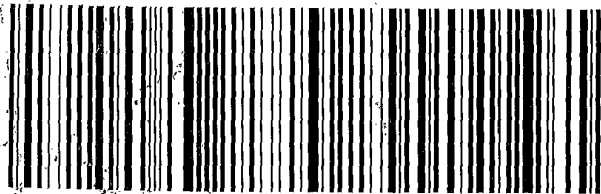
5 12:00
A 2889
07-21
ST 19
717
MON-SAT

fedEx
PK# 1054 5426 2889
0221

5:00 PM
DAY 12:00P
PRIORITY OVERNIGHT

X0 JOTA

60484
IL-US
ORD



F1D 8723803 26JUL19 EADA 568C2/A6F9/0C8A

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-167423-1

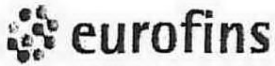
Login Number: 167423

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Buckley, Paula M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing
TestAmerica

Sacramento
Sample Receiving Notes



500-167423 Field Sheet

Tracking #: 4059 7182 0942

SO (PO) / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other _____

Job: _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Notes: _____

Therm. ID: AK10 Corr. Factor: -

Ice Wet Gel _____ Other _____

Cooler Custody Seal: 768187

Sample Custody Seal: -

Cooler ID: -

Temp Observed: 1.0 Corrected: 1.0

From: Temp Blank Sample

NCM Filed: Yes No

	Yes	No	NA
Perchlorate has headspace? (Methods 314, 331, 6850)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alkalinity has no headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CoC is complete w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample preservatives verified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cooler compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample containers have legible labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Containers are not broken or leaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample date/times are provided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate containers are used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample bottles are completely filled?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zero headspace?*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Multiphasic samples are not present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample temp OK?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample out of temp?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Initials: PK Date: 07/30/19

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

W4A

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-176296-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
1/20/2020 12:20:20 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	7
Sample Summary	8
Client Sample Results	9
Definitions	71
QC Association	72
Surrogate Summary	73
QC Sample Results	75
Chronicle	87
Certification Summary	92
Chain of Custody	93
Receipt Checklists	96

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Job ID: 500-176296-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

**Job Narrative
500-176296-1**

Comments

No additional comments.

Receipt

The samples were received on 1/14/2020 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

Receipt Exceptions

Received 1 VOA vial for samples 2 & 11 with headspace.

Didn't receive the Trip Blank.

GC/MS VOA

Method 8260B: The following samples were collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The samples were analyzed within the 7-day holding time specified for unpreserved samples: MW-1 (500-176296-1), P-6 (500-176296-6), MW-17 (500-176296-16), P-19 (500-176296-18), MW-26 (500-176296-26) and P-27 (500-176296-27).

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: P-25D (500-176296-24). Elevated reporting limits (RLs) are provided.

Method 8260B: The method blank for analytical batch 525000 contained Naphthalene above the Method detection limit (MDL) but below reporting limit (RL). Naphthalene was non-detect in the samples: therefore, no re-analysis was done and the data has been reported.

Method 8260B: The method blank for analytical batch 525191 contained Naphthalene and 1,2,3-Trichlorobenzene above the Method detection limit (MDL) but below reporting limit (RL). Naphthalene and 1,2,3-Trichlorobenzene were non-detect in the samples: therefore, no re-analysis was done and the data has been reported.

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-1

Lab Sample ID: 500-176296-1

No Detections.

Client Sample ID: MW-2

Lab Sample ID: 500-176296-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.47	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 500-176296-3

No Detections.

Client Sample ID: P-4

Lab Sample ID: 500-176296-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	9.2		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 500-176296-5

No Detections.

Client Sample ID: P-6

Lab Sample ID: 500-176296-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.41	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 500-176296-7

No Detections.

Client Sample ID: MW-8

Lab Sample ID: 500-176296-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	99		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 500-176296-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.45	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-10

Lab Sample ID: 500-176296-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	43		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 500-176296-11

No Detections.

Client Sample ID: MW-13

Lab Sample ID: 500-176296-12

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.1		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-14

Lab Sample ID: 500-176296-13

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	4.6		0.50	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-15

Lab Sample ID: 500-176296-14

No Detections.

Client Sample ID: MW-16

Lab Sample ID: 500-176296-15

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	39		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 500-176296-16

No Detections.

Client Sample ID: P-18

Lab Sample ID: 500-176296-17

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.0		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-19

Lab Sample ID: 500-176296-18

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.5		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-20

Lab Sample ID: 500-176296-19

No Detections.

Client Sample ID: MW-21

Lab Sample ID: 500-176296-20

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	140		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-22

Lab Sample ID: 500-176296-21

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.1		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-23

Lab Sample ID: 500-176296-22

No Detections.

Client Sample ID: MW-24

Lab Sample ID: 500-176296-23

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	79		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-25D

Lab Sample ID: 500-176296-24

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.97		0.50	0.15	ug/L	1		8260B	Total/NA
Trichloroethene - DL	200		5.0	1.6	ug/L	10		8260B	Total/NA

Client Sample ID: P-25S

Lab Sample ID: 500-176296-25

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	76		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-26

Lab Sample ID: 500-176296-26

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-27

Lab Sample ID: 500-176296-27

No Detections.

Client Sample ID: MW-28

Lab Sample ID: 500-176296-28

No Detections.

Client Sample ID: MW-29

Lab Sample ID: 500-176296-29

No Detections.

Client Sample ID: P-30

Lab Sample ID: 500-176296-30

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	9.9		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-31

Lab Sample ID: 500-176296-31

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	1.1		1.0	0.35	ug/L	1		8260B	Total/NA
Trichloroethene	8.8		0.50	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-176296-1	MW-1	Ground Water	01/09/20 13:30	01/14/20 10:00	
500-176296-2	MW-2	Ground Water	01/10/20 09:30	01/14/20 10:00	
500-176296-3	MW-3	Ground Water	01/10/20 11:00	01/14/20 10:00	
500-176296-4	P-4	Ground Water	01/10/20 11:15	01/14/20 10:00	
500-176296-5	MW-5	Ground Water	01/10/20 10:30	01/14/20 10:00	
500-176296-6	P-6	Ground Water	01/09/20 08:50	01/14/20 10:00	
500-176296-7	MW-7	Ground Water	01/09/20 12:45	01/14/20 10:00	
500-176296-8	MW-8	Ground Water	01/09/20 12:30	01/14/20 10:00	
500-176296-9	MW-9	Ground Water	01/10/20 11:45	01/14/20 10:00	
500-176296-10	P-10	Ground Water	01/10/20 11:30	01/14/20 10:00	
500-176296-11	MW-11	Ground Water	01/10/20 12:00	01/14/20 10:00	
500-176296-12	MW-13	Ground Water	01/10/20 12:15	01/14/20 10:00	
500-176296-13	P-14	Ground Water	01/10/20 12:30	01/14/20 10:00	
500-176296-14	P-15	Ground Water	01/10/20 13:00	01/14/20 10:00	
500-176296-15	MW-16	Ground Water	01/09/20 13:30	01/14/20 10:00	
500-176296-16	MW-17	Ground Water	01/09/20 11:30	01/14/20 10:00	
500-176296-17	P-18	Ground Water	01/09/20 11:15	01/14/20 10:00	
500-176296-18	P-19	Ground Water	01/09/20 11:45	01/14/20 10:00	
500-176296-19	P-20	Ground Water	01/09/20 09:00	01/14/20 10:00	
500-176296-20	MW-21	Ground Water	01/09/20 14:30	01/14/20 10:00	
500-176296-21	MW-22	Ground Water	01/09/20 09:30	01/14/20 10:00	
500-176296-22	P-23	Ground Water	01/09/20 11:00	01/14/20 10:00	
500-176296-23	MW-24	Ground Water	01/09/20 12:00	01/14/20 10:00	
500-176296-24	P-25D	Ground Water	01/09/20 10:35	01/14/20 10:00	
500-176296-25	P-25S	Ground Water	01/09/20 10:20	01/14/20 10:00	
500-176296-26	MW-26	Ground Water	01/09/20 13:45	01/14/20 10:00	
500-176296-27	P-27	Ground Water	01/09/20 14:45	01/14/20 10:00	
500-176296-28	MW-28	Ground Water	01/09/20 10:00	01/14/20 10:00	
500-176296-29	MW-29	Ground Water	01/09/20 15:45	01/14/20 10:00	
500-176296-30	P-30	Ground Water	01/09/20 16:00	01/14/20 10:00	
500-176296-31	MW-31	Ground Water	01/09/20 15:30	01/14/20 10:00	

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-1

Lab Sample ID: 500-176296-1

Date Collected: 01/09/20 13:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 11:01	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 11:01	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 11:01	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 11:01	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 11:01	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 11:01	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 11:01	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 11:01	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 11:01	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 11:01	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 11:01	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 11:01	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 11:01	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 11:01	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 11:01	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 11:01	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 11:01	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 11:01	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 11:01	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 11:01	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 11:01	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 11:01	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 11:01	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 11:01	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 11:01	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 11:01	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 11:01	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 11:01	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 11:01	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 11:01	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 11:01	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 11:01	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 11:01	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 11:01	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 11:01	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 11:01	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 11:01	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 11:01	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 11:01	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 11:01	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 11:01	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 11:01	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 11:01	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 11:01	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 11:01	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 11:01	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 11:01	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 11:01	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 11:01	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-1

Lab Sample ID: 500-176296-1

Date Collected: 01/09/20 13:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 11:01	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 11:01	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 11:01	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 11:01	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 11:01	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 11:01	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 11:01	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 11:01	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 11:01	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 11:01	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 11:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		75 - 126		01/16/20 11:01	1
Toluene-d8 (Surr)	97		75 - 120		01/16/20 11:01	1
4-Bromofluorobenzene (Surr)	93		72 - 124		01/16/20 11:01	1
Dibromofluoromethane (Surr)	92		75 - 120		01/16/20 11:01	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-2

Lab Sample ID: 500-176296-2

Date Collected: 01/10/20 09:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 11:26	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 11:26	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 11:26	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 11:26	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 11:26	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 11:26	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 11:26	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 11:26	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 11:26	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 11:26	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 11:26	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 11:26	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 11:26	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 11:26	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 11:26	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 11:26	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 11:26	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 11:26	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 11:26	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 11:26	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 11:26	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 11:26	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 11:26	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 11:26	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 11:26	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 11:26	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 11:26	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 11:26	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 11:26	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 11:26	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 11:26	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 11:26	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 11:26	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 11:26	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 11:26	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 11:26	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 11:26	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 11:26	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 11:26	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 11:26	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 11:26	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 11:26	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 11:26	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 11:26	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 11:26	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 11:26	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 11:26	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 11:26	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 11:26	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-2

Lab Sample ID: 500-176296-2

Date Collected: 01/10/20 09:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 11:26	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 11:26	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 11:26	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 11:26	1
Trichloroethene	0.47	J	0.50	0.16	ug/L			01/16/20 11:26	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 11:26	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 11:26	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 11:26	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 11:26	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 11:26	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 11:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		01/16/20 11:26	1
Toluene-d8 (Surr)	96		75 - 120		01/16/20 11:26	1
4-Bromofluorobenzene (Surr)	93		72 - 124		01/16/20 11:26	1
Dibromofluoromethane (Surr)	94		75 - 120		01/16/20 11:26	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-3

Lab Sample ID: 500-176296-3

Date Collected: 01/10/20 11:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 11:52	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 11:52	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 11:52	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 11:52	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 11:52	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 11:52	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 11:52	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 11:52	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 11:52	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 11:52	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 11:52	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 11:52	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 11:52	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 11:52	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 11:52	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 11:52	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 11:52	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 11:52	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 11:52	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 11:52	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 11:52	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 11:52	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 11:52	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 11:52	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 11:52	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 11:52	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 11:52	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 11:52	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 11:52	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 11:52	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 11:52	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 11:52	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 11:52	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 11:52	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 11:52	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 11:52	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 11:52	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 11:52	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 11:52	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 11:52	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 11:52	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 11:52	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 11:52	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 11:52	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 11:52	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 11:52	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 11:52	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 11:52	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 11:52	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-3
Date Collected: 01/10/20 11:00
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-3
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 11:52	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 11:52	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 11:52	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 11:52	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 11:52	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 11:52	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 11:52	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 11:52	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 11:52	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 11:52	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 11:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 126					01/16/20 11:52	1
Toluene-d8 (Surr)	95		75 - 120					01/16/20 11:52	1
4-Bromofluorobenzene (Surr)	93		72 - 124					01/16/20 11:52	1
Dibromofluoromethane (Surr)	95		75 - 120					01/16/20 11:52	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-4

Lab Sample ID: 500-176296-4

Date Collected: 01/10/20 11:15

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 12:18	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 12:18	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 12:18	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 12:18	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 12:18	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 12:18	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 12:18	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 12:18	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 12:18	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 12:18	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 12:18	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 12:18	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 12:18	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 12:18	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 12:18	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 12:18	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 12:18	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 12:18	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 12:18	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 12:18	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 12:18	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 12:18	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 12:18	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 12:18	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 12:18	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 12:18	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 12:18	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 12:18	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 12:18	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 12:18	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 12:18	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 12:18	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 12:18	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 12:18	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 12:18	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 12:18	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 12:18	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 12:18	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 12:18	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 12:18	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 12:18	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 12:18	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 12:18	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 12:18	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 12:18	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 12:18	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 12:18	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 12:18	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 12:18	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-4

Lab Sample ID: 500-176296-4

Date Collected: 01/10/20 11:15

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 12:18	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 12:18	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 12:18	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 12:18	1
Trichloroethene	9.2		0.50	0.16	ug/L			01/16/20 12:18	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 12:18	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 12:18	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 12:18	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 12:18	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 12:18	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		75 - 126		01/16/20 12:18	1
Toluene-d8 (Surr)	97		75 - 120		01/16/20 12:18	1
4-Bromofluorobenzene (Surr)	93		72 - 124		01/16/20 12:18	1
Dibromofluoromethane (Surr)	93		75 - 120		01/16/20 12:18	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-5
Date Collected: 01/10/20 10:30
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-5
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 12:44	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 12:44	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 12:44	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 12:44	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 12:44	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 12:44	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 12:44	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 12:44	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 12:44	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 12:44	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 12:44	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 12:44	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 12:44	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 12:44	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 12:44	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 12:44	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 12:44	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 12:44	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 12:44	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 12:44	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 12:44	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 12:44	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 12:44	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 12:44	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 12:44	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 12:44	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 12:44	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 12:44	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 12:44	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 12:44	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 12:44	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 12:44	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 12:44	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 12:44	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 12:44	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 12:44	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 12:44	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 12:44	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 12:44	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 12:44	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 12:44	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 12:44	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 12:44	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 12:44	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 12:44	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 12:44	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 12:44	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 12:44	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 12:44	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-5
Date Collected: 01/10/20 10:30
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-5
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 12:44	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 12:44	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 12:44	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 12:44	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 12:44	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 12:44	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 12:44	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 12:44	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 12:44	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 12:44	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 12:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 126					01/16/20 12:44	1
Toluene-d8 (Surr)	95		75 - 120					01/16/20 12:44	1
4-Bromofluorobenzene (Surr)	94		72 - 124					01/16/20 12:44	1
Dibromofluoromethane (Surr)	95		75 - 120					01/16/20 12:44	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-6

Lab Sample ID: 500-176296-6

Date Collected: 01/09/20 08:50

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 13:09	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 13:09	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 13:09	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 13:09	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 13:09	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 13:09	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 13:09	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 13:09	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 13:09	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 13:09	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 13:09	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 13:09	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 13:09	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 13:09	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 13:09	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 13:09	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 13:09	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 13:09	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 13:09	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 13:09	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 13:09	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 13:09	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 13:09	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 13:09	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 13:09	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 13:09	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 13:09	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 13:09	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 13:09	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 13:09	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 13:09	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 13:09	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 13:09	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 13:09	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 13:09	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 13:09	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 13:09	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 13:09	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 13:09	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 13:09	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 13:09	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 13:09	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 13:09	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 13:09	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 13:09	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 13:09	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 13:09	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 13:09	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 13:09	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-6

Lab Sample ID: 500-176296-6

Date Collected: 01/09/20 08:50

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 13:09	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 13:09	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 13:09	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 13:09	1
Trichloroethene	0.41	J	0.50	0.16	ug/L			01/16/20 13:09	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 13:09	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 13:09	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 13:09	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 13:09	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 13:09	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 13:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		01/16/20 13:09	1
Toluene-d8 (Surr)	96		75 - 120		01/16/20 13:09	1
4-Bromofluorobenzene (Surr)	94		72 - 124		01/16/20 13:09	1
Dibromofluoromethane (Surr)	94		75 - 120		01/16/20 13:09	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-7

Lab Sample ID: 500-176296-7

Date Collected: 01/09/20 12:45

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 13:35	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 13:35	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 13:35	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 13:35	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 13:35	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 13:35	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 13:35	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 13:35	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 13:35	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 13:35	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 13:35	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 13:35	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 13:35	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 13:35	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 13:35	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 13:35	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 13:35	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 13:35	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 13:35	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 13:35	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 13:35	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 13:35	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 13:35	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 13:35	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 13:35	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 13:35	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 13:35	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 13:35	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 13:35	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 13:35	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 13:35	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 13:35	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 13:35	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 13:35	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 13:35	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 13:35	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 13:35	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 13:35	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 13:35	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 13:35	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 13:35	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 13:35	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 13:35	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 13:35	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 13:35	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 13:35	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 13:35	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 13:35	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 13:35	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-7
Date Collected: 01/09/20 12:45
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-7
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 13:35	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 13:35	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 13:35	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 13:35	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 13:35	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 13:35	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 13:35	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 13:35	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 13:35	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 13:35	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 13:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		75 - 126					01/16/20 13:35	1
Toluene-d8 (Surr)	96		75 - 120					01/16/20 13:35	1
4-Bromofluorobenzene (Surr)	93		72 - 124					01/16/20 13:35	1
Dibromofluoromethane (Surr)	94		75 - 120					01/16/20 13:35	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-8

Lab Sample ID: 500-176296-8

Date Collected: 01/09/20 12:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 14:01	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 14:01	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 14:01	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 14:01	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 14:01	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 14:01	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 14:01	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 14:01	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 14:01	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 14:01	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 14:01	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 14:01	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 14:01	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 14:01	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 14:01	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 14:01	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 14:01	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 14:01	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 14:01	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 14:01	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 14:01	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 14:01	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 14:01	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 14:01	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 14:01	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 14:01	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 14:01	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 14:01	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 14:01	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 14:01	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 14:01	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 14:01	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 14:01	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 14:01	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 14:01	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 14:01	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 14:01	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 14:01	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 14:01	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 14:01	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 14:01	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 14:01	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 14:01	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 14:01	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 14:01	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 14:01	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 14:01	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 14:01	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 14:01	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-8
Date Collected: 01/09/20 12:30
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-8
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 14:01	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 14:01	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 14:01	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 14:01	1
Trichloroethene	99		0.50	0.16	ug/L			01/16/20 14:01	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 14:01	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 14:01	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 14:01	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 14:01	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 14:01	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 14:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		01/16/20 14:01	1
Toluene-d8 (Surr)	96		75 - 120		01/16/20 14:01	1
4-Bromofluorobenzene (Surr)	93		72 - 124		01/16/20 14:01	1
Dibromofluoromethane (Surr)	95		75 - 120		01/16/20 14:01	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-9

Lab Sample ID: 500-176296-9

Date Collected: 01/10/20 11:45

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 14:28	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 14:28	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 14:28	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 14:28	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 14:28	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 14:28	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 14:28	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 14:28	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 14:28	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 14:28	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 14:28	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 14:28	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 14:28	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 14:28	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 14:28	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 14:28	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 14:28	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 14:28	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 14:28	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 14:28	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 14:28	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 14:28	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 14:28	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 14:28	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 14:28	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 14:28	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 14:28	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 14:28	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 14:28	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 14:28	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 14:28	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 14:28	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 14:28	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 14:28	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 14:28	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 14:28	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 14:28	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 14:28	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 14:28	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 14:28	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 14:28	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 14:28	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 14:28	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 14:28	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 14:28	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 14:28	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 14:28	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 14:28	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 14:28	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-9

Lab Sample ID: 500-176296-9

Date Collected: 01/10/20 11:45

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 14:28	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 14:28	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 14:28	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 14:28	1
Trichloroethene	0.45	J	0.50	0.16	ug/L			01/16/20 14:28	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 14:28	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 14:28	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 14:28	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 14:28	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 14:28	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 14:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		01/16/20 14:28	1
Toluene-d8 (Surr)	97		75 - 120		01/16/20 14:28	1
4-Bromofluorobenzene (Surr)	94		72 - 124		01/16/20 14:28	1
Dibromofluoromethane (Surr)	93		75 - 120		01/16/20 14:28	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-10

Lab Sample ID: 500-176296-10

Date Collected: 01/10/20 11:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 14:53	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 14:53	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 14:53	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 14:53	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 14:53	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 14:53	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 14:53	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 14:53	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 14:53	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 14:53	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 14:53	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 14:53	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 14:53	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 14:53	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 14:53	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 14:53	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 14:53	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 14:53	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 14:53	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 14:53	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 14:53	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 14:53	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 14:53	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 14:53	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 14:53	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 14:53	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 14:53	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 14:53	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 14:53	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 14:53	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 14:53	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 14:53	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 14:53	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 14:53	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 14:53	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 14:53	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 14:53	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 14:53	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 14:53	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 14:53	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 14:53	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 14:53	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 14:53	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 14:53	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 14:53	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 14:53	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 14:53	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 14:53	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 14:53	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-10

Lab Sample ID: 500-176296-10

Date Collected: 01/10/20 11:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 14:53	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 14:53	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 14:53	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 14:53	1
Trichloroethene	43		0.50	0.16	ug/L			01/16/20 14:53	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 14:53	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 14:53	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 14:53	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 14:53	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 14:53	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 14:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		75 - 126		01/16/20 14:53	1
Toluene-d8 (Surr)	96		75 - 120		01/16/20 14:53	1
4-Bromofluorobenzene (Surr)	94		72 - 124		01/16/20 14:53	1
Dibromofluoromethane (Surr)	95		75 - 120		01/16/20 14:53	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-11

Lab Sample ID: 500-176296-11

Date Collected: 01/10/20 12:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 15:19	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:19	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 15:19	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 15:19	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 15:19	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 15:19	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:19	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:19	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:19	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 15:19	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:19	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 15:19	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 15:19	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 15:19	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 15:19	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 15:19	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 15:19	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 15:19	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 15:19	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 15:19	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 15:19	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:19	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:19	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 15:19	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 15:19	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 15:19	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 15:19	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 15:19	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 15:19	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 15:19	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 15:19	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 15:19	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 15:19	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 15:19	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 15:19	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 15:19	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 15:19	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 15:19	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:19	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 15:19	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 15:19	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 15:19	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 15:19	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 15:19	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 15:19	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 15:19	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 15:19	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 15:19	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 15:19	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-11

Lab Sample ID: 500-176296-11

Date Collected: 01/10/20 12:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 15:19	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 15:19	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 15:19	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 15:19	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 15:19	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 15:19	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 15:19	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:19	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 15:19	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 15:19	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 126		01/16/20 15:19	1
Toluene-d8 (Surr)	95		75 - 120		01/16/20 15:19	1
4-Bromofluorobenzene (Surr)	93		72 - 124		01/16/20 15:19	1
Dibromofluoromethane (Surr)	95		75 - 120		01/16/20 15:19	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-13
Date Collected: 01/10/20 12:15
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-12
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 15:46	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:46	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 15:46	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 15:46	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 15:46	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 15:46	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:46	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:46	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:46	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 15:46	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:46	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 15:46	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 15:46	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 15:46	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 15:46	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 15:46	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 15:46	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 15:46	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 15:46	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 15:46	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 15:46	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:46	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:46	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 15:46	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 15:46	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 15:46	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 15:46	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 15:46	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 15:46	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 15:46	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 15:46	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 15:46	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 15:46	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 15:46	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 15:46	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 15:46	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 15:46	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 15:46	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:46	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 15:46	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 15:46	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 15:46	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 15:46	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 15:46	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 15:46	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 15:46	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 15:46	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 15:46	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 15:46	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-13
Date Collected: 01/10/20 12:15
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-12
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 15:46	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 15:46	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 15:46	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 15:46	1
Trichloroethene	3.1		0.50	0.16	ug/L			01/16/20 15:46	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 15:46	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 15:46	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:46	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 15:46	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 15:46	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 15:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		75 - 126					01/16/20 15:46	1
Toluene-d8 (Surr)	96		75 - 120					01/16/20 15:46	1
4-Bromofluorobenzene (Surr)	95		72 - 124					01/16/20 15:46	1
Dibromofluoromethane (Surr)	96		75 - 120					01/16/20 15:46	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-14

Lab Sample ID: 500-176296-13

Date Collected: 01/10/20 12:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 16:11	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:11	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 16:11	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 16:11	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 16:11	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 16:11	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:11	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:11	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:11	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 16:11	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:11	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 16:11	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 16:11	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 16:11	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 16:11	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 16:11	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 16:11	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 16:11	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 16:11	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 16:11	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 16:11	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:11	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:11	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 16:11	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 16:11	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 16:11	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 16:11	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 16:11	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 16:11	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 16:11	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 16:11	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 16:11	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 16:11	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 16:11	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 16:11	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 16:11	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 16:11	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 16:11	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:11	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 16:11	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 16:11	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 16:11	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 16:11	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 16:11	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 16:11	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 16:11	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 16:11	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 16:11	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 16:11	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-14

Lab Sample ID: 500-176296-13

Date Collected: 01/10/20 12:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 16:11	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 16:11	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 16:11	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 16:11	1
Trichloroethene	4.6		0.50	0.16	ug/L			01/16/20 16:11	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 16:11	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 16:11	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:11	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 16:11	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 16:11	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		01/16/20 16:11	1
Toluene-d8 (Surr)	94		75 - 120		01/16/20 16:11	1
4-Bromofluorobenzene (Surr)	94		72 - 124		01/16/20 16:11	1
Dibromofluoromethane (Surr)	95		75 - 120		01/16/20 16:11	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-15

Lab Sample ID: 500-176296-14

Date Collected: 01/10/20 13:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 16:38	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:38	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 16:38	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 16:38	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 16:38	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 16:38	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:38	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:38	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:38	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 16:38	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:38	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 16:38	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 16:38	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 16:38	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 16:38	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 16:38	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 16:38	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 16:38	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 16:38	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 16:38	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 16:38	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:38	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:38	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 16:38	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 16:38	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 16:38	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 16:38	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 16:38	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 16:38	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 16:38	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 16:38	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 16:38	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 16:38	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 16:38	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 16:38	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 16:38	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 16:38	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 16:38	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:38	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 16:38	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 16:38	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 16:38	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 16:38	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 16:38	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 16:38	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 16:38	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 16:38	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 16:38	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 16:38	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-15

Lab Sample ID: 500-176296-14

Date Collected: 01/10/20 13:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 16:38	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 16:38	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 16:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 16:38	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 16:38	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 16:38	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 16:38	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:38	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 16:38	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 16:38	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 16:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 126					01/16/20 16:38	1
Toluene-d8 (Surr)	95		75 - 120					01/16/20 16:38	1
4-Bromofluorobenzene (Surr)	93		72 - 124					01/16/20 16:38	1
Dibromofluoromethane (Surr)	97		75 - 120					01/16/20 16:38	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-16

Lab Sample ID: 500-176296-15

Date Collected: 01/09/20 13:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 17:03	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:03	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 17:03	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 17:03	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 17:03	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 17:03	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:03	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:03	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:03	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 17:03	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:03	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 17:03	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 17:03	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 17:03	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 17:03	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 17:03	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 17:03	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 17:03	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 17:03	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 17:03	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 17:03	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:03	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:03	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 17:03	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 17:03	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 17:03	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 17:03	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 17:03	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 17:03	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 17:03	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 17:03	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 17:03	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 17:03	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 17:03	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 17:03	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 17:03	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 17:03	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 17:03	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:03	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 17:03	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 17:03	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 17:03	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 17:03	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 17:03	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 17:03	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 17:03	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 17:03	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 17:03	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 17:03	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-16

Lab Sample ID: 500-176296-15

Date Collected: 01/09/20 13:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 17:03	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 17:03	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 17:03	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 17:03	1
Trichloroethene	39		0.50	0.16	ug/L			01/16/20 17:03	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 17:03	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 17:03	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:03	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 17:03	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 17:03	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 17:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		75 - 126					01/16/20 17:03	1
Toluene-d8 (Surr)	94		75 - 120					01/16/20 17:03	1
4-Bromofluorobenzene (Surr)	96		72 - 124					01/16/20 17:03	1
Dibromofluoromethane (Surr)	96		75 - 120					01/16/20 17:03	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-17

Lab Sample ID: 500-176296-16

Date Collected: 01/09/20 11:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 17:30	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:30	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 17:30	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 17:30	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 17:30	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 17:30	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:30	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:30	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:30	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 17:30	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:30	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 17:30	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 17:30	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 17:30	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 17:30	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 17:30	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 17:30	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 17:30	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 17:30	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 17:30	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 17:30	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:30	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:30	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 17:30	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 17:30	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 17:30	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 17:30	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 17:30	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 17:30	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 17:30	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 17:30	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 17:30	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 17:30	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 17:30	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 17:30	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 17:30	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 17:30	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 17:30	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:30	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 17:30	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 17:30	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 17:30	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 17:30	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 17:30	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 17:30	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 17:30	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 17:30	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 17:30	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 17:30	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-17

Lab Sample ID: 500-176296-16

Date Collected: 01/09/20 11:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 17:30	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 17:30	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 17:30	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 17:30	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 17:30	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 17:30	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 17:30	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:30	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 17:30	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 17:30	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 17:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		01/16/20 17:30	1
Toluene-d8 (Surr)	94		75 - 120		01/16/20 17:30	1
4-Bromofluorobenzene (Surr)	93		72 - 124		01/16/20 17:30	1
Dibromofluoromethane (Surr)	97		75 - 120		01/16/20 17:30	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-18

Lab Sample ID: 500-176296-17

Date Collected: 01/09/20 11:15

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 17:55	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:55	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 17:55	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 17:55	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 17:55	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 17:55	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:55	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:55	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:55	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 17:55	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:55	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 17:55	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 17:55	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 17:55	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 17:55	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 17:55	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 17:55	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 17:55	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 17:55	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 17:55	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 17:55	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:55	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:55	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 17:55	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 17:55	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 17:55	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 17:55	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 17:55	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 17:55	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 17:55	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 17:55	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 17:55	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 17:55	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 17:55	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 17:55	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 17:55	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 17:55	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 17:55	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:55	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 17:55	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 17:55	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 17:55	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 17:55	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 17:55	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 17:55	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 17:55	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 17:55	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 17:55	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 17:55	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-18

Lab Sample ID: 500-176296-17

Date Collected: 01/09/20 11:15

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 17:55	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 17:55	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 17:55	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 17:55	1
Trichloroethene	3.0		0.50	0.16	ug/L			01/16/20 17:55	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 17:55	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 17:55	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:55	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 17:55	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 17:55	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		01/16/20 17:55	1
Toluene-d8 (Surr)	96		75 - 120		01/16/20 17:55	1
4-Bromofluorobenzene (Surr)	95		72 - 124		01/16/20 17:55	1
Dibromofluoromethane (Surr)	95		75 - 120		01/16/20 17:55	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-19

Lab Sample ID: 500-176296-18

Date Collected: 01/09/20 11:45

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 18:21	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 18:21	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 18:21	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 18:21	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 18:21	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 18:21	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 18:21	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 18:21	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 18:21	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 18:21	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 18:21	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 18:21	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 18:21	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 18:21	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 18:21	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 18:21	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 18:21	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 18:21	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 18:21	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 18:21	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 18:21	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 18:21	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 18:21	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 18:21	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 18:21	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 18:21	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 18:21	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 18:21	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 18:21	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 18:21	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 18:21	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 18:21	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 18:21	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 18:21	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 18:21	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 18:21	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 18:21	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 18:21	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 18:21	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 18:21	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 18:21	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 18:21	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 18:21	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 18:21	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 18:21	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 18:21	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 18:21	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 18:21	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 18:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-19

Lab Sample ID: 500-176296-18

Date Collected: 01/09/20 11:45

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 18:21	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 18:21	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 18:21	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 18:21	1
Trichloroethene	3.5		0.50	0.16	ug/L			01/16/20 18:21	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 18:21	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 18:21	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 18:21	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 18:21	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 18:21	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 18:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		01/16/20 18:21	1
Toluene-d8 (Surr)	95		75 - 120		01/16/20 18:21	1
4-Bromofluorobenzene (Surr)	94		72 - 124		01/16/20 18:21	1
Dibromofluoromethane (Surr)	95		75 - 120		01/16/20 18:21	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-20

Lab Sample ID: 500-176296-19

Date Collected: 01/09/20 09:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 18:47	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 18:47	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 18:47	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 18:47	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 18:47	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 18:47	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 18:47	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 18:47	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 18:47	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 18:47	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 18:47	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 18:47	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 18:47	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 18:47	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 18:47	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 18:47	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 18:47	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 18:47	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 18:47	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 18:47	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 18:47	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 18:47	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 18:47	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 18:47	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 18:47	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 18:47	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 18:47	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 18:47	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 18:47	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 18:47	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 18:47	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 18:47	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 18:47	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 18:47	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 18:47	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 18:47	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 18:47	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 18:47	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 18:47	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 18:47	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 18:47	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 18:47	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 18:47	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 18:47	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 18:47	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 18:47	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 18:47	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 18:47	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 18:47	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-20

Lab Sample ID: 500-176296-19

Date Collected: 01/09/20 09:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 18:47	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 18:47	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 18:47	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 18:47	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 18:47	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 18:47	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 18:47	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 18:47	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 18:47	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 18:47	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 126		01/16/20 18:47	1
Toluene-d8 (Surr)	95		75 - 120		01/16/20 18:47	1
4-Bromofluorobenzene (Surr)	95		72 - 124		01/16/20 18:47	1
Dibromofluoromethane (Surr)	95		75 - 120		01/16/20 18:47	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-21

Lab Sample ID: 500-176296-20

Date Collected: 01/09/20 14:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 19:13	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 19:13	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 19:13	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 19:13	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 19:13	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 19:13	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 19:13	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 19:13	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 19:13	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 19:13	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 19:13	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 19:13	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 19:13	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 19:13	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 19:13	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 19:13	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 19:13	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 19:13	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 19:13	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 19:13	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 19:13	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 19:13	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 19:13	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 19:13	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 19:13	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 19:13	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 19:13	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 19:13	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 19:13	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 19:13	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 19:13	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 19:13	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 19:13	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 19:13	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 19:13	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 19:13	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 19:13	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 19:13	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 19:13	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 19:13	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 19:13	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 19:13	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 19:13	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 19:13	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 19:13	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 19:13	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 19:13	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 19:13	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 19:13	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-21

Lab Sample ID: 500-176296-20

Date Collected: 01/09/20 14:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 19:13	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 19:13	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 19:13	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 19:13	1
Trichloroethene	140		0.50	0.16	ug/L			01/16/20 19:13	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 19:13	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 19:13	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 19:13	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 19:13	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 19:13	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 19:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		01/16/20 19:13	1
Toluene-d8 (Surr)	95		75 - 120		01/16/20 19:13	1
4-Bromofluorobenzene (Surr)	95		72 - 124		01/16/20 19:13	1
Dibromofluoromethane (Surr)	95		75 - 120		01/16/20 19:13	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-22

Lab Sample ID: 500-176296-21

Date Collected: 01/09/20 09:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 15:13	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:13	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 15:13	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 15:13	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 15:13	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 15:13	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:13	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:13	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:13	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 15:13	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:13	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 15:13	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 15:13	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 15:13	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 15:13	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 15:13	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 15:13	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 15:13	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 15:13	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 15:13	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 15:13	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:13	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:13	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 15:13	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 15:13	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 15:13	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 15:13	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 15:13	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 15:13	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 15:13	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 15:13	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 15:13	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 15:13	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 15:13	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 15:13	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 15:13	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 15:13	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 15:13	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:13	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 15:13	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 15:13	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 15:13	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 15:13	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 15:13	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 15:13	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 15:13	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 15:13	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 15:13	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 15:13	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-22
Date Collected: 01/09/20 09:30
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-21
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 15:13	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 15:13	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 15:13	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 15:13	1
Trichloroethene	7.1		0.50	0.16	ug/L			01/16/20 15:13	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 15:13	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 15:13	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:13	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 15:13	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 15:13	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		01/16/20 15:13	1
Toluene-d8 (Surr)	100		75 - 120		01/16/20 15:13	1
4-Bromofluorobenzene (Surr)	90		72 - 124		01/16/20 15:13	1
Dibromofluoromethane (Surr)	103		75 - 120		01/16/20 15:13	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-23

Lab Sample ID: 500-176296-22

Date Collected: 01/09/20 11:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 15:37	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:37	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 15:37	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 15:37	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 15:37	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 15:37	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:37	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:37	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:37	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 15:37	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:37	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 15:37	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 15:37	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 15:37	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 15:37	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 15:37	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 15:37	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 15:37	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 15:37	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 15:37	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 15:37	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 15:37	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:37	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 15:37	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 15:37	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 15:37	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 15:37	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 15:37	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 15:37	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 15:37	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 15:37	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 15:37	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 15:37	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 15:37	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 15:37	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 15:37	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 15:37	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 15:37	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 15:37	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 15:37	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 15:37	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 15:37	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 15:37	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 15:37	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 15:37	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 15:37	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 15:37	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 15:37	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 15:37	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-23

Lab Sample ID: 500-176296-22

Date Collected: 01/09/20 11:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 15:37	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 15:37	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 15:37	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 15:37	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 15:37	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 15:37	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 15:37	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 15:37	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 15:37	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 15:37	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		01/16/20 15:37	1
Toluene-d8 (Surr)	102		75 - 120		01/16/20 15:37	1
4-Bromofluorobenzene (Surr)	90		72 - 124		01/16/20 15:37	1
Dibromofluoromethane (Surr)	103		75 - 120		01/16/20 15:37	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-24
Date Collected: 01/09/20 12:00
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-23
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 16:01	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:01	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 16:01	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 16:01	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 16:01	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 16:01	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:01	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:01	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:01	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 16:01	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:01	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 16:01	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 16:01	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 16:01	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 16:01	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 16:01	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 16:01	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 16:01	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 16:01	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 16:01	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 16:01	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:01	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:01	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 16:01	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 16:01	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 16:01	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 16:01	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 16:01	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 16:01	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 16:01	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 16:01	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 16:01	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 16:01	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 16:01	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 16:01	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 16:01	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 16:01	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 16:01	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:01	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 16:01	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 16:01	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 16:01	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 16:01	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 16:01	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 16:01	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 16:01	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 16:01	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 16:01	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 16:01	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-24
Date Collected: 01/09/20 12:00
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-23
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 16:01	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 16:01	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 16:01	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 16:01	1
Trichloroethene	79		0.50	0.16	ug/L			01/16/20 16:01	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 16:01	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 16:01	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:01	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 16:01	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 16:01	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		75 - 126		01/16/20 16:01	1
Toluene-d8 (Surr)	99		75 - 120		01/16/20 16:01	1
4-Bromofluorobenzene (Surr)	90		72 - 124		01/16/20 16:01	1
Dibromofluoromethane (Surr)	105		75 - 120		01/16/20 16:01	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-25D

Lab Sample ID: 500-176296-24

Date Collected: 01/09/20 10:35

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.97		0.50	0.15	ug/L			01/16/20 16:24	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:24	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 16:24	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 16:24	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 16:24	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 16:24	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:24	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:24	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:24	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 16:24	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:24	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 16:24	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 16:24	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 16:24	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 16:24	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 16:24	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 16:24	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 16:24	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 16:24	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 16:24	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 16:24	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:24	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:24	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 16:24	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 16:24	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 16:24	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 16:24	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 16:24	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 16:24	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 16:24	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 16:24	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 16:24	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 16:24	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 16:24	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 16:24	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 16:24	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 16:24	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 16:24	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:24	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 16:24	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 16:24	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 16:24	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 16:24	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 16:24	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 16:24	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 16:24	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 16:24	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 16:24	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 16:24	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-25D

Lab Sample ID: 500-176296-24

Date Collected: 01/09/20 10:35

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 16:24	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 16:24	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 16:24	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 16:24	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 16:24	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 16:24	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:24	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 16:24	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 16:24	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 126		01/16/20 16:24	1
Toluene-d8 (Surr)	101		75 - 120		01/16/20 16:24	1
4-Bromofluorobenzene (Surr)	91		72 - 124		01/16/20 16:24	1
Dibromofluoromethane (Surr)	103		75 - 120		01/16/20 16:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	200		5.0	1.6	ug/L			01/17/20 12:01	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		75 - 126		01/17/20 12:01	10
Toluene-d8 (Surr)	101		75 - 120		01/17/20 12:01	10
4-Bromofluorobenzene (Surr)	90		72 - 124		01/17/20 12:01	10
Dibromofluoromethane (Surr)	103		75 - 120		01/17/20 12:01	10

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-25S

Lab Sample ID: 500-176296-25

Date Collected: 01/09/20 10:20

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 16:48	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:48	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 16:48	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 16:48	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 16:48	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 16:48	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:48	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:48	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:48	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 16:48	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:48	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 16:48	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 16:48	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 16:48	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 16:48	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 16:48	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 16:48	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 16:48	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 16:48	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 16:48	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 16:48	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 16:48	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:48	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 16:48	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 16:48	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 16:48	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 16:48	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 16:48	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 16:48	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 16:48	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 16:48	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 16:48	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 16:48	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 16:48	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 16:48	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 16:48	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 16:48	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 16:48	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 16:48	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 16:48	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 16:48	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 16:48	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 16:48	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 16:48	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 16:48	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 16:48	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 16:48	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 16:48	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 16:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-25S

Lab Sample ID: 500-176296-25

Date Collected: 01/09/20 10:20

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 16:48	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 16:48	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 16:48	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 16:48	1
Trichloroethene	76		0.50	0.16	ug/L			01/16/20 16:48	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 16:48	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 16:48	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 16:48	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 16:48	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 16:48	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 126		01/16/20 16:48	1
Toluene-d8 (Surr)	99		75 - 120		01/16/20 16:48	1
4-Bromofluorobenzene (Surr)	93		72 - 124		01/16/20 16:48	1
Dibromofluoromethane (Surr)	104		75 - 120		01/16/20 16:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-26

Lab Sample ID: 500-176296-26

Date Collected: 01/09/20 13:45

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 17:12	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:12	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 17:12	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 17:12	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 17:12	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 17:12	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:12	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:12	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:12	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 17:12	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:12	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 17:12	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 17:12	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 17:12	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 17:12	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 17:12	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 17:12	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 17:12	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 17:12	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 17:12	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 17:12	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:12	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:12	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 17:12	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 17:12	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 17:12	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 17:12	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 17:12	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 17:12	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 17:12	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 17:12	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 17:12	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 17:12	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 17:12	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 17:12	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 17:12	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 17:12	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 17:12	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:12	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 17:12	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 17:12	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 17:12	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 17:12	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 17:12	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 17:12	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 17:12	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 17:12	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 17:12	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 17:12	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-26
Date Collected: 01/09/20 13:45
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-26
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 17:12	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 17:12	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 17:12	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 17:12	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 17:12	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 17:12	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 17:12	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:12	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 17:12	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 17:12	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 17:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126					01/16/20 17:12	1
Toluene-d8 (Surr)	98		75 - 120					01/16/20 17:12	1
4-Bromofluorobenzene (Surr)	91		72 - 124					01/16/20 17:12	1
Dibromofluoromethane (Surr)	105		75 - 120					01/16/20 17:12	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-27

Lab Sample ID: 500-176296-27

Date Collected: 01/09/20 14:45

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 17:36	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:36	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 17:36	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 17:36	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 17:36	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 17:36	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:36	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:36	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:36	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 17:36	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:36	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 17:36	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 17:36	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 17:36	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 17:36	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 17:36	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 17:36	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 17:36	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 17:36	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 17:36	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 17:36	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 17:36	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:36	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 17:36	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 17:36	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 17:36	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 17:36	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 17:36	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 17:36	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 17:36	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 17:36	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 17:36	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 17:36	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 17:36	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 17:36	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 17:36	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 17:36	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 17:36	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 17:36	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 17:36	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 17:36	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 17:36	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 17:36	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 17:36	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 17:36	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 17:36	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 17:36	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 17:36	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 17:36	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-27

Lab Sample ID: 500-176296-27

Date Collected: 01/09/20 14:45

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 17:36	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 17:36	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 17:36	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 17:36	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 17:36	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 17:36	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 17:36	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 17:36	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 17:36	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 17:36	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 17:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126					01/16/20 17:36	1
Toluene-d8 (Surr)	98		75 - 120					01/16/20 17:36	1
4-Bromofluorobenzene (Surr)	90		72 - 124					01/16/20 17:36	1
Dibromofluoromethane (Surr)	104		75 - 120					01/16/20 17:36	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-28

Lab Sample ID: 500-176296-28

Date Collected: 01/09/20 10:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/17/20 12:24	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/17/20 12:24	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/17/20 12:24	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/17/20 12:24	1
Bromoform	<0.48		1.0	0.48	ug/L			01/17/20 12:24	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/17/20 12:24	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/17/20 12:24	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/20 12:24	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/20 12:24	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/17/20 12:24	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/17/20 12:24	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/17/20 12:24	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/17/20 12:24	1
Chloroform	<0.37		2.0	0.37	ug/L			01/17/20 12:24	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/17/20 12:24	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/17/20 12:24	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/17/20 12:24	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/17/20 12:24	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/17/20 12:24	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/17/20 12:24	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/17/20 12:24	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/17/20 12:24	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/17/20 12:24	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/17/20 12:24	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/17/20 12:24	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/17/20 12:24	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/17/20 12:24	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/17/20 12:24	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/17/20 12:24	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/17/20 12:24	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/17/20 12:24	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/17/20 12:24	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/17/20 12:24	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/17/20 12:24	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/17/20 12:24	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/17/20 12:24	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/17/20 12:24	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/17/20 12:24	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/17/20 12:24	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/17/20 12:24	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/17/20 12:24	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/17/20 12:24	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/17/20 12:24	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/17/20 12:24	1
Styrene	<0.39		1.0	0.39	ug/L			01/17/20 12:24	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/17/20 12:24	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/17/20 12:24	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/17/20 12:24	1
Toluene	<0.15		0.50	0.15	ug/L			01/17/20 12:24	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-28
Date Collected: 01/09/20 10:00
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-28
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/17/20 12:24	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/17/20 12:24	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/17/20 12:24	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/17/20 12:24	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/17/20 12:24	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/17/20 12:24	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/17/20 12:24	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/17/20 12:24	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/17/20 12:24	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/17/20 12:24	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/17/20 12:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 126					01/17/20 12:24	1
Toluene-d8 (Surr)	100		75 - 120					01/17/20 12:24	1
4-Bromofluorobenzene (Surr)	91		72 - 124					01/17/20 12:24	1
Dibromofluoromethane (Surr)	99		75 - 120					01/17/20 12:24	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-29

Lab Sample ID: 500-176296-29

Date Collected: 01/09/20 15:45

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/17/20 12:48	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/17/20 12:48	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/17/20 12:48	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/17/20 12:48	1
Bromoform	<0.48		1.0	0.48	ug/L			01/17/20 12:48	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/17/20 12:48	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/17/20 12:48	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/20 12:48	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/20 12:48	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/17/20 12:48	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/17/20 12:48	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/17/20 12:48	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/17/20 12:48	1
Chloroform	<0.37		2.0	0.37	ug/L			01/17/20 12:48	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/17/20 12:48	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/17/20 12:48	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/17/20 12:48	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/17/20 12:48	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/17/20 12:48	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/17/20 12:48	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/17/20 12:48	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/17/20 12:48	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/17/20 12:48	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/17/20 12:48	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/17/20 12:48	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/17/20 12:48	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/17/20 12:48	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/17/20 12:48	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/17/20 12:48	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/17/20 12:48	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/17/20 12:48	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/17/20 12:48	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/17/20 12:48	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/17/20 12:48	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/17/20 12:48	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/17/20 12:48	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/17/20 12:48	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/17/20 12:48	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/17/20 12:48	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/17/20 12:48	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/17/20 12:48	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/17/20 12:48	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/17/20 12:48	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/17/20 12:48	1
Styrene	<0.39		1.0	0.39	ug/L			01/17/20 12:48	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/17/20 12:48	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/17/20 12:48	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/17/20 12:48	1
Toluene	<0.15		0.50	0.15	ug/L			01/17/20 12:48	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-29
Date Collected: 01/09/20 15:45
Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-29
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/17/20 12:48	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/17/20 12:48	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/17/20 12:48	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/17/20 12:48	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/17/20 12:48	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/17/20 12:48	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/17/20 12:48	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/17/20 12:48	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/17/20 12:48	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/17/20 12:48	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/17/20 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 126					01/17/20 12:48	1
Toluene-d8 (Surr)	100		75 - 120					01/17/20 12:48	1
4-Bromofluorobenzene (Surr)	90		72 - 124					01/17/20 12:48	1
Dibromofluoromethane (Surr)	102		75 - 120					01/17/20 12:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-30

Lab Sample ID: 500-176296-30

Date Collected: 01/09/20 16:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/17/20 13:12	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/17/20 13:12	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/17/20 13:12	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/17/20 13:12	1
Bromoform	<0.48		1.0	0.48	ug/L			01/17/20 13:12	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/17/20 13:12	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/17/20 13:12	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/20 13:12	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/20 13:12	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/17/20 13:12	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/17/20 13:12	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/17/20 13:12	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/17/20 13:12	1
Chloroform	<0.37		2.0	0.37	ug/L			01/17/20 13:12	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/17/20 13:12	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/17/20 13:12	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/17/20 13:12	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/17/20 13:12	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/17/20 13:12	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/17/20 13:12	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/17/20 13:12	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/17/20 13:12	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/17/20 13:12	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/17/20 13:12	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/17/20 13:12	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/17/20 13:12	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/17/20 13:12	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/17/20 13:12	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/17/20 13:12	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/17/20 13:12	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/17/20 13:12	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/17/20 13:12	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/17/20 13:12	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/17/20 13:12	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/17/20 13:12	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/17/20 13:12	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/17/20 13:12	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/17/20 13:12	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/17/20 13:12	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/17/20 13:12	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/17/20 13:12	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/17/20 13:12	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/17/20 13:12	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/17/20 13:12	1
Styrene	<0.39		1.0	0.39	ug/L			01/17/20 13:12	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/17/20 13:12	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/17/20 13:12	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/17/20 13:12	1
Toluene	<0.15		0.50	0.15	ug/L			01/17/20 13:12	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-30

Lab Sample ID: 500-176296-30

Date Collected: 01/09/20 16:00

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/17/20 13:12	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/17/20 13:12	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/17/20 13:12	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/17/20 13:12	1
Trichloroethene	9.9		0.50	0.16	ug/L			01/17/20 13:12	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/17/20 13:12	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/17/20 13:12	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/17/20 13:12	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/17/20 13:12	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/17/20 13:12	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/17/20 13:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 126		01/17/20 13:12	1
Toluene-d8 (Surr)	102		75 - 120		01/17/20 13:12	1
4-Bromofluorobenzene (Surr)	90		72 - 124		01/17/20 13:12	1
Dibromofluoromethane (Surr)	102		75 - 120		01/17/20 13:12	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-31

Lab Sample ID: 500-176296-31

Date Collected: 01/09/20 15:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/17/20 13:36	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/17/20 13:36	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/17/20 13:36	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/17/20 13:36	1
Bromoform	<0.48		1.0	0.48	ug/L			01/17/20 13:36	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/17/20 13:36	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/17/20 13:36	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/20 13:36	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/20 13:36	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/17/20 13:36	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/17/20 13:36	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/17/20 13:36	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/17/20 13:36	1
Chloroform	<0.37		2.0	0.37	ug/L			01/17/20 13:36	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/17/20 13:36	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/17/20 13:36	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/17/20 13:36	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/17/20 13:36	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/17/20 13:36	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/17/20 13:36	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/17/20 13:36	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/17/20 13:36	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/17/20 13:36	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/17/20 13:36	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/17/20 13:36	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/17/20 13:36	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/17/20 13:36	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/17/20 13:36	1
trans-1,2-Dichloroethene	1.1		1.0	0.35	ug/L			01/17/20 13:36	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/17/20 13:36	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/17/20 13:36	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/17/20 13:36	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/17/20 13:36	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/17/20 13:36	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/17/20 13:36	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/17/20 13:36	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/17/20 13:36	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/17/20 13:36	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/17/20 13:36	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/17/20 13:36	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/17/20 13:36	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/17/20 13:36	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/17/20 13:36	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/17/20 13:36	1
Styrene	<0.39		1.0	0.39	ug/L			01/17/20 13:36	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/17/20 13:36	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/17/20 13:36	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/17/20 13:36	1
Toluene	<0.15		0.50	0.15	ug/L			01/17/20 13:36	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-31

Lab Sample ID: 500-176296-31

Date Collected: 01/09/20 15:30

Matrix: Ground Water

Date Received: 01/14/20 10:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/17/20 13:36	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/17/20 13:36	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/17/20 13:36	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/17/20 13:36	1
Trichloroethene	8.8		0.50	0.16	ug/L			01/17/20 13:36	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/17/20 13:36	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/17/20 13:36	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/17/20 13:36	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/17/20 13:36	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/17/20 13:36	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/17/20 13:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 126		01/17/20 13:36	1
Toluene-d8 (Surr)	102		75 - 120		01/17/20 13:36	1
4-Bromofluorobenzene (Surr)	91		72 - 124		01/17/20 13:36	1
Dibromofluoromethane (Surr)	100		75 - 120		01/17/20 13:36	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

GC/MS VOA

Analysis Batch: 525000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-176296-21	MW-22	Total/NA	Ground Water	8260B	
500-176296-22	P-23	Total/NA	Ground Water	8260B	
500-176296-23	MW-24	Total/NA	Ground Water	8260B	
500-176296-24	P-25D	Total/NA	Ground Water	8260B	
500-176296-25	P-25S	Total/NA	Ground Water	8260B	
500-176296-26	MW-26	Total/NA	Ground Water	8260B	
500-176296-27	P-27	Total/NA	Ground Water	8260B	
MB 500-525000/6	Method Blank	Total/NA	Water	8260B	
LCS 500-525000/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 525003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-176296-1	MW-1	Total/NA	Ground Water	8260B	
500-176296-2	MW-2	Total/NA	Ground Water	8260B	
500-176296-3	MW-3	Total/NA	Ground Water	8260B	
500-176296-4	P-4	Total/NA	Ground Water	8260B	
500-176296-5	MW-5	Total/NA	Ground Water	8260B	
500-176296-6	P-6	Total/NA	Ground Water	8260B	
500-176296-7	MW-7	Total/NA	Ground Water	8260B	
500-176296-8	MW-8	Total/NA	Ground Water	8260B	
500-176296-9	MW-9	Total/NA	Ground Water	8260B	
500-176296-10	P-10	Total/NA	Ground Water	8260B	
500-176296-11	MW-11	Total/NA	Ground Water	8260B	
500-176296-12	MW-13	Total/NA	Ground Water	8260B	
500-176296-13	P-14	Total/NA	Ground Water	8260B	
500-176296-14	P-15	Total/NA	Ground Water	8260B	
500-176296-15	MW-16	Total/NA	Ground Water	8260B	
500-176296-16	MW-17	Total/NA	Ground Water	8260B	
500-176296-17	P-18	Total/NA	Ground Water	8260B	
500-176296-18	P-19	Total/NA	Ground Water	8260B	
500-176296-19	P-20	Total/NA	Ground Water	8260B	
500-176296-20	MW-21	Total/NA	Ground Water	8260B	
MB 500-525003/6	Method Blank	Total/NA	Water	8260B	
LCS 500-525003/4	Lab Control Sample	Total/NA	Water	8260B	
500-176296-20 MS	MW-21	Total/NA	Ground Water	8260B	
500-176296-20 MSD	MW-21	Total/NA	Ground Water	8260B	

Analysis Batch: 525191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-176296-24 - DL	P-25D	Total/NA	Ground Water	8260B	
500-176296-28	MW-28	Total/NA	Ground Water	8260B	
500-176296-29	MW-29	Total/NA	Ground Water	8260B	
500-176296-30	P-30	Total/NA	Ground Water	8260B	
500-176296-31	MW-31	Total/NA	Ground Water	8260B	
MB 500-525191/7	Method Blank	Total/NA	Water	8260B	
LCS 500-525191/5	Lab Control Sample	Total/NA	Water	8260B	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-126)	TOL (75-120)	BFB (72-124)	DBFM (75-120)
500-176296-1	MW-1	93	97	93	92
500-176296-2	MW-2	94	96	93	94
500-176296-3	MW-3	98	95	93	95
500-176296-4	P-4	93	97	93	93
500-176296-5	MW-5	98	95	94	95
500-176296-6	P-6	94	96	94	94
500-176296-7	MW-7	96	96	93	94
500-176296-8	MW-8	94	96	93	95
500-176296-9	MW-9	94	97	94	93
500-176296-10	P-10	96	96	94	95
500-176296-11	MW-11	98	95	93	95
500-176296-12	MW-13	96	96	95	96
500-176296-13	P-14	97	94	94	95
500-176296-14	P-15	98	95	93	97
500-176296-15	MW-16	99	94	96	96
500-176296-16	MW-17	100	94	93	97
500-176296-17	P-18	97	96	95	95
500-176296-18	P-19	97	95	94	95
500-176296-19	P-20	98	95	95	95
500-176296-20	MW-21	97	95	95	95
500-176296-20 MS	MW-21	97	95	95	97
500-176296-20 MSD	MW-21	97	95	98	97
500-176296-21	MW-22	94	100	90	103
500-176296-22	P-23	97	102	90	103
500-176296-23	MW-24	96	99	90	105
500-176296-24	P-25D	95	101	91	103
500-176296-24 - DL	P-25D	93	101	90	103
500-176296-25	P-25S	98	99	93	104
500-176296-26	MW-26	97	98	91	105
500-176296-27	P-27	97	98	90	104
500-176296-28	MW-28	91	100	91	99
500-176296-29	MW-29	95	100	90	102
500-176296-30	P-30	95	102	90	102
500-176296-31	MW-31	91	102	91	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-126)	TOL (75-120)	BFB (72-124)	DBFM (75-120)
LCS 500-525000/4	Lab Control Sample	94	101	93	106
LCS 500-525003/4	Lab Control Sample	95	95	93	96
LCS 500-525191/5	Lab Control Sample	95	100	94	104

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (75-126)	TOL (75-120)	BFB (72-124)	DBFM (75-120)
MB 500-525000/6	Method Blank	98	99	88	105
MB 500-525003/6	Method Blank	97	94	93	96
MB 500-525191/7	Method Blank	101	99	88	106

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-525000/6
Matrix: Water
Analysis Batch: 525000

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 10:27	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 10:27	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 10:27	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 10:27	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 10:27	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 10:27	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 10:27	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 10:27	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 10:27	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 10:27	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 10:27	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 10:27	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 10:27	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 10:27	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 10:27	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 10:27	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 10:27	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 10:27	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 10:27	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 10:27	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 10:27	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 10:27	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 10:27	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 10:27	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 10:27	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 10:27	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 10:27	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 10:27	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 10:27	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 10:27	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 10:27	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 10:27	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 10:27	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 10:27	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 10:27	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 10:27	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 10:27	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 10:27	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 10:27	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 10:27	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 10:27	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 10:27	1
Naphthalene	0.453	J	1.0	0.34	ug/L			01/16/20 10:27	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 10:27	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 10:27	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 10:27	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 10:27	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 10:27	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: MB 500-525000/6
Matrix: Water
Analysis Batch: 525000

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 10:27	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 10:27	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 10:27	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 10:27	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 10:27	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 10:27	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 10:27	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 10:27	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 10:27	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 10:27	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 10:27	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 10:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 126		01/16/20 10:27	1
Toluene-d8 (Surr)	99		75 - 120		01/16/20 10:27	1
4-Bromofluorobenzene (Surr)	88		72 - 124		01/16/20 10:27	1
Dibromofluoromethane (Surr)	105		75 - 120		01/16/20 10:27	1

Lab Sample ID: LCS 500-525000/4
Matrix: Water
Analysis Batch: 525000

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	47.3		ug/L		95	70 - 120
Bromobenzene	50.0	46.7		ug/L		93	70 - 122
Bromochloromethane	50.0	49.0		ug/L		98	65 - 122
Bromodichloromethane	50.0	44.8		ug/L		90	69 - 120
Bromoform	50.0	48.3		ug/L		97	56 - 132
Bromomethane	50.0	52.9		ug/L		106	40 - 152
n-Butylbenzene	50.0	47.5		ug/L		95	68 - 125
sec-Butylbenzene	50.0	45.9		ug/L		92	70 - 123
tert-Butylbenzene	50.0	47.4		ug/L		95	70 - 121
Carbon tetrachloride	50.0	49.9		ug/L		100	59 - 133
Chlorobenzene	50.0	50.4		ug/L		101	70 - 120
Dibromochloromethane	50.0	47.2		ug/L		94	68 - 125
Chloroethane	50.0	45.9		ug/L		92	48 - 136
Chloroform	50.0	44.6		ug/L		89	70 - 120
Chloromethane	50.0	53.3		ug/L		107	56 - 152
2-Chlorotoluene	50.0	45.7		ug/L		91	70 - 125
4-Chlorotoluene	50.0	45.5		ug/L		91	68 - 124
1,2-Dibromo-3-Chloropropane	50.0	41.6		ug/L		83	56 - 123
1,2-Dibromoethane	50.0	45.4		ug/L		91	70 - 125
Dibromomethane	50.0	46.1		ug/L		92	70 - 120
1,2-Dichlorobenzene	50.0	47.5		ug/L		95	70 - 125
1,3-Dichlorobenzene	50.0	47.8		ug/L		96	70 - 125
1,4-Dichlorobenzene	50.0	47.0		ug/L		94	70 - 120
Dichlorodifluoromethane	50.0	47.1		ug/L		94	40 - 159

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: LCS 500-525000/4
Matrix: Water
Analysis Batch: 525000

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	50.0	48.7		ug/L		97	70 - 125
1,2-Dichloroethane	50.0	46.4		ug/L		93	68 - 127
1,1-Dichloroethene	50.0	47.3		ug/L		95	67 - 122
cis-1,2-Dichloroethene	50.0	48.7		ug/L		97	70 - 125
trans-1,2-Dichloroethene	50.0	49.0		ug/L		98	70 - 125
1,2-Dichloropropane	50.0	48.8		ug/L		98	67 - 130
1,3-Dichloropropane	50.0	44.9		ug/L		90	62 - 136
2,2-Dichloropropane	50.0	47.9		ug/L		96	58 - 139
1,1-Dichloropropene	50.0	48.4		ug/L		97	70 - 121
cis-1,3-Dichloropropene	50.0	46.9		ug/L		94	64 - 127
trans-1,3-Dichloropropene	50.0	45.4		ug/L		91	62 - 128
Ethylbenzene	50.0	48.8		ug/L		98	70 - 123
Hexachlorobutadiene	50.0	42.2		ug/L		84	51 - 150
Isopropylbenzene	50.0	45.7		ug/L		91	70 - 126
p-Isopropyltoluene	50.0	47.5		ug/L		95	70 - 125
Methylene Chloride	50.0	45.1		ug/L		90	69 - 125
Methyl tert-butyl ether	50.0	45.6		ug/L		91	55 - 123
Naphthalene	50.0	44.2		ug/L		88	53 - 144
N-Propylbenzene	50.0	46.2		ug/L		92	69 - 127
Styrene	50.0	46.9		ug/L		94	70 - 120
1,1,1,2-Tetrachloroethane	50.0	50.8		ug/L		102	70 - 125
1,1,2,2-Tetrachloroethane	50.0	41.4		ug/L		83	62 - 140
Tetrachloroethene	50.0	49.4		ug/L		99	70 - 128
Toluene	50.0	47.8		ug/L		96	70 - 125
1,2,3-Trichlorobenzene	50.0	45.2		ug/L		90	51 - 145
1,2,4-Trichlorobenzene	50.0	46.6		ug/L		93	57 - 137
1,1,1-Trichloroethane	50.0	48.8		ug/L		98	70 - 125
1,1,2-Trichloroethane	50.0	44.9		ug/L		90	71 - 130
Trichloroethene	50.0	50.8		ug/L		102	70 - 125
Trichlorofluoromethane	50.0	47.9		ug/L		96	55 - 128
1,2,3-Trichloropropane	50.0	42.6		ug/L		85	50 - 133
1,2,4-Trimethylbenzene	50.0	45.6		ug/L		91	70 - 123
1,3,5-Trimethylbenzene	50.0	46.3		ug/L		93	70 - 123
Vinyl chloride	50.0	47.0		ug/L		94	64 - 126
Xylenes, Total	100	96.9		ug/L		97	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits
1,2-Dichloroethane-d4 (Surr)	94		75 - 126
Toluene-d8 (Surr)	101		75 - 120
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane (Surr)	106		75 - 120

Lab Sample ID: MB 500-525003/6
Matrix: Water
Analysis Batch: 525003

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/16/20 10:35	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: MB 500-525003/6
Matrix: Water
Analysis Batch: 525003

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/20 10:35	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/20 10:35	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/20 10:35	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/20 10:35	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/16/20 10:35	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 10:35	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 10:35	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/20 10:35	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/20 10:35	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/20 10:35	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/20 10:35	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/20 10:35	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/20 10:35	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/20 10:35	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/20 10:35	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/20 10:35	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/20 10:35	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/20 10:35	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/20 10:35	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/20 10:35	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/20 10:35	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/20 10:35	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/16/20 10:35	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/20 10:35	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/20 10:35	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/20 10:35	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/20 10:35	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/20 10:35	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/20 10:35	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/20 10:35	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/20 10:35	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/20 10:35	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/20 10:35	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/20 10:35	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/20 10:35	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/20 10:35	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/20 10:35	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/20 10:35	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/20 10:35	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/20 10:35	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/20 10:35	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/20 10:35	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/20 10:35	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/20 10:35	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/20 10:35	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/20 10:35	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/20 10:35	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/20 10:35	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/20 10:35	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: MB 500-525003/6
Matrix: Water
Analysis Batch: 525003

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/20 10:35	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/20 10:35	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/20 10:35	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/20 10:35	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/20 10:35	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/16/20 10:35	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/20 10:35	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/20 10:35	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/16/20 10:35	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/20 10:35	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		01/16/20 10:35	1
Toluene-d8 (Surr)	94		75 - 120		01/16/20 10:35	1
4-Bromofluorobenzene (Surr)	93		72 - 124		01/16/20 10:35	1
Dibromofluoromethane (Surr)	96		75 - 120		01/16/20 10:35	1

Lab Sample ID: LCS 500-525003/4
Matrix: Water
Analysis Batch: 525003

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
Benzene	50.0	46.7		ug/L		93	70 - 120
Bromobenzene	50.0	47.6		ug/L		95	70 - 122
Bromochloromethane	50.0	47.9		ug/L		96	65 - 122
Bromodichloromethane	50.0	47.8		ug/L		96	69 - 120
Bromoform	50.0	48.1		ug/L		96	56 - 132
Bromomethane	50.0	51.0		ug/L		102	40 - 152
n-Butylbenzene	50.0	46.1		ug/L		92	68 - 125
sec-Butylbenzene	50.0	46.3		ug/L		93	70 - 123
tert-Butylbenzene	50.0	47.0		ug/L		94	70 - 121
Carbon tetrachloride	50.0	49.7		ug/L		99	59 - 133
Chlorobenzene	50.0	47.2		ug/L		94	70 - 120
Dibromochloromethane	50.0	47.3		ug/L		95	68 - 125
Chloroethane	50.0	67.6		ug/L		135	48 - 136
Chloroform	50.0	47.1		ug/L		94	70 - 120
Chloromethane	50.0	50.7		ug/L		101	56 - 152
2-Chlorotoluene	50.0	45.7		ug/L		91	70 - 125
4-Chlorotoluene	50.0	46.3		ug/L		93	68 - 124
1,2-Dibromo-3-Chloropropane	50.0	45.1		ug/L		90	56 - 123
1,2-Dibromoethane	50.0	47.5		ug/L		95	70 - 125
Dibromomethane	50.0	47.5		ug/L		95	70 - 120
1,2-Dichlorobenzene	50.0	45.8		ug/L		92	70 - 125
1,3-Dichlorobenzene	50.0	46.3		ug/L		93	70 - 125
1,4-Dichlorobenzene	50.0	45.8		ug/L		92	70 - 120
Dichlorodifluoromethane	50.0	58.4		ug/L		117	40 - 159
1,1-Dichloroethane	50.0	47.8		ug/L		96	70 - 125
1,2-Dichloroethane	50.0	47.7		ug/L		95	68 - 127

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: LCS 500-525003/4
Matrix: Water
Analysis Batch: 525003

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	47.9		ug/L		96	67 - 122
cis-1,2-Dichloroethene	50.0	46.9		ug/L		94	70 - 125
trans-1,2-Dichloroethene	50.0	47.6		ug/L		95	70 - 125
1,2-Dichloropropane	50.0	48.3		ug/L		97	67 - 130
1,3-Dichloropropane	50.0	47.2		ug/L		94	62 - 136
2,2-Dichloropropane	50.0	48.1		ug/L		96	58 - 139
1,1-Dichloropropene	50.0	47.5		ug/L		95	70 - 121
cis-1,3-Dichloropropene	50.0	46.0		ug/L		92	64 - 127
trans-1,3-Dichloropropene	50.0	47.0		ug/L		94	62 - 128
Ethylbenzene	50.0	46.4		ug/L		93	70 - 123
Hexachlorobutadiene	50.0	47.1		ug/L		94	51 - 150
Isopropylbenzene	50.0	46.4		ug/L		93	70 - 126
p-Isopropyltoluene	50.0	47.0		ug/L		94	70 - 125
Methylene Chloride	50.0	46.7		ug/L		93	69 - 125
Methyl tert-butyl ether	50.0	47.8		ug/L		96	55 - 123
Naphthalene	50.0	44.0		ug/L		88	53 - 144
N-Propylbenzene	50.0	46.8		ug/L		94	69 - 127
Styrene	50.0	48.1		ug/L		96	70 - 120
1,1,1,2-Tetrachloroethane	50.0	46.4		ug/L		93	70 - 125
1,1,2,2-Tetrachloroethane	50.0	45.4		ug/L		91	62 - 140
Tetrachloroethene	50.0	48.4		ug/L		97	70 - 128
Toluene	50.0	45.6		ug/L		91	70 - 125
1,2,3-Trichlorobenzene	50.0	44.7		ug/L		89	51 - 145
1,2,4-Trichlorobenzene	50.0	46.2		ug/L		92	57 - 137
1,1,1-Trichloroethane	50.0	49.5		ug/L		99	70 - 125
1,1,2-Trichloroethane	50.0	46.7		ug/L		93	71 - 130
Trichloroethene	50.0	48.4		ug/L		97	70 - 125
Trichlorofluoromethane	50.0	51.3		ug/L		103	55 - 128
1,2,3-Trichloropropane	50.0	50.2		ug/L		100	50 - 133
1,2,4-Trimethylbenzene	50.0	45.9		ug/L		92	70 - 123
1,3,5-Trimethylbenzene	50.0	46.2		ug/L		92	70 - 123
Vinyl chloride	50.0	53.9		ug/L		108	64 - 126
Xylenes, Total	100	90.2		ug/L		90	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		75 - 126
Toluene-d8 (Surr)	95		75 - 120
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane (Surr)	96		75 - 120

Lab Sample ID: 500-176296-20 MS
Matrix: Ground Water
Analysis Batch: 525003

Client Sample ID: MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.15		50.0	51.7		ug/L		103	70 - 120
Bromobenzene	<0.36		50.0	54.1		ug/L		108	70 - 122
Bromochloromethane	<0.43		50.0	52.9		ug/L		106	65 - 122

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: 500-176296-20 MS

Matrix: Ground Water

Analysis Batch: 525003

Client Sample ID: MW-21

Prep Type: Total/NA

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS Qualifier	Unit	D	%Rec	%Rec. Limits
	Result			Result					
Bromodichloromethane	<0.37		50.0	52.8		ug/L		106	69 - 120
Bromoform	<0.48		50.0	51.0		ug/L		102	56 - 132
Bromomethane	<0.80		50.0	56.0		ug/L		112	40 - 152
n-Butylbenzene	<0.39		50.0	49.2		ug/L		98	68 - 125
sec-Butylbenzene	<0.40		50.0	51.3		ug/L		103	70 - 123
tert-Butylbenzene	<0.40		50.0	52.4		ug/L		105	70 - 121
Carbon tetrachloride	<0.38		50.0	53.0		ug/L		106	59 - 133
Chlorobenzene	<0.39		50.0	51.4		ug/L		103	70 - 120
Dibromochloromethane	<0.49		50.0	50.6		ug/L		101	68 - 125
Chloroethane	<0.51		50.0	58.5		ug/L		117	48 - 136
Chloroform	<0.37		50.0	52.5		ug/L		105	70 - 120
Chloromethane	<0.32		50.0	55.6		ug/L		111	56 - 152
2-Chlorotoluene	<0.31		50.0	51.4		ug/L		103	70 - 125
4-Chlorotoluene	<0.35		50.0	51.4		ug/L		103	68 - 124
1,2-Dibromo-3-Chloropropane	<2.0		50.0	47.3		ug/L		95	56 - 123
1,2-Dibromoethane	<0.39		50.0	51.3		ug/L		103	70 - 125
Dibromomethane	<0.27		50.0	52.0		ug/L		104	70 - 120
1,2-Dichlorobenzene	<0.33		50.0	51.0		ug/L		102	70 - 125
1,3-Dichlorobenzene	<0.40		50.0	51.2		ug/L		102	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	50.4		ug/L		101	70 - 120
Dichlorodifluoromethane	<0.67		50.0	68.5		ug/L		137	40 - 159
1,1-Dichloroethane	<0.41		50.0	52.5		ug/L		105	70 - 125
1,2-Dichloroethane	<0.39		50.0	52.7		ug/L		105	68 - 127
1,1-Dichloroethene	<0.39		50.0	52.3		ug/L		105	67 - 122
cis-1,2-Dichloroethene	<0.41		50.0	52.1		ug/L		104	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	52.6		ug/L		105	70 - 125
1,2-Dichloropropane	<0.43		50.0	52.7		ug/L		105	67 - 130
1,3-Dichloropropane	<0.36		50.0	50.8		ug/L		102	62 - 136
2,2-Dichloropropane	<0.44		50.0	50.0		ug/L		100	58 - 139
1,1-Dichloropropene	<0.30		50.0	51.3		ug/L		103	70 - 121
cis-1,3-Dichloropropene	<0.42		50.0	49.7		ug/L		99	64 - 127
trans-1,3-Dichloropropene	<0.36		50.0	49.9		ug/L		100	62 - 128
Ethylbenzene	<0.18		50.0	50.6		ug/L		101	70 - 123
Hexachlorobutadiene	<0.45		50.0	50.2		ug/L		100	51 - 150
Isopropylbenzene	<0.39		50.0	52.0		ug/L		104	70 - 126
p-Isopropyltoluene	<0.36		50.0	51.6		ug/L		103	70 - 125
Methylene Chloride	<1.6		50.0	52.7		ug/L		105	69 - 125
Methyl tert-butyl ether	<0.39		50.0	51.9		ug/L		104	55 - 123
Naphthalene	<0.34		50.0	47.1		ug/L		94	53 - 144
N-Propylbenzene	<0.41		50.0	51.7		ug/L		103	69 - 127
Styrene	<0.39		50.0	52.5		ug/L		105	70 - 120
1,1,1,2-Tetrachloroethane	<0.46		50.0	51.5		ug/L		103	70 - 125
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	49.4		ug/L		99	62 - 140
Tetrachloroethene	<0.37		50.0	52.0		ug/L		104	70 - 128
Toluene	<0.15		50.0	50.3		ug/L		101	70 - 125
1,2,3-Trichlorobenzene	<0.46		50.0	47.8		ug/L		96	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	48.4		ug/L		97	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	53.7		ug/L		107	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	50.4		ug/L		101	71 - 130

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: 500-176296-20 MS
Matrix: Ground Water
Analysis Batch: 525003

Client Sample ID: MW-21
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Trichloroethene	140		50.0	187		ug/L		104	70 - 125
Trichlorofluoromethane	<0.43		50.0	54.8		ug/L		110	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	55.2		ug/L		110	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	51.4		ug/L		103	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	51.7		ug/L		103	70 - 123
Vinyl chloride	<0.20		50.0	57.7		ug/L		115	64 - 126
Xylenes, Total	<0.22		100	99.5		ug/L		99	70 - 125
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	97		75 - 126						
Toluene-d8 (Surr)	95		75 - 120						
4-Bromofluorobenzene (Surr)	95		72 - 124						
Dibromofluoromethane (Surr)	97		75 - 120						

Lab Sample ID: 500-176296-20 MSD
Matrix: Ground Water
Analysis Batch: 525003

Client Sample ID: MW-21
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.15		50.0	49.9		ug/L		100	70 - 120	4	20
Bromobenzene	<0.36		50.0	53.6		ug/L		107	70 - 122	1	20
Bromochloromethane	<0.43		50.0	51.5		ug/L		103	65 - 122	3	20
Bromodichloromethane	<0.37		50.0	51.3		ug/L		103	69 - 120	3	20
Bromoform	<0.48		50.0	49.8		ug/L		100	56 - 132	2	20
Bromomethane	<0.80		50.0	54.3		ug/L		109	40 - 152	3	20
n-Butylbenzene	<0.39		50.0	47.1		ug/L		94	68 - 125	4	20
sec-Butylbenzene	<0.40		50.0	49.9		ug/L		100	70 - 123	3	20
tert-Butylbenzene	<0.40		50.0	51.4		ug/L		103	70 - 121	2	20
Carbon tetrachloride	<0.38		50.0	50.6		ug/L		101	59 - 133	5	20
Chlorobenzene	<0.39		50.0	50.2		ug/L		100	70 - 120	2	20
Dibromochloromethane	<0.49		50.0	49.6		ug/L		99	68 - 125	2	20
Chloroethane	<0.51		50.0	63.7		ug/L		127	48 - 136	8	20
Chloroform	<0.37		50.0	50.5		ug/L		101	70 - 120	4	20
Chloromethane	<0.32		50.0	53.4		ug/L		107	56 - 152	4	20
2-Chlorotoluene	<0.31		50.0	50.4		ug/L		101	70 - 125	2	20
4-Chlorotoluene	<0.35		50.0	50.7		ug/L		101	68 - 124	1	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	48.0		ug/L		96	56 - 123	1	20
1,2-Dibromoethane	<0.39		50.0	50.6		ug/L		101	70 - 125	1	20
Dibromomethane	<0.27		50.0	50.5		ug/L		101	70 - 120	3	20
1,2-Dichlorobenzene	<0.33		50.0	50.0		ug/L		100	70 - 125	2	20
1,3-Dichlorobenzene	<0.40		50.0	49.9		ug/L		100	70 - 125	3	20
1,4-Dichlorobenzene	<0.36		50.0	49.4		ug/L		99	70 - 120	2	20
Dichlorodifluoromethane	<0.67		50.0	67.3		ug/L		135	40 - 159	2	20
1,1-Dichloroethane	<0.41		50.0	50.7		ug/L		101	70 - 125	4	20
1,2-Dichloroethane	<0.39		50.0	50.9		ug/L		102	68 - 127	4	20
1,1-Dichloroethene	<0.39		50.0	49.7		ug/L		99	67 - 122	5	20
cis-1,2-Dichloroethene	<0.41		50.0	50.1		ug/L		100	70 - 125	4	20
trans-1,2-Dichloroethene	<0.35		50.0	50.5		ug/L		101	70 - 125	4	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: 500-176296-20 MSD
Matrix: Ground Water
Analysis Batch: 525003

Client Sample ID: MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane	<0.43		50.0	51.6		ug/L		103	67 - 130	2	20
1,3-Dichloropropane	<0.36		50.0	50.0		ug/L		100	62 - 136	2	20
2,2-Dichloropropane	<0.44		50.0	48.1		ug/L		96	58 - 139	4	20
1,1-Dichloropropene	<0.30		50.0	48.9		ug/L		98	70 - 121	5	20
cis-1,3-Dichloropropene	<0.42		50.0	48.4		ug/L		97	64 - 127	3	20
trans-1,3-Dichloropropene	<0.36		50.0	49.7		ug/L		99	62 - 128	0	20
Ethylbenzene	<0.18		50.0	49.1		ug/L		98	70 - 123	3	20
Hexachlorobutadiene	<0.45		50.0	49.4		ug/L		99	51 - 150	2	20
Isopropylbenzene	<0.39		50.0	51.0		ug/L		102	70 - 126	2	20
p-Isopropyltoluene	<0.36		50.0	50.0		ug/L		100	70 - 125	3	20
Methylene Chloride	<1.6		50.0	50.2		ug/L		100	69 - 125	5	20
Methyl tert-butyl ether	<0.39		50.0	49.6		ug/L		99	55 - 123	4	20
Naphthalene	<0.34		50.0	47.7		ug/L		95	53 - 144	1	20
N-Propylbenzene	<0.41		50.0	50.6		ug/L		101	69 - 127	2	20
Styrene	<0.39		50.0	50.9		ug/L		102	70 - 120	3	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	49.3		ug/L		99	70 - 125	4	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	49.6		ug/L		99	62 - 140	0	20
Tetrachloroethene	<0.37		50.0	49.7		ug/L		99	70 - 128	5	20
Toluene	<0.15		50.0	48.6		ug/L		97	70 - 125	3	20
1,2,3-Trichlorobenzene	<0.46		50.0	48.1		ug/L		96	51 - 145	1	20
1,2,4-Trichlorobenzene	<0.34		50.0	47.3		ug/L		95	57 - 137	2	20
1,1,1-Trichloroethane	<0.38		50.0	51.4		ug/L		103	70 - 125	4	20
1,1,2-Trichloroethane	<0.35		50.0	50.0		ug/L		100	71 - 130	1	20
Trichloroethene	140		50.0	184		ug/L		97	70 - 125	2	20
Trichlorofluoromethane	<0.43		50.0	52.5		ug/L		105	55 - 128	4	20
1,2,3-Trichloropropane	<0.41		50.0	54.6		ug/L		109	50 - 133	1	20
1,2,4-Trimethylbenzene	<0.36		50.0	50.5		ug/L		101	70 - 123	2	20
1,3,5-Trimethylbenzene	<0.25		50.0	50.5		ug/L		101	70 - 123	2	20
Vinyl chloride	<0.20		50.0	55.7		ug/L		111	64 - 126	4	20
Xylenes, Total	<0.22		100	96.0		ug/L		96	70 - 125	4	20

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
1,2-Dichloroethane-d4 (Surr)	97		75 - 126
Toluene-d8 (Surr)	95		75 - 120
4-Bromofluorobenzene (Surr)	98		72 - 124
Dibromofluoromethane (Surr)	97		75 - 120

Lab Sample ID: MB 500-525191/7
Matrix: Water
Analysis Batch: 525191

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			01/17/20 11:13	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/17/20 11:13	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/17/20 11:13	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/17/20 11:13	1
Bromoform	<0.48		1.0	0.48	ug/L			01/17/20 11:13	1
Bromomethane	<0.80		3.0	0.80	ug/L			01/17/20 11:13	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: MB 500-525191/7

Matrix: Water

Analysis Batch: 525191

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/17/20 11:13	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/20 11:13	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/20 11:13	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/17/20 11:13	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/17/20 11:13	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/17/20 11:13	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/17/20 11:13	1
Chloroform	<0.37		2.0	0.37	ug/L			01/17/20 11:13	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/17/20 11:13	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/17/20 11:13	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/17/20 11:13	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/17/20 11:13	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/17/20 11:13	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/17/20 11:13	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/17/20 11:13	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/17/20 11:13	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/17/20 11:13	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/17/20 11:13	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/17/20 11:13	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/17/20 11:13	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/17/20 11:13	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/17/20 11:13	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/17/20 11:13	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/17/20 11:13	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/17/20 11:13	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/17/20 11:13	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/17/20 11:13	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/17/20 11:13	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/17/20 11:13	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/17/20 11:13	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/17/20 11:13	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/17/20 11:13	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/17/20 11:13	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/17/20 11:13	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/17/20 11:13	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/17/20 11:13	1
Naphthalene	0.628	J	1.0	0.34	ug/L			01/17/20 11:13	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/17/20 11:13	1
Styrene	<0.39		1.0	0.39	ug/L			01/17/20 11:13	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/17/20 11:13	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/17/20 11:13	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/17/20 11:13	1
Toluene	<0.15		0.50	0.15	ug/L			01/17/20 11:13	1
1,2,3-Trichlorobenzene	0.467	J	1.0	0.46	ug/L			01/17/20 11:13	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/17/20 11:13	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/17/20 11:13	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/17/20 11:13	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/17/20 11:13	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/17/20 11:13	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: MB 500-525191/7
Matrix: Water
Analysis Batch: 525191

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/17/20 11:13	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/17/20 11:13	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/17/20 11:13	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/17/20 11:13	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/17/20 11:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 126		01/17/20 11:13	1
Toluene-d8 (Surr)	99		75 - 120		01/17/20 11:13	1
4-Bromofluorobenzene (Surr)	88		72 - 124		01/17/20 11:13	1
Dibromofluoromethane (Surr)	106		75 - 120		01/17/20 11:13	1

Lab Sample ID: LCS 500-525191/5
Matrix: Water
Analysis Batch: 525191

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	50.3		ug/L		101	70 - 120
Bromobenzene	50.0	49.0		ug/L		98	70 - 122
Bromochloromethane	50.0	51.4		ug/L		103	65 - 122
Bromodichloromethane	50.0	46.6		ug/L		93	69 - 120
Bromoform	50.0	51.3		ug/L		103	56 - 132
Bromomethane	50.0	57.2		ug/L		114	40 - 152
n-Butylbenzene	50.0	50.0		ug/L		100	68 - 125
sec-Butylbenzene	50.0	49.2		ug/L		98	70 - 123
tert-Butylbenzene	50.0	49.8		ug/L		100	70 - 121
Carbon tetrachloride	50.0	55.0		ug/L		110	59 - 133
Chlorobenzene	50.0	52.5		ug/L		105	70 - 120
Dibromochloromethane	50.0	49.0		ug/L		98	68 - 125
Chloroethane	50.0	45.0		ug/L		90	48 - 136
Chloroform	50.0	47.2		ug/L		94	70 - 120
Chloromethane	50.0	57.9		ug/L		116	56 - 152
2-Chlorotoluene	50.0	49.0		ug/L		98	70 - 125
4-Chlorotoluene	50.0	47.7		ug/L		95	68 - 124
1,2-Dibromo-3-Chloropropane	50.0	44.2		ug/L		88	56 - 123
1,2-Dibromoethane	50.0	48.4		ug/L		97	70 - 125
Dibromomethane	50.0	49.0		ug/L		98	70 - 120
1,2-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 125
1,3-Dichlorobenzene	50.0	49.9		ug/L		100	70 - 125
1,4-Dichlorobenzene	50.0	48.6		ug/L		97	70 - 120
Dichlorodifluoromethane	50.0	53.8		ug/L		108	40 - 159
1,1-Dichloroethane	50.0	51.5		ug/L		103	70 - 125
1,2-Dichloroethane	50.0	49.0		ug/L		98	68 - 127
1,1-Dichloroethene	50.0	53.0		ug/L		106	67 - 122
cis-1,2-Dichloroethene	50.0	51.2		ug/L		102	70 - 125
trans-1,2-Dichloroethene	50.0	53.1		ug/L		106	70 - 125
1,2-Dichloropropane	50.0	51.6		ug/L		103	67 - 130
1,3-Dichloropropane	50.0	46.7		ug/L		93	62 - 136

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

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

Lab Sample ID: LCS 500-525191/5

Matrix: Water

Analysis Batch: 525191

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	50.0	52.0		ug/L		104	58 - 139
1,1-Dichloropropene	50.0	51.3		ug/L		103	70 - 121
cis-1,3-Dichloropropene	50.0	48.5		ug/L		97	64 - 127
trans-1,3-Dichloropropene	50.0	46.7		ug/L		93	62 - 128
Ethylbenzene	50.0	49.8		ug/L		100	70 - 123
Hexachlorobutadiene	50.0	44.9		ug/L		90	51 - 150
Isopropylbenzene	50.0	48.4		ug/L		97	70 - 126
p-Isopropyltoluene	50.0	50.6		ug/L		101	70 - 125
Methylene Chloride	50.0	48.4		ug/L		97	69 - 125
Methyl tert-butyl ether	50.0	49.3		ug/L		99	55 - 123
Naphthalene	50.0	48.7		ug/L		97	53 - 144
N-Propylbenzene	50.0	48.4		ug/L		97	69 - 127
Styrene	50.0	49.0		ug/L		98	70 - 120
1,1,1,2-Tetrachloroethane	50.0	52.5		ug/L		105	70 - 125
1,1,1,2,2-Tetrachloroethane	50.0	42.7		ug/L		85	62 - 140
Tetrachloroethene	50.0	53.5		ug/L		107	70 - 128
Toluene	50.0	50.4		ug/L		101	70 - 125
1,2,3-Trichlorobenzene	50.0	49.9		ug/L		100	51 - 145
1,2,4-Trichlorobenzene	50.0	50.4		ug/L		101	57 - 137
1,1,1-Trichloroethane	50.0	52.3		ug/L		105	70 - 125
1,1,2-Trichloroethane	50.0	46.7		ug/L		93	71 - 130
Trichloroethene	50.0	54.3		ug/L		109	70 - 125
Trichlorofluoromethane	50.0	53.1		ug/L		106	55 - 128
1,2,3-Trichloropropane	50.0	45.6		ug/L		91	50 - 133
1,2,4-Trimethylbenzene	50.0	47.7		ug/L		95	70 - 123
1,3,5-Trimethylbenzene	50.0	48.7		ug/L		97	70 - 123
Vinyl chloride	50.0	53.5		ug/L		107	64 - 126
Xylenes, Total	100	101		ug/L		101	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	95		75 - 126
Toluene-d8 (Surr)	100		75 - 120
4-Bromofluorobenzene (Surr)	94		72 - 124
Dibromofluoromethane (Surr)	104		75 - 120

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-1

Date Collected: 01/09/20 13:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 11:01	JLC	TAL CHI

Client Sample ID: MW-2

Date Collected: 01/10/20 09:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 11:26	JLC	TAL CHI

Client Sample ID: MW-3

Date Collected: 01/10/20 11:00

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 11:52	JLC	TAL CHI

Client Sample ID: P-4

Date Collected: 01/10/20 11:15

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 12:18	JLC	TAL CHI

Client Sample ID: MW-5

Date Collected: 01/10/20 10:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 12:44	JLC	TAL CHI

Client Sample ID: P-6

Date Collected: 01/09/20 08:50

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 13:09	JLC	TAL CHI

Client Sample ID: MW-7

Date Collected: 01/09/20 12:45

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 13:35	JLC	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-8

Date Collected: 01/09/20 12:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-8

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 14:01	JLC	TAL CHI

Client Sample ID: MW-9

Date Collected: 01/10/20 11:45

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-9

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 14:28	JLC	TAL CHI

Client Sample ID: P-10

Date Collected: 01/10/20 11:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-10

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 14:53	JLC	TAL CHI

Client Sample ID: MW-11

Date Collected: 01/10/20 12:00

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-11

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 15:19	JLC	TAL CHI

Client Sample ID: MW-13

Date Collected: 01/10/20 12:15

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-12

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 15:46	JLC	TAL CHI

Client Sample ID: P-14

Date Collected: 01/10/20 12:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-13

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 16:11	JLC	TAL CHI

Client Sample ID: P-15

Date Collected: 01/10/20 13:00

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-14

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 16:38	JLC	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-16

Date Collected: 01/09/20 13:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-15

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 17:03	JLC	TAL CHI

Client Sample ID: MW-17

Date Collected: 01/09/20 11:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-16

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 17:30	JLC	TAL CHI

Client Sample ID: P-18

Date Collected: 01/09/20 11:15

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-17

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 17:55	JLC	TAL CHI

Client Sample ID: P-19

Date Collected: 01/09/20 11:45

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-18

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 18:21	JLC	TAL CHI

Client Sample ID: P-20

Date Collected: 01/09/20 09:00

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-19

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 18:47	JLC	TAL CHI

Client Sample ID: MW-21

Date Collected: 01/09/20 14:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-20

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525003	01/16/20 19:13	JLC	TAL CHI

Client Sample ID: MW-22

Date Collected: 01/09/20 09:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-21

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525000	01/16/20 15:13	JLC	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: P-23

Date Collected: 01/09/20 11:00

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-22

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525000	01/16/20 15:37	JLC	TAL CHI

Client Sample ID: MW-24

Date Collected: 01/09/20 12:00

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-23

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525000	01/16/20 16:01	JLC	TAL CHI

Client Sample ID: P-25D

Date Collected: 01/09/20 10:35

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-24

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525000	01/16/20 16:24	JLC	TAL CHI
Total/NA	Analysis	8260B	DL	10	525191	01/17/20 12:01	JLC	TAL CHI

Client Sample ID: P-25S

Date Collected: 01/09/20 10:20

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-25

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525000	01/16/20 16:48	JLC	TAL CHI

Client Sample ID: MW-26

Date Collected: 01/09/20 13:45

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-26

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525000	01/16/20 17:12	JLC	TAL CHI

Client Sample ID: P-27

Date Collected: 01/09/20 14:45

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-27

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525000	01/16/20 17:36	JLC	TAL CHI

Client Sample ID: MW-28

Date Collected: 01/09/20 10:00

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-28

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525191	01/17/20 12:24	JLC	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Client Sample ID: MW-29

Date Collected: 01/09/20 15:45

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-29

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525191	01/17/20 12:48	JLC	TAL CHI

Client Sample ID: P-30

Date Collected: 01/09/20 16:00

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-30

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525191	01/17/20 13:12	JLC	TAL CHI

Client Sample ID: MW-31

Date Collected: 01/09/20 15:30

Date Received: 01/14/20 10:00

Lab Sample ID: 500-176296-31

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	525191	01/17/20 13:36	JLC	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-176296-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

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

Chain of Custody Record

388552



Environment Testing
TestAmerica

Address: _____

Regulatory Program: DW NPDES RCRA Other:

TAL-8210

Client Contact		Project Manager: <u>Mitch Evenson</u>		Site Contact: <u>AMB</u>		Date: <u>1/13/2020</u>		COC No: _____	
Company Name: <u>Cedar Corporation</u>		Tel/Email: <u>715-235-9081</u>		Lab Contact: <u>Sandra F.</u>		Carrier: <u>FedEx</u>		1 of 3 COCs	
Address: <u>604 Wilson Ave</u>		Analysis Turnaround Time							
City/State/Zip: <u>Menomonee, WI 54751</u>		<input type="checkbox"/> CALENDAR DAYS		<input type="checkbox"/> WORKING DAYS					
Phone: <u>715-235-9081</u>		TAT if different from Below _____							
Fax: _____		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 1 week					
Project Name: <u>Town of Warren</u>		<input type="checkbox"/> 2 days		<input type="checkbox"/> 1 day					
Site: <u>Hudson, WI</u>									
P O # _____									

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	
1 MW-1	1/9	1330	G	GW	3	X		
2 MW-2	1/10	0930						
3 MW-3	1/10	1100						
4 MW-P-4	1/10	1115						
5 MW-5	1/10	1030						
6 P-6	1/9	0850						
7 MW-7	1/9	1245						
8 MW-8	1/9	1230						
9 MW-9	1/10	1145						
10 P-10	1/10	1130						
11 MW-11	1/10	1200						
12 P MW-13	1/10	1215	↓	↓	↓	↓		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: Yes No Custody Seal No.: _____ Cooler Temp. (°C): Obs'd: 5.0 Corr'd: _____ Therm ID No.: _____

Relinquished by: <u>[Signature]</u>	Company: <u>Cedar</u>	Date/Time: <u>1/13/20 1100</u>	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: <u>[Signature]</u>	Company: <u>TestAmerica</u>	Date/Time: <u>1/14/20 1000</u>



Chain of Custody Record

388553



Environment Testing
TestAmerica

Address: _____

Regulatory Program: DW NPDES RCRA Other:

TAL-8210

Client Contact		Project Manager: MITCH EVENSON		Site Contact: AMB		Date: 1/13/2020		COC No: _____			
Company Name: Cedar Corporation		Tel/Email: 715-235-9081		Lab Contact: Sandie F.		Carrier: FedEx		2 of 3 COCs			
Address: 604 Wilson Ave		Analysis Turnaround Time									
City/State/Zip: Menomonie, WI 54751		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Sampler: _____	
Phone: 715-235-9081		TAT if different from Below _____								For Lab Use Only:	
Fax: _____		_____								Walk-in Client: _____	
Project Name: Town of Warren		_____								Lab Sampling: _____	
Site: Hudson, WI		_____								Job / SDG No.: _____	
P O # _____		_____		_____		_____		500-176296			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Sample Specific Notes:		
13	P-14	1/10	1230	G	GW	3	X				
14	P-15	1/10	1300								
15	MW-16	1/9	1330								
16	MW-17	1/9	1130								
17	P-18	1/9	1115								
18	P-19	1/9	1145								
19	P-20	1/9	0900								
20	MW-21	1/9	1430								
21	MW-22	1/9	0930								
22	P-23	1/9	1100								
23	MW-24	1/9	1200								
24	P-25D	1/9	1035								
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown											
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____					
Relinquished by: <i>M. Tang</i>		Company: <i>Cedar</i>		Date/Time: <i>1/13/20 1100</i>		Received by:		Date/Time:			
Relinquished by:		Company:		Date/Time:		Received by:		Date/Time:			
Relinquished by:		Company:		Date/Time:		Received in Laboratory by: <i>John Scott</i>		Date/Time: <i>1/14/20 1000</i>			

Chain of Custody Record

388554



Environment Testing
TestAmerica

Address: _____

Regulatory Program: DW NPDES RCRA Other:

TAL-8210

Client Contact		Project Manager: <u>Mitch Evenson</u>		Site Contact: <u>AMB</u>		Date: <u>1/13/2020</u>		COC No.:		
Company Name: <u>Cedar Corporation</u>		Tel/Email: <u>715-235-9081</u>		Lab Contact: <u>Sandie F.</u>		Carrier: <u>FedEx</u>		3 of 3 COCs		
Address: <u>6004 Wilson Ave</u>		Analysis Turnaround Time								
City/State/Zip: <u>Menomonie, WI 54751</u>		<input type="checkbox"/> CALENDAR DAYS		<input type="checkbox"/> WORKING DAYS						
Phone: <u>715-235-9081</u>		TAT if different from Below _____								
Fax: _____		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 1 week						
Project Name: <u>Town of Warren</u>		<input type="checkbox"/> 2 days		<input type="checkbox"/> 1 day						
Site: <u>Hudson, WI</u>										
PO # _____										
						Filtered Sample (Y/N) Perform MS/MSD (Y/N)		DOCS		
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:			
25	P-25 S	1/9	1020	G	GW	3	X			
26	mlw-26	1/9	1345	↓	↓	↓	↓			
27	P-27	1/9	1445	↓	↓	↓	↓			
28	mlw-28	1/10	1000	↓	↓	↓	↓			
29	mlw-29	1/9	1545	↓	↓	↓	↓			
30	P-30	1/9	1600	↓	↓	↓	↓			
31	mlw-31	1/9	1530	↓	↓	↓	↓			
32	Trip Blank									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____										
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
Special Instructions/QC Requirements & Comments:										
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:			Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.:			
Relinquished by: <u>M. Tan</u>		Company: <u>Cedar</u>		Date/Time: <u>1/13/20 1100</u>		Received by:		Company: _____ Date/Time: _____		
Relinquished by: _____		Company: _____		Date/Time: _____		Received by: _____		Company: _____ Date/Time: _____		
Relinquished by: _____		Company: _____		Date/Time: _____		Received in Laboratory by: <u>Alan Scott</u>		Company: <u>TA-CH-F</u> Date/Time: <u>1/14/20 1000</u>		

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-176296-1

Login Number: 176296

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	False	Refer to Job Narrative for details.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-185479-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
8/10/2020 2:16:36 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	7
Sample Summary	8
Client Sample Results	9
Definitions	75
QC Association	76
Surrogate Summary	78
QC Sample Results	80
Chronicle	101
Certification Summary	106
Chain of Custody	107
Receipt Checklists	110

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Job ID: 500-185479-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

**Job Narrative
500-185479-1**

Comments

No additional comments.

Receipt

The samples were received on 7/25/2020 11:40 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.9° C.

GC/MS VOA

Method 8260B: Surrogate recovery for the following samples were outside control limits: P-6 (500-185479-5) and P-23 (500-185479-21). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8260B: The matrix spike/matrix spike duplicate (MS/MSD) for the following sample was analyzed outside the 12 hour tune window. No further action was taken. P-15 (500-185479-13)

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



Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-2

Lab Sample ID: 500-185479-1

No Detections.

Client Sample ID: MW-3

Lab Sample ID: 500-185479-2

No Detections.

Client Sample ID: P-4

Lab Sample ID: 500-185479-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	9.4		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 500-185479-4

No Detections.

Client Sample ID: P-6

Lab Sample ID: 500-185479-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Bromoform	1.8		1.0	0.48	ug/L	1		8260B	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 500-185479-6

No Detections.

Client Sample ID: MW-8

Lab Sample ID: 500-185479-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	67		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 500-185479-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.37	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-10

Lab Sample ID: 500-185479-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	35		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 500-185479-10

No Detections.

Client Sample ID: MW-13

Lab Sample ID: 500-185479-11

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.3		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-14

Lab Sample ID: 500-185479-12

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.8		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-15

Lab Sample ID: 500-185479-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-16

Lab Sample ID: 500-185479-14

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	82		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 500-185479-15

No Detections.

Client Sample ID: P-18

Lab Sample ID: 500-185479-16

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	25		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-19

Lab Sample ID: 500-185479-17

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	10		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-20

Lab Sample ID: 500-185479-18

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Bromoform	0.57	J	1.0	0.48	ug/L	1		8260B	Total/NA

Client Sample ID: MW-21

Lab Sample ID: 500-185479-19

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	140		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-22

Lab Sample ID: 500-185479-20

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.31	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-23

Lab Sample ID: 500-185479-21

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Bromoform	2.4		1.0	0.48	ug/L	1		8260B	Total/NA

Client Sample ID: MW-24

Lab Sample ID: 500-185479-22

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	72		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-25D

Lab Sample ID: 500-185479-23

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	150		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-25S

Lab Sample ID: 500-185479-24

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	64		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-26

Lab Sample ID: 500-185479-25

No Detections.

Client Sample ID: P-27

Lab Sample ID: 500-185479-26

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-29

Lab Sample ID: 500-185479-27

No Detections.

Client Sample ID: P-30

Lab Sample ID: 500-185479-28

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	8.1		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-31

Lab Sample ID: 500-185479-29

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.7		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 500-185479-30

No Detections.

Client Sample ID: Albright

Lab Sample ID: 500-185479-31

No Detections.

Client Sample ID: Ogbum

Lab Sample ID: 500-185479-32

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.62		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: Burton

Lab Sample ID: 500-185479-33

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-185479-1	MW-2	Ground Water	07/23/20 13:00	07/25/20 11:40	
500-185479-2	MW-3	Ground Water	07/22/20 13:00	07/25/20 11:40	
500-185479-3	P-4	Ground Water	07/22/20 13:30	07/25/20 11:40	
500-185479-4	MW-5	Ground Water	07/23/20 09:30	07/25/20 11:40	
500-185479-5	P-6	Ground Water	07/21/20 13:45	07/25/20 11:40	
500-185479-6	MW-7	Ground Water	07/22/20 14:00	07/25/20 11:40	
500-185479-7	MW-8	Ground Water	07/20/20 09:30	07/25/20 11:40	
500-185479-8	MW-9	Ground Water	07/22/20 11:00	07/25/20 11:40	
500-185479-9	P-10	Ground Water	07/22/20 10:30	07/25/20 11:40	
500-185479-10	MW-11	Ground Water	07/22/20 09:30	07/25/20 11:40	
500-185479-11	MW-13	Ground Water	07/23/20 10:00	07/25/20 11:40	
500-185479-12	P-14	Ground Water	07/23/20 10:15	07/25/20 11:40	
500-185479-13	P-15	Ground Water	07/23/20 14:30	07/25/20 11:40	
500-185479-14	MW-16	Ground Water	07/22/20 14:30	07/25/20 11:40	
500-185479-15	MW-17	Ground Water	07/20/20 11:45	07/25/20 11:40	
500-185479-16	P-18	Ground Water	07/20/20 11:30	07/25/20 11:40	
500-185479-17	P-19	Ground Water	07/20/20 11:15	07/25/20 11:40	
500-185479-18	P-20	Ground Water	07/21/20 14:00	07/25/20 11:40	
500-185479-19	MW-21	Ground Water	07/23/20 12:30	07/25/20 11:40	
500-185479-20	MW-22	Ground Water	07/21/20 11:15	07/25/20 11:40	
500-185479-21	P-23	Ground Water	07/20/20 14:45	07/25/20 11:40	
500-185479-22	MW-24	Ground Water	07/20/20 10:15	07/25/20 11:40	
500-185479-23	P-25D	Ground Water	07/20/20 14:15	07/25/20 11:40	
500-185479-24	P-25S	Ground Water	07/20/20 14:00	07/25/20 11:40	
500-185479-25	MW-26	Ground Water	07/23/20 12:00	07/25/20 11:40	
500-185479-26	P-27	Ground Water	07/23/20 11:30	07/25/20 11:40	
500-185479-27	MW-29	Ground Water	07/22/20 12:00	07/25/20 11:40	
500-185479-28	P-30	Ground Water	07/22/20 12:15	07/25/20 11:40	
500-185479-29	MW-31	Ground Water	07/22/20 11:30	07/25/20 11:40	
500-185479-30	Trip Blank	Ground Water	07/20/20 00:00	07/25/20 11:40	
500-185479-31	Albright	Ground Water	07/22/20 12:45	07/25/20 11:40	
500-185479-32	Ogbum	Ground Water	07/20/20 10:00	07/25/20 11:40	
500-185479-33	Burton	Ground Water	07/23/20 14:00	07/25/20 11:40	



Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-2
Date Collected: 07/23/20 13:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-1
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 14:20	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:20	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 14:20	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 14:20	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 14:20	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 14:20	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:20	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:20	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:20	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 14:20	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:20	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 14:20	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 14:20	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 14:20	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 14:20	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 14:20	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 14:20	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 14:20	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 14:20	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 14:20	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 14:20	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:20	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:20	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 14:20	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 14:20	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 14:20	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 14:20	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 14:20	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 14:20	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 14:20	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 14:20	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 14:20	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 14:20	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 14:20	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 14:20	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 14:20	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 14:20	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 14:20	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:20	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 14:20	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 14:20	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 14:20	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 14:20	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 14:20	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 14:20	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 14:20	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 14:20	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 14:20	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 14:20	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-2
Date Collected: 07/23/20 13:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-1
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 14:20	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 14:20	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 14:20	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 14:20	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 14:20	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 14:20	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 14:20	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:20	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 14:20	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 14:20	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 14:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		75 - 126					07/30/20 14:20	1
Toluene-d8 (Surr)	92		75 - 120					07/30/20 14:20	1
4-Bromofluorobenzene (Surr)	91		72 - 124					07/30/20 14:20	1
Dibromofluoromethane (Surr)	93		75 - 120					07/30/20 14:20	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-3
Date Collected: 07/22/20 13:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-2
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 14:48	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:48	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 14:48	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 14:48	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 14:48	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 14:48	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:48	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:48	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:48	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 14:48	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:48	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 14:48	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 14:48	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 14:48	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 14:48	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 14:48	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 14:48	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 14:48	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 14:48	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 14:48	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 14:48	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:48	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:48	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 14:48	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 14:48	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 14:48	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 14:48	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 14:48	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 14:48	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 14:48	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 14:48	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 14:48	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 14:48	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 14:48	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 14:48	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 14:48	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 14:48	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 14:48	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:48	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 14:48	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 14:48	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 14:48	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 14:48	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 14:48	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 14:48	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 14:48	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 14:48	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 14:48	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 14:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-3

Lab Sample ID: 500-185479-2

Date Collected: 07/22/20 13:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 14:48	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 14:48	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 14:48	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 14:48	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 14:48	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 14:48	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 14:48	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:48	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 14:48	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 14:48	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 14:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		75 - 126		07/30/20 14:48	1
Toluene-d8 (Surr)	92		75 - 120		07/30/20 14:48	1
4-Bromofluorobenzene (Surr)	91		72 - 124		07/30/20 14:48	1
Dibromofluoromethane (Surr)	91		75 - 120		07/30/20 14:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-4

Lab Sample ID: 500-185479-3

Date Collected: 07/22/20 13:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 15:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 15:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 15:16	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 15:16	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 15:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 15:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 15:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 15:16	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 15:16	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 15:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 15:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 15:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 15:16	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 15:16	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 15:16	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 15:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 15:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 15:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 15:16	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 15:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 15:16	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 15:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 15:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 15:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 15:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 15:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 15:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 15:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 15:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 15:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 15:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 15:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 15:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 15:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 15:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 15:16	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 15:16	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 15:16	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 15:16	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 15:16	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 15:16	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-4

Lab Sample ID: 500-185479-3

Date Collected: 07/22/20 13:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 15:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 15:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 15:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 15:16	1
Trichloroethene	9.4		0.50	0.16	ug/L			07/30/20 15:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 15:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 15:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 15:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 15:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 15:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		07/30/20 15:16	1
Toluene-d8 (Surr)	93		75 - 120		07/30/20 15:16	1
4-Bromofluorobenzene (Surr)	92		72 - 124		07/30/20 15:16	1
Dibromofluoromethane (Surr)	92		75 - 120		07/30/20 15:16	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-5
Date Collected: 07/23/20 09:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-4
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/31/20 14:09	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/20 14:09	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/20 14:09	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/20 14:09	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/20 14:09	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/31/20 14:09	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/20 14:09	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/20 14:09	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/20 14:09	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/20 14:09	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/20 14:09	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/20 14:09	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/20 14:09	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/20 14:09	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/31/20 14:09	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/20 14:09	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/20 14:09	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/20 14:09	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/20 14:09	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/31/20 14:09	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/20 14:09	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/20 14:09	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/20 14:09	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/20 14:09	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/20 14:09	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/20 14:09	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/31/20 14:09	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/31/20 14:09	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/31/20 14:09	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/20 14:09	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/20 14:09	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/20 14:09	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/20 14:09	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/20 14:09	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/20 14:09	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/20 14:09	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/20 14:09	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/20 14:09	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/20 14:09	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/20 14:09	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/20 14:09	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/20 14:09	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/20 14:09	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/20 14:09	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/20 14:09	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/20 14:09	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/20 14:09	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/31/20 14:09	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/20 14:09	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-5
Date Collected: 07/23/20 09:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-4
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/20 14:09	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/20 14:09	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/20 14:09	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/20 14:09	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/31/20 14:09	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/20 14:09	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/20 14:09	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/20 14:09	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/20 14:09	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/20 14:09	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/20 14:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		75 - 126					07/31/20 14:09	1
Toluene-d8 (Surr)	93		75 - 120					07/31/20 14:09	1
4-Bromofluorobenzene (Surr)	92		72 - 124					07/31/20 14:09	1
Dibromofluoromethane (Surr)	92		75 - 120					07/31/20 14:09	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-6

Lab Sample ID: 500-185479-5

Date Collected: 07/21/20 13:45

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 15:43	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:43	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 15:43	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 15:43	1
Bromoform	1.8		1.0	0.48	ug/L			07/30/20 15:43	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 15:43	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:43	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:43	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:43	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 15:43	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:43	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 15:43	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 15:43	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 15:43	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 15:43	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 15:43	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 15:43	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 15:43	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 15:43	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 15:43	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 15:43	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:43	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:43	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 15:43	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 15:43	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 15:43	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 15:43	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 15:43	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 15:43	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 15:43	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 15:43	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 15:43	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 15:43	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 15:43	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 15:43	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 15:43	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 15:43	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 15:43	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:43	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 15:43	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 15:43	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 15:43	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 15:43	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 15:43	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 15:43	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 15:43	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 15:43	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 15:43	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 15:43	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-6

Lab Sample ID: 500-185479-5

Date Collected: 07/21/20 13:45

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 15:43	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 15:43	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 15:43	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 15:43	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 15:43	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 15:43	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 15:43	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:43	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 15:43	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 15:43	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 15:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		07/30/20 15:43	1
Toluene-d8 (Surr)	39	X	75 - 120		07/30/20 15:43	1
4-Bromofluorobenzene (Surr)	92		72 - 124		07/30/20 15:43	1
Dibromofluoromethane (Surr)	93		75 - 120		07/30/20 15:43	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-7

Lab Sample ID: 500-185479-6

Date Collected: 07/22/20 14:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 16:11	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:11	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:11	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 16:11	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 16:11	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 16:11	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:11	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:11	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:11	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 16:11	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:11	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 16:11	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 16:11	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 16:11	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 16:11	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 16:11	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 16:11	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 16:11	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 16:11	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 16:11	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 16:11	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:11	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:11	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 16:11	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 16:11	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 16:11	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 16:11	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 16:11	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 16:11	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 16:11	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 16:11	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 16:11	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 16:11	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 16:11	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 16:11	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 16:11	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 16:11	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 16:11	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:11	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 16:11	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 16:11	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 16:11	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 16:11	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 16:11	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 16:11	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 16:11	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 16:11	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 16:11	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 16:11	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-7
Date Collected: 07/22/20 14:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-6
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 16:11	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 16:11	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 16:11	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 16:11	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 16:11	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:11	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 16:11	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:11	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 16:11	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 16:11	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		75 - 126		07/30/20 16:11	1
Toluene-d8 (Surr)	93		75 - 120		07/30/20 16:11	1
4-Bromofluorobenzene (Surr)	91		72 - 124		07/30/20 16:11	1
Dibromofluoromethane (Surr)	93		75 - 120		07/30/20 16:11	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-8
Date Collected: 07/20/20 09:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-7
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 16:38	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:38	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:38	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 16:38	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 16:38	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 16:38	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:38	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:38	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:38	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 16:38	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:38	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 16:38	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 16:38	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 16:38	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 16:38	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 16:38	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 16:38	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 16:38	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 16:38	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 16:38	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 16:38	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:38	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:38	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 16:38	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 16:38	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 16:38	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 16:38	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 16:38	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 16:38	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 16:38	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 16:38	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 16:38	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 16:38	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 16:38	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 16:38	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 16:38	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 16:38	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 16:38	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:38	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 16:38	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 16:38	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 16:38	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 16:38	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 16:38	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 16:38	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 16:38	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 16:38	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 16:38	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 16:38	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-8
Date Collected: 07/20/20 09:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-7
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 16:38	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 16:38	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 16:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 16:38	1
Trichloroethene	67		0.50	0.16	ug/L			07/30/20 16:38	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:38	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 16:38	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:38	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 16:38	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 16:38	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 16:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		07/30/20 16:38	1
Toluene-d8 (Surr)	94		75 - 120		07/30/20 16:38	1
4-Bromofluorobenzene (Surr)	93		72 - 124		07/30/20 16:38	1
Dibromofluoromethane (Surr)	92		75 - 120		07/30/20 16:38	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-9

Lab Sample ID: 500-185479-8

Date Collected: 07/22/20 11:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 17:06	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:06	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:06	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 17:06	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 17:06	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 17:06	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:06	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:06	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:06	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 17:06	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:06	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 17:06	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 17:06	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 17:06	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 17:06	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 17:06	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 17:06	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 17:06	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 17:06	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 17:06	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 17:06	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:06	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:06	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 17:06	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 17:06	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 17:06	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 17:06	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 17:06	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 17:06	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 17:06	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 17:06	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 17:06	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 17:06	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 17:06	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 17:06	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 17:06	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 17:06	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 17:06	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:06	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 17:06	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 17:06	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 17:06	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 17:06	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 17:06	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 17:06	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 17:06	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 17:06	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 17:06	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 17:06	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-9
Date Collected: 07/22/20 11:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-8
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 17:06	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 17:06	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 17:06	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 17:06	1
Trichloroethene	0.37	J	0.50	0.16	ug/L			07/30/20 17:06	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:06	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 17:06	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:06	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 17:06	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 17:06	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 17:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		75 - 126					07/30/20 17:06	1
Toluene-d8 (Surr)	92		75 - 120					07/30/20 17:06	1
4-Bromofluorobenzene (Surr)	92		72 - 124					07/30/20 17:06	1
Dibromofluoromethane (Surr)	92		75 - 120					07/30/20 17:06	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-10

Lab Sample ID: 500-185479-9

Date Collected: 07/22/20 10:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 17:34	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:34	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:34	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 17:34	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 17:34	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 17:34	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:34	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:34	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:34	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 17:34	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:34	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 17:34	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 17:34	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 17:34	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 17:34	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 17:34	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 17:34	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 17:34	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 17:34	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 17:34	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 17:34	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:34	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:34	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 17:34	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 17:34	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 17:34	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 17:34	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 17:34	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 17:34	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 17:34	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 17:34	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 17:34	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 17:34	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 17:34	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 17:34	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 17:34	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 17:34	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 17:34	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:34	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 17:34	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 17:34	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 17:34	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 17:34	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 17:34	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 17:34	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 17:34	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 17:34	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 17:34	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 17:34	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-10

Lab Sample ID: 500-185479-9

Date Collected: 07/22/20 10:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 17:34	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 17:34	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 17:34	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 17:34	1
Trichloroethene	35		0.50	0.16	ug/L			07/30/20 17:34	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:34	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 17:34	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:34	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 17:34	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 17:34	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 17:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		07/30/20 17:34	1
Toluene-d8 (Surr)	93		75 - 120		07/30/20 17:34	1
4-Bromofluorobenzene (Surr)	92		72 - 124		07/30/20 17:34	1
Dibromofluoromethane (Surr)	92		75 - 120		07/30/20 17:34	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-11

Lab Sample ID: 500-185479-10

Date Collected: 07/22/20 09:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 18:02	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:02	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 18:02	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 18:02	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 18:02	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 18:02	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:02	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:02	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:02	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 18:02	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:02	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 18:02	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 18:02	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 18:02	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 18:02	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 18:02	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 18:02	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 18:02	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 18:02	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 18:02	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 18:02	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:02	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:02	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 18:02	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 18:02	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 18:02	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 18:02	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 18:02	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 18:02	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 18:02	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 18:02	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 18:02	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 18:02	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 18:02	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 18:02	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 18:02	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 18:02	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 18:02	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:02	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 18:02	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 18:02	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 18:02	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 18:02	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 18:02	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 18:02	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 18:02	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 18:02	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 18:02	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 18:02	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-11

Lab Sample ID: 500-185479-10

Date Collected: 07/22/20 09:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 18:02	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 18:02	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 18:02	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 18:02	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 18:02	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 18:02	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 18:02	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:02	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 18:02	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 18:02	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		07/30/20 18:02	1
Toluene-d8 (Surr)	92		75 - 120		07/30/20 18:02	1
4-Bromofluorobenzene (Surr)	93		72 - 124		07/30/20 18:02	1
Dibromofluoromethane (Surr)	93		75 - 120		07/30/20 18:02	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-13

Lab Sample ID: 500-185479-11

Date Collected: 07/23/20 10:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 18:30	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:30	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 18:30	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 18:30	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 18:30	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 18:30	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:30	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:30	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:30	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 18:30	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:30	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 18:30	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 18:30	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 18:30	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 18:30	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 18:30	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 18:30	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 18:30	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 18:30	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 18:30	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 18:30	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:30	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:30	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 18:30	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 18:30	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 18:30	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 18:30	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 18:30	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 18:30	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 18:30	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 18:30	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 18:30	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 18:30	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 18:30	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 18:30	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 18:30	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 18:30	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 18:30	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:30	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 18:30	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 18:30	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 18:30	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 18:30	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 18:30	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 18:30	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 18:30	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 18:30	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 18:30	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 18:30	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-13
Date Collected: 07/23/20 10:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-11
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 18:30	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 18:30	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 18:30	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 18:30	1
Trichloroethene	2.3		0.50	0.16	ug/L			07/30/20 18:30	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 18:30	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 18:30	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:30	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 18:30	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 18:30	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		07/30/20 18:30	1
Toluene-d8 (Surr)	93		75 - 120		07/30/20 18:30	1
4-Bromofluorobenzene (Surr)	92		72 - 124		07/30/20 18:30	1
Dibromofluoromethane (Surr)	92		75 - 120		07/30/20 18:30	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-14

Lab Sample ID: 500-185479-12

Date Collected: 07/23/20 10:15

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 18:57	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:57	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 18:57	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 18:57	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 18:57	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 18:57	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:57	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:57	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:57	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 18:57	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:57	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 18:57	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 18:57	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 18:57	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 18:57	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 18:57	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 18:57	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 18:57	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 18:57	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 18:57	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 18:57	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:57	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:57	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 18:57	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 18:57	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 18:57	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 18:57	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 18:57	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 18:57	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 18:57	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 18:57	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 18:57	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 18:57	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 18:57	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 18:57	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 18:57	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 18:57	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 18:57	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:57	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 18:57	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 18:57	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 18:57	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 18:57	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 18:57	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 18:57	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 18:57	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 18:57	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 18:57	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 18:57	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-14

Lab Sample ID: 500-185479-12

Date Collected: 07/23/20 10:15

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 18:57	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 18:57	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 18:57	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 18:57	1
Trichloroethene	3.8		0.50	0.16	ug/L			07/30/20 18:57	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 18:57	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 18:57	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:57	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 18:57	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 18:57	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 18:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		07/30/20 18:57	1
Toluene-d8 (Surr)	92		75 - 120		07/30/20 18:57	1
4-Bromofluorobenzene (Surr)	92		72 - 124		07/30/20 18:57	1
Dibromofluoromethane (Surr)	94		75 - 120		07/30/20 18:57	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-15

Lab Sample ID: 500-185479-13

Date Collected: 07/23/20 14:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 15:44	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:44	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 15:44	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 15:44	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 15:44	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 15:44	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:44	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:44	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:44	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 15:44	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:44	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 15:44	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 15:44	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 15:44	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 15:44	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 15:44	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 15:44	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 15:44	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 15:44	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 15:44	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 15:44	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:44	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:44	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 15:44	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 15:44	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 15:44	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 15:44	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 15:44	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 15:44	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 15:44	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 15:44	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 15:44	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 15:44	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 15:44	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 15:44	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 15:44	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 15:44	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 15:44	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:44	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 15:44	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 15:44	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 15:44	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 15:44	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 15:44	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 15:44	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 15:44	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 15:44	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 15:44	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 15:44	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-15

Lab Sample ID: 500-185479-13

Date Collected: 07/23/20 14:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 15:44	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 15:44	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 15:44	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 15:44	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 15:44	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 15:44	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 15:44	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:44	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 15:44	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 15:44	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 15:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126					07/30/20 15:44	1
Toluene-d8 (Surr)	94		75 - 120					07/30/20 15:44	1
4-Bromofluorobenzene (Surr)	107		72 - 124					07/30/20 15:44	1
Dibromofluoromethane (Surr)	92		75 - 120					07/30/20 15:44	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-16

Lab Sample ID: 500-185479-14

Date Collected: 07/22/20 14:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 16:09	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:09	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:09	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 16:09	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 16:09	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 16:09	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:09	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:09	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:09	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 16:09	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:09	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 16:09	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 16:09	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 16:09	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 16:09	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 16:09	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 16:09	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 16:09	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 16:09	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 16:09	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 16:09	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:09	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:09	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 16:09	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 16:09	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 16:09	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 16:09	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 16:09	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 16:09	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 16:09	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 16:09	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 16:09	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 16:09	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 16:09	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 16:09	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 16:09	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 16:09	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 16:09	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:09	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 16:09	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 16:09	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 16:09	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 16:09	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 16:09	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 16:09	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 16:09	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 16:09	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 16:09	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 16:09	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-16
Date Collected: 07/22/20 14:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-14
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 16:09	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 16:09	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 16:09	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 16:09	1
Trichloroethene	82		0.50	0.16	ug/L			07/30/20 16:09	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:09	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 16:09	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:09	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 16:09	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 16:09	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 16:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126					07/30/20 16:09	1
Toluene-d8 (Surr)	95		75 - 120					07/30/20 16:09	1
4-Bromofluorobenzene (Surr)	108		72 - 124					07/30/20 16:09	1
Dibromofluoromethane (Surr)	100		75 - 120					07/30/20 16:09	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-17

Lab Sample ID: 500-185479-15

Date Collected: 07/20/20 11:45

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 16:34	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:34	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:34	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 16:34	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 16:34	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 16:34	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:34	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:34	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:34	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 16:34	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:34	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 16:34	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 16:34	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 16:34	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 16:34	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 16:34	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 16:34	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 16:34	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 16:34	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 16:34	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 16:34	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:34	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:34	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 16:34	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 16:34	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 16:34	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 16:34	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 16:34	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 16:34	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 16:34	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 16:34	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 16:34	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 16:34	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 16:34	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 16:34	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 16:34	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 16:34	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 16:34	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:34	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 16:34	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 16:34	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 16:34	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 16:34	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 16:34	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 16:34	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 16:34	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 16:34	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 16:34	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 16:34	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-17

Lab Sample ID: 500-185479-15

Date Collected: 07/20/20 11:45

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 16:34	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 16:34	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 16:34	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 16:34	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 16:34	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:34	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 16:34	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:34	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 16:34	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 16:34	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 16:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		07/30/20 16:34	1
Toluene-d8 (Surr)	98		75 - 120		07/30/20 16:34	1
4-Bromofluorobenzene (Surr)	117		72 - 124		07/30/20 16:34	1
Dibromofluoromethane (Surr)	96		75 - 120		07/30/20 16:34	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-18

Lab Sample ID: 500-185479-16

Date Collected: 07/20/20 11:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 17:00	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:00	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:00	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 17:00	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 17:00	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 17:00	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:00	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:00	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:00	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 17:00	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:00	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 17:00	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 17:00	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 17:00	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 17:00	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 17:00	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 17:00	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 17:00	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 17:00	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 17:00	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 17:00	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:00	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:00	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 17:00	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 17:00	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 17:00	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 17:00	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 17:00	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 17:00	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 17:00	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 17:00	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 17:00	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 17:00	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 17:00	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 17:00	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 17:00	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 17:00	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 17:00	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:00	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 17:00	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 17:00	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 17:00	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 17:00	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 17:00	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 17:00	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 17:00	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 17:00	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 17:00	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 17:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-18

Lab Sample ID: 500-185479-16

Date Collected: 07/20/20 11:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 17:00	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 17:00	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 17:00	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 17:00	1
Trichloroethene	25		0.50	0.16	ug/L			07/30/20 17:00	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:00	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 17:00	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:00	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 17:00	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 17:00	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 17:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		75 - 126		07/30/20 17:00	1
Toluene-d8 (Surr)	96		75 - 120		07/30/20 17:00	1
4-Bromofluorobenzene (Surr)	106		72 - 124		07/30/20 17:00	1
Dibromofluoromethane (Surr)	96		75 - 120		07/30/20 17:00	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-19

Lab Sample ID: 500-185479-17

Date Collected: 07/20/20 11:15

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 17:25	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:25	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:25	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 17:25	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 17:25	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 17:25	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:25	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:25	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:25	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 17:25	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:25	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 17:25	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 17:25	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 17:25	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 17:25	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 17:25	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 17:25	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 17:25	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 17:25	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 17:25	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 17:25	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:25	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:25	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 17:25	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 17:25	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 17:25	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 17:25	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 17:25	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 17:25	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 17:25	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 17:25	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 17:25	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 17:25	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 17:25	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 17:25	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 17:25	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 17:25	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 17:25	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:25	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 17:25	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 17:25	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 17:25	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 17:25	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 17:25	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 17:25	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 17:25	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 17:25	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 17:25	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 17:25	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-19

Lab Sample ID: 500-185479-17

Date Collected: 07/20/20 11:15

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 17:25	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 17:25	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 17:25	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 17:25	1
Trichloroethene	10		0.50	0.16	ug/L			07/30/20 17:25	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:25	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 17:25	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:25	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 17:25	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 17:25	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 17:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 126		07/30/20 17:25	1
Toluene-d8 (Surr)	100		75 - 120		07/30/20 17:25	1
4-Bromofluorobenzene (Surr)	107		72 - 124		07/30/20 17:25	1
Dibromofluoromethane (Surr)	99		75 - 120		07/30/20 17:25	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-20

Lab Sample ID: 500-185479-18

Date Collected: 07/21/20 14:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 17:50	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:50	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:50	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 17:50	1
Bromoform	0.57	J	1.0	0.48	ug/L			07/30/20 17:50	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 17:50	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:50	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:50	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:50	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 17:50	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:50	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 17:50	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 17:50	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 17:50	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 17:50	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 17:50	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 17:50	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 17:50	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 17:50	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 17:50	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 17:50	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:50	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:50	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 17:50	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 17:50	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 17:50	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 17:50	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 17:50	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 17:50	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 17:50	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 17:50	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 17:50	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 17:50	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 17:50	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 17:50	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 17:50	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 17:50	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 17:50	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:50	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 17:50	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 17:50	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 17:50	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 17:50	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 17:50	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 17:50	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 17:50	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 17:50	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 17:50	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 17:50	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-20

Lab Sample ID: 500-185479-18

Date Collected: 07/21/20 14:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 17:50	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 17:50	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 17:50	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 17:50	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 17:50	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:50	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 17:50	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:50	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 17:50	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 17:50	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 17:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		07/30/20 17:50	1
Toluene-d8 (Surr)	87		75 - 120		07/30/20 17:50	1
4-Bromofluorobenzene (Surr)	107		72 - 124		07/30/20 17:50	1
Dibromofluoromethane (Surr)	103		75 - 120		07/30/20 17:50	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-21

Lab Sample ID: 500-185479-19

Date Collected: 07/23/20 12:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 19:06	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 19:06	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 19:06	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 19:06	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 19:06	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 19:06	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 19:06	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 19:06	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 19:06	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 19:06	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 19:06	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 19:06	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 19:06	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 19:06	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 19:06	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 19:06	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 19:06	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 19:06	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 19:06	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 19:06	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 19:06	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 19:06	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 19:06	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 19:06	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 19:06	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 19:06	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 19:06	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 19:06	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 19:06	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 19:06	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 19:06	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 19:06	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 19:06	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 19:06	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 19:06	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 19:06	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 19:06	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 19:06	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 19:06	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 19:06	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 19:06	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 19:06	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 19:06	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 19:06	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 19:06	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 19:06	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 19:06	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 19:06	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 19:06	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-21
Date Collected: 07/23/20 12:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-19
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 19:06	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 19:06	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 19:06	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 19:06	1
Trichloroethene	140		0.50	0.16	ug/L			07/30/20 19:06	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 19:06	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 19:06	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 19:06	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 19:06	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 19:06	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 19:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 126					07/30/20 19:06	1
Toluene-d8 (Surr)	100		75 - 120					07/30/20 19:06	1
4-Bromofluorobenzene (Surr)	109		72 - 124					07/30/20 19:06	1
Dibromofluoromethane (Surr)	97		75 - 120					07/30/20 19:06	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-22
Date Collected: 07/21/20 11:15
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-20
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 18:15	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:15	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 18:15	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 18:15	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 18:15	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 18:15	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:15	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:15	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:15	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 18:15	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:15	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 18:15	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 18:15	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 18:15	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 18:15	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 18:15	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 18:15	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 18:15	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 18:15	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 18:15	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 18:15	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:15	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:15	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 18:15	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 18:15	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 18:15	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 18:15	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 18:15	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 18:15	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 18:15	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 18:15	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 18:15	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 18:15	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 18:15	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 18:15	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 18:15	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 18:15	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 18:15	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:15	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 18:15	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 18:15	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 18:15	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 18:15	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 18:15	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 18:15	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 18:15	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 18:15	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 18:15	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 18:15	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-22

Lab Sample ID: 500-185479-20

Date Collected: 07/21/20 11:15

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 18:15	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 18:15	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 18:15	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 18:15	1
Trichloroethene	0.31	J	0.50	0.16	ug/L			07/30/20 18:15	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 18:15	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 18:15	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:15	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 18:15	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 18:15	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 18:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		07/30/20 18:15	1
Toluene-d8 (Surr)	100		75 - 120		07/30/20 18:15	1
4-Bromofluorobenzene (Surr)	110		72 - 124		07/30/20 18:15	1
Dibromofluoromethane (Surr)	104		75 - 120		07/30/20 18:15	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-23

Lab Sample ID: 500-185479-21

Date Collected: 07/20/20 14:45

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 18:41	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:41	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 18:41	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 18:41	1
Bromoform	2.4		1.0	0.48	ug/L			07/30/20 18:41	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 18:41	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:41	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:41	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:41	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 18:41	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:41	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 18:41	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 18:41	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 18:41	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 18:41	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 18:41	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 18:41	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 18:41	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 18:41	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 18:41	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 18:41	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 18:41	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:41	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 18:41	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 18:41	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 18:41	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 18:41	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 18:41	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 18:41	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 18:41	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 18:41	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 18:41	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 18:41	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 18:41	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 18:41	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 18:41	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 18:41	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 18:41	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 18:41	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 18:41	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 18:41	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 18:41	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 18:41	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 18:41	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 18:41	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 18:41	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 18:41	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 18:41	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 18:41	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-23

Lab Sample ID: 500-185479-21

Date Collected: 07/20/20 14:45

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 18:41	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 18:41	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 18:41	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 18:41	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 18:41	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 18:41	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 18:41	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 18:41	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 18:41	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 18:41	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		75 - 126		07/30/20 18:41	1
Toluene-d8 (Surr)	42	X	75 - 120		07/30/20 18:41	1
4-Bromofluorobenzene (Surr)	108		72 - 124		07/30/20 18:41	1
Dibromofluoromethane (Surr)	96		75 - 120		07/30/20 18:41	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-24
Date Collected: 07/20/20 10:15
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-22
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 12:50	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 12:50	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 12:50	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 12:50	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 12:50	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 12:50	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 12:50	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 12:50	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 12:50	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 12:50	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 12:50	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 12:50	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 12:50	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 12:50	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 12:50	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 12:50	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 12:50	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 12:50	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 12:50	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 12:50	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 12:50	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 12:50	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 12:50	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 12:50	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 12:50	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 12:50	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 12:50	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 12:50	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 12:50	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 12:50	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 12:50	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 12:50	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 12:50	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 12:50	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 12:50	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 12:50	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 12:50	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 12:50	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 12:50	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 12:50	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 12:50	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 12:50	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 12:50	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 12:50	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 12:50	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 12:50	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 12:50	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 12:50	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 12:50	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-24
Date Collected: 07/20/20 10:15
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-22
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 12:50	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 12:50	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 12:50	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 12:50	1
Trichloroethene	72		0.50	0.16	ug/L			07/30/20 12:50	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 12:50	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 12:50	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 12:50	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 12:50	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 12:50	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 12:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126					07/30/20 12:50	1
Toluene-d8 (Surr)	100		75 - 120					07/30/20 12:50	1
4-Bromofluorobenzene (Surr)	95		72 - 124					07/30/20 12:50	1
Dibromofluoromethane (Surr)	97		75 - 120					07/30/20 12:50	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-25D

Lab Sample ID: 500-185479-23

Date Collected: 07/20/20 14:15

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 13:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 13:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 13:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 13:16	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 13:16	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 13:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 13:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 13:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 13:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 13:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 13:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 13:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 13:16	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 13:16	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 13:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 13:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 13:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 13:16	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 13:16	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 13:16	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 13:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 13:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 13:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 13:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 13:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 13:16	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 13:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 13:16	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 13:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 13:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 13:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 13:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 13:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 13:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 13:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 13:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 13:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 13:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 13:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 13:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 13:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 13:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 13:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 13:16	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 13:16	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 13:16	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 13:16	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 13:16	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 13:16	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-25D

Lab Sample ID: 500-185479-23

Date Collected: 07/20/20 14:15

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 13:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 13:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 13:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 13:16	1
Trichloroethene	150		0.50	0.16	ug/L			07/30/20 13:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 13:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 13:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 13:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 13:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 13:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 13:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126		07/30/20 13:16	1
Toluene-d8 (Surr)	99		75 - 120		07/30/20 13:16	1
4-Bromofluorobenzene (Surr)	94		72 - 124		07/30/20 13:16	1
Dibromofluoromethane (Surr)	97		75 - 120		07/30/20 13:16	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-25S

Lab Sample ID: 500-185479-24

Date Collected: 07/20/20 14:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 14:07	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:07	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 14:07	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 14:07	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 14:07	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 14:07	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:07	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:07	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:07	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 14:07	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:07	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 14:07	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 14:07	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 14:07	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 14:07	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 14:07	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 14:07	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 14:07	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 14:07	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 14:07	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 14:07	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:07	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:07	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 14:07	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 14:07	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 14:07	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 14:07	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 14:07	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 14:07	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 14:07	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 14:07	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 14:07	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 14:07	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 14:07	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 14:07	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 14:07	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 14:07	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 14:07	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:07	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 14:07	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 14:07	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 14:07	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 14:07	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 14:07	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 14:07	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 14:07	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 14:07	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 14:07	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 14:07	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-25S

Lab Sample ID: 500-185479-24

Date Collected: 07/20/20 14:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 14:07	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 14:07	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 14:07	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 14:07	1
Trichloroethene	64		0.50	0.16	ug/L			07/30/20 14:07	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 14:07	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 14:07	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:07	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 14:07	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 14:07	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 14:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		07/30/20 14:07	1
Toluene-d8 (Surr)	100		75 - 120		07/30/20 14:07	1
4-Bromofluorobenzene (Surr)	96		72 - 124		07/30/20 14:07	1
Dibromofluoromethane (Surr)	98		75 - 120		07/30/20 14:07	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-26

Lab Sample ID: 500-185479-25

Date Collected: 07/23/20 12:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 14:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 14:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 14:33	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 14:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 14:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 14:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 14:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 14:33	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 14:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 14:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 14:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 14:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 14:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 14:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 14:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 14:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 14:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 14:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 14:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 14:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 14:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 14:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 14:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 14:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 14:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 14:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 14:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 14:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 14:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 14:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 14:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 14:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 14:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 14:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 14:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 14:33	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 14:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 14:33	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 14:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 14:33	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 14:33	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-26

Lab Sample ID: 500-185479-25

Date Collected: 07/23/20 12:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 14:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 14:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 14:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 14:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 14:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 14:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 14:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 14:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 14:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		07/30/20 14:33	1
Toluene-d8 (Surr)	101		75 - 120		07/30/20 14:33	1
4-Bromofluorobenzene (Surr)	95		72 - 124		07/30/20 14:33	1
Dibromofluoromethane (Surr)	99		75 - 120		07/30/20 14:33	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-27

Lab Sample ID: 500-185479-26

Date Collected: 07/23/20 11:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 14:59	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:59	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 14:59	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 14:59	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 14:59	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 14:59	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:59	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:59	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:59	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 14:59	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:59	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 14:59	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 14:59	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 14:59	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 14:59	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 14:59	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 14:59	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 14:59	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 14:59	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 14:59	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 14:59	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 14:59	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:59	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 14:59	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 14:59	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 14:59	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 14:59	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 14:59	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 14:59	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 14:59	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 14:59	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 14:59	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 14:59	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 14:59	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 14:59	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 14:59	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 14:59	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 14:59	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 14:59	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 14:59	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 14:59	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 14:59	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 14:59	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 14:59	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 14:59	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 14:59	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 14:59	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 14:59	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 14:59	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-27

Lab Sample ID: 500-185479-26

Date Collected: 07/23/20 11:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 14:59	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 14:59	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 14:59	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 14:59	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 14:59	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 14:59	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 14:59	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 14:59	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 14:59	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 14:59	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 14:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		07/30/20 14:59	1
Toluene-d8 (Surr)	101		75 - 120		07/30/20 14:59	1
4-Bromofluorobenzene (Surr)	96		72 - 124		07/30/20 14:59	1
Dibromofluoromethane (Surr)	96		75 - 120		07/30/20 14:59	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-29

Lab Sample ID: 500-185479-27

Date Collected: 07/22/20 12:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 15:25	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:25	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 15:25	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 15:25	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 15:25	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 15:25	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:25	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:25	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:25	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 15:25	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:25	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 15:25	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 15:25	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 15:25	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 15:25	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 15:25	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 15:25	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 15:25	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 15:25	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 15:25	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 15:25	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:25	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:25	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 15:25	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 15:25	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 15:25	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 15:25	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 15:25	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 15:25	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 15:25	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 15:25	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 15:25	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 15:25	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 15:25	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 15:25	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 15:25	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 15:25	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 15:25	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:25	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 15:25	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 15:25	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 15:25	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 15:25	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 15:25	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 15:25	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 15:25	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 15:25	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 15:25	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 15:25	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-29

Lab Sample ID: 500-185479-27

Date Collected: 07/22/20 12:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 15:25	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 15:25	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 15:25	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 15:25	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 15:25	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 15:25	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 15:25	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:25	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 15:25	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 15:25	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 15:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/30/20 15:25	1
Toluene-d8 (Surr)	100		75 - 120		07/30/20 15:25	1
4-Bromofluorobenzene (Surr)	95		72 - 124		07/30/20 15:25	1
Dibromofluoromethane (Surr)	97		75 - 120		07/30/20 15:25	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-30

Lab Sample ID: 500-185479-28

Date Collected: 07/22/20 12:15

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 15:51	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:51	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 15:51	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 15:51	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 15:51	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 15:51	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:51	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:51	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:51	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 15:51	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:51	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 15:51	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 15:51	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 15:51	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 15:51	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 15:51	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 15:51	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 15:51	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 15:51	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 15:51	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 15:51	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 15:51	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:51	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 15:51	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 15:51	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 15:51	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 15:51	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 15:51	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 15:51	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 15:51	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 15:51	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 15:51	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 15:51	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 15:51	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 15:51	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 15:51	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 15:51	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 15:51	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 15:51	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 15:51	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 15:51	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 15:51	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 15:51	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 15:51	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 15:51	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 15:51	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 15:51	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 15:51	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 15:51	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: P-30

Lab Sample ID: 500-185479-28

Date Collected: 07/22/20 12:15

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 15:51	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 15:51	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 15:51	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 15:51	1
Trichloroethene	8.1		0.50	0.16	ug/L			07/30/20 15:51	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 15:51	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 15:51	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 15:51	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 15:51	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 15:51	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 15:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126		07/30/20 15:51	1
Toluene-d8 (Surr)	99		75 - 120		07/30/20 15:51	1
4-Bromofluorobenzene (Surr)	95		72 - 124		07/30/20 15:51	1
Dibromofluoromethane (Surr)	97		75 - 120		07/30/20 15:51	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-31

Lab Sample ID: 500-185479-29

Date Collected: 07/22/20 11:30

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 16:17	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:17	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:17	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 16:17	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 16:17	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 16:17	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:17	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:17	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:17	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 16:17	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:17	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 16:17	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 16:17	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 16:17	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 16:17	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 16:17	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 16:17	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 16:17	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 16:17	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 16:17	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 16:17	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:17	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:17	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 16:17	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 16:17	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 16:17	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 16:17	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 16:17	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 16:17	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 16:17	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 16:17	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 16:17	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 16:17	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 16:17	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 16:17	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 16:17	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 16:17	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 16:17	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:17	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 16:17	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 16:17	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 16:17	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 16:17	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 16:17	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 16:17	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 16:17	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 16:17	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 16:17	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 16:17	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-31
Date Collected: 07/22/20 11:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-29
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 16:17	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 16:17	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 16:17	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 16:17	1
Trichloroethene	3.7		0.50	0.16	ug/L			07/30/20 16:17	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:17	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 16:17	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:17	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 16:17	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 16:17	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 16:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/30/20 16:17	1
Toluene-d8 (Surr)	100		75 - 120		07/30/20 16:17	1
4-Bromofluorobenzene (Surr)	96		72 - 124		07/30/20 16:17	1
Dibromofluoromethane (Surr)	100		75 - 120		07/30/20 16:17	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-185479-30

Date Collected: 07/20/20 00:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 11:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 11:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 11:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 11:33	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 11:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 11:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 11:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 11:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 11:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 11:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 11:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 11:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 11:33	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 11:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 11:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 11:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 11:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 11:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 11:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 11:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 11:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 11:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 11:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 11:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 11:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 11:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 11:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 11:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 11:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 11:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 11:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 11:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 11:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 11:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 11:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 11:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 11:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 11:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 11:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 11:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 11:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 11:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 11:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 11:33	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 11:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 11:33	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 11:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 11:33	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 11:33	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-185479-30

Date Collected: 07/20/20 00:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 11:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 11:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 11:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 11:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 11:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 11:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 11:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 11:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 11:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 11:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 11:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		07/30/20 11:33	1
Toluene-d8 (Surr)	100		75 - 120		07/30/20 11:33	1
4-Bromofluorobenzene (Surr)	93		72 - 124		07/30/20 11:33	1
Dibromofluoromethane (Surr)	95		75 - 120		07/30/20 11:33	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: Albright

Lab Sample ID: 500-185479-31

Date Collected: 07/22/20 12:45

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 16:43	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:43	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:43	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 16:43	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 16:43	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 16:43	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:43	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:43	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:43	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 16:43	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:43	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 16:43	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 16:43	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 16:43	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 16:43	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 16:43	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 16:43	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 16:43	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 16:43	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 16:43	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 16:43	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 16:43	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:43	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 16:43	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 16:43	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 16:43	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 16:43	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 16:43	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 16:43	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 16:43	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 16:43	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 16:43	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 16:43	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 16:43	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 16:43	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 16:43	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 16:43	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 16:43	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 16:43	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 16:43	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 16:43	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 16:43	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 16:43	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 16:43	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 16:43	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 16:43	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 16:43	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 16:43	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 16:43	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: Albright

Lab Sample ID: 500-185479-31

Date Collected: 07/22/20 12:45

Matrix: Ground Water

Date Received: 07/25/20 11:40

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 16:43	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 16:43	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 16:43	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 16:43	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 16:43	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 16:43	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 16:43	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 16:43	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 16:43	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 16:43	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		07/30/20 16:43	1
Toluene-d8 (Surr)	100		75 - 120		07/30/20 16:43	1
4-Bromofluorobenzene (Surr)	95		72 - 124		07/30/20 16:43	1
Dibromofluoromethane (Surr)	98		75 - 120		07/30/20 16:43	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: Ogbum

Lab Sample ID: 500-185479-32

Date Collected: 07/20/20 10:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 17:09	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:09	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:09	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 17:09	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 17:09	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 17:09	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:09	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:09	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:09	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 17:09	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:09	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 17:09	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 17:09	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 17:09	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 17:09	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 17:09	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 17:09	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 17:09	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 17:09	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 17:09	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 17:09	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:09	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:09	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 17:09	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 17:09	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 17:09	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 17:09	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 17:09	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 17:09	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 17:09	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 17:09	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 17:09	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 17:09	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 17:09	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 17:09	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 17:09	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 17:09	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 17:09	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:09	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 17:09	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 17:09	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 17:09	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 17:09	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 17:09	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 17:09	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 17:09	1
1,1,1,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 17:09	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 17:09	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 17:09	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: Ogbum
Date Collected: 07/20/20 10:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-32
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 17:09	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 17:09	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 17:09	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 17:09	1
Trichloroethene	0.62		0.50	0.16	ug/L			07/30/20 17:09	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:09	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 17:09	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:09	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 17:09	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 17:09	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126					07/30/20 17:09	1
Toluene-d8 (Surr)	100		75 - 120					07/30/20 17:09	1
4-Bromofluorobenzene (Surr)	95		72 - 124					07/30/20 17:09	1
Dibromofluoromethane (Surr)	99		75 - 120					07/30/20 17:09	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: Burton

Lab Sample ID: 500-185479-33

Date Collected: 07/23/20 14:00

Matrix: Ground Water

Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 17:35	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:35	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:35	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 17:35	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 17:35	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 17:35	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:35	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:35	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:35	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 17:35	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:35	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 17:35	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 17:35	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 17:35	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 17:35	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 17:35	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 17:35	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 17:35	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 17:35	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 17:35	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 17:35	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 17:35	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:35	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 17:35	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 17:35	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 17:35	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 17:35	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 17:35	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 17:35	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 17:35	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 17:35	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 17:35	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 17:35	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 17:35	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 17:35	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 17:35	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 17:35	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 17:35	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 17:35	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 17:35	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 17:35	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 17:35	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 17:35	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 17:35	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 17:35	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 17:35	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 17:35	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 17:35	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 17:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: Burton
Date Collected: 07/23/20 14:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-33
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 17:35	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 17:35	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 17:35	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 17:35	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 17:35	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 17:35	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 17:35	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 17:35	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 17:35	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 17:35	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126					07/30/20 17:35	1
Toluene-d8 (Surr)	100		75 - 120					07/30/20 17:35	1
4-Bromofluorobenzene (Surr)	95		72 - 124					07/30/20 17:35	1
Dibromofluoromethane (Surr)	98		75 - 120					07/30/20 17:35	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.
X	Surrogate recovery exceeds control limits

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

GC/MS VOA

Analysis Batch: 554494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-185479-1	MW-2	Total/NA	Ground Water	8260B	
500-185479-2	MW-3	Total/NA	Ground Water	8260B	
500-185479-3	P-4	Total/NA	Ground Water	8260B	
500-185479-5	P-6	Total/NA	Ground Water	8260B	
500-185479-6	MW-7	Total/NA	Ground Water	8260B	
500-185479-7	MW-8	Total/NA	Ground Water	8260B	
500-185479-8	MW-9	Total/NA	Ground Water	8260B	
500-185479-9	P-10	Total/NA	Ground Water	8260B	
500-185479-10	MW-11	Total/NA	Ground Water	8260B	
500-185479-11	MW-13	Total/NA	Ground Water	8260B	
500-185479-12	P-14	Total/NA	Ground Water	8260B	
MB 500-554494/6	Method Blank	Total/NA	Water	8260B	
LCS 500-554494/4	Lab Control Sample	Total/NA	Water	8260B	
500-185479-12 MS	P-14	Total/NA	Ground Water	8260B	
500-185479-12 MSD	P-14	Total/NA	Ground Water	8260B	

Analysis Batch: 554501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-185479-13	P-15	Total/NA	Ground Water	8260B	
500-185479-14	MW-16	Total/NA	Ground Water	8260B	
500-185479-15	MW-17	Total/NA	Ground Water	8260B	
500-185479-16	P-18	Total/NA	Ground Water	8260B	
500-185479-17	P-19	Total/NA	Ground Water	8260B	
500-185479-18	P-20	Total/NA	Ground Water	8260B	
500-185479-19	MW-21	Total/NA	Ground Water	8260B	
500-185479-20	MW-22	Total/NA	Ground Water	8260B	
500-185479-21	P-23	Total/NA	Ground Water	8260B	
MB 500-554501/7	Method Blank	Total/NA	Water	8260B	
LCS 500-554501/5	Lab Control Sample	Total/NA	Water	8260B	
500-185479-13 MS	P-15	Total/NA	Ground Water	8260B	
500-185479-13 MSD	P-15	Total/NA	Ground Water	8260B	

Analysis Batch: 554509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-185479-22	MW-24	Total/NA	Ground Water	8260B	
500-185479-23	P-25D	Total/NA	Ground Water	8260B	
500-185479-24	P-25S	Total/NA	Ground Water	8260B	
500-185479-25	MW-26	Total/NA	Ground Water	8260B	
500-185479-26	P-27	Total/NA	Ground Water	8260B	
500-185479-27	MW-29	Total/NA	Ground Water	8260B	
500-185479-28	P-30	Total/NA	Ground Water	8260B	
500-185479-29	MW-31	Total/NA	Ground Water	8260B	
500-185479-30	Trip Blank	Total/NA	Ground Water	8260B	
500-185479-31	Albright	Total/NA	Ground Water	8260B	
500-185479-32	Ogbum	Total/NA	Ground Water	8260B	
500-185479-33	Burton	Total/NA	Ground Water	8260B	
MB 500-554509/7	Method Blank	Total/NA	Water	8260B	
LCS 500-554509/5	Lab Control Sample	Total/NA	Water	8260B	
500-185479-22 MS	MW-24	Total/NA	Ground Water	8260B	
500-185479-22 MSD	MW-24	Total/NA	Ground Water	8260B	

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

GC/MS VOA

Analysis Batch: 554716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-185479-4	MW-5	Total/NA	Ground Water	8260B	
MB 500-554716/6	Method Blank	Total/NA	Water	8260B	
LCS 500-554716/4	Lab Control Sample	Total/NA	Water	8260B	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Ground Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-126)	TOL (75-120)	BFB (72-124)	DBFM (75-120)
500-185479-1	MW-2	109	92	91	93
500-185479-2	MW-3	109	92	91	91
500-185479-3	P-4	113	93	92	92
500-185479-4	MW-5	111	93	92	92
500-185479-5	P-6	113	39 X	92	93
500-185479-6	MW-7	112	93	91	93
500-185479-7	MW-8	110	94	93	92
500-185479-8	MW-9	111	92	92	92
500-185479-9	P-10	110	93	92	92
500-185479-10	MW-11	111	92	93	93
500-185479-11	MW-13	110	93	92	92
500-185479-12	P-14	111	92	92	94
500-185479-12 MS	P-14	111	93	88	96
500-185479-12 MSD	P-14	112	93	89	97
500-185479-13	P-15	97	94	107	92
500-185479-13 MS	P-15	104	101	93	105
500-185479-13 MSD	P-15	102	99	97	96
500-185479-14	MW-16	94	95	108	100
500-185479-15	MW-17	100	98	117	96
500-185479-16	P-18	99	96	106	96
500-185479-17	P-19	98	100	107	99
500-185479-18	P-20	107	87	107	103
500-185479-19	MW-21	102	100	109	97
500-185479-20	MW-22	94	100	110	104
500-185479-21	P-23	99	42 X	108	96
500-185479-22	MW-24	105	100	95	97
500-185479-22 MS	MW-24	108	98	95	103
500-185479-22 MSD	MW-24	106	100	94	102
500-185479-23	P-25D	105	99	94	97
500-185479-24	P-25S	107	100	96	98
500-185479-25	MW-26	108	101	95	99
500-185479-26	P-27	108	101	96	96
500-185479-27	MW-29	106	100	95	97
500-185479-28	P-30	105	99	95	97
500-185479-29	MW-31	106	100	96	100
500-185479-30	Trip Blank	103	100	93	95
500-185479-31	Albright	107	100	95	98
500-185479-32	Ogbum	105	100	95	99
500-185479-33	Burton	106	100	95	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (75-126)	TOL (75-120)	BFB (72-124)	DBFM (75-120)
LCS 500-554494/4	Lab Control Sample	109	94	88	95
LCS 500-554501/5	Lab Control Sample	84	105	95	96
LCS 500-554509/5	Lab Control Sample	105	99	93	98
LCS 500-554716/4	Lab Control Sample	109	94	88	95
MB 500-554494/6	Method Blank	113	93	91	94
MB 500-554501/7	Method Blank	90	101	107	96
MB 500-554509/7	Method Blank	107	98	95	100
MB 500-554716/6	Method Blank	113	93	93	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-554494/6
Matrix: Water
Analysis Batch: 554494

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 11:04	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 11:04	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 11:04	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 11:04	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 11:04	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 11:04	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 11:04	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 11:04	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 11:04	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 11:04	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 11:04	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 11:04	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 11:04	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 11:04	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 11:04	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 11:04	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 11:04	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 11:04	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 11:04	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 11:04	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 11:04	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 11:04	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 11:04	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 11:04	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 11:04	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 11:04	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 11:04	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 11:04	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 11:04	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 11:04	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 11:04	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 11:04	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 11:04	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 11:04	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 11:04	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 11:04	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 11:04	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 11:04	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 11:04	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 11:04	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 11:04	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 11:04	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 11:04	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 11:04	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 11:04	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 11:04	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 11:04	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 11:04	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: MB 500-554494/6
Matrix: Water
Analysis Batch: 554494

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 11:04	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 11:04	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 11:04	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 11:04	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 11:04	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 11:04	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 11:04	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 11:04	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 11:04	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 11:04	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 11:04	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 11:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		07/30/20 11:04	1
Toluene-d8 (Surr)	93		75 - 120		07/30/20 11:04	1
4-Bromofluorobenzene (Surr)	91		72 - 124		07/30/20 11:04	1
Dibromofluoromethane (Surr)	94		75 - 120		07/30/20 11:04	1

Lab Sample ID: LCS 500-554494/4
Matrix: Water
Analysis Batch: 554494

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	51.6		ug/L		103	70 - 120
Bromobenzene	50.0	44.6		ug/L		89	70 - 122
Bromochloromethane	50.0	48.7		ug/L		97	65 - 122
Bromodichloromethane	50.0	47.3		ug/L		95	69 - 120
Bromoform	50.0	37.8		ug/L		76	56 - 132
Bromomethane	50.0	54.1		ug/L		108	40 - 152
n-Butylbenzene	50.0	54.5		ug/L		109	68 - 125
sec-Butylbenzene	50.0	53.0		ug/L		106	70 - 123
tert-Butylbenzene	50.0	51.4		ug/L		103	70 - 121
Carbon tetrachloride	50.0	52.4		ug/L		105	59 - 133
Chlorobenzene	50.0	49.6		ug/L		99	70 - 120
Dibromochloromethane	50.0	40.6		ug/L		81	68 - 125
Chloroethane	50.0	58.9		ug/L		118	48 - 136
Chloroform	50.0	50.0		ug/L		100	70 - 120
Chloromethane	50.0	49.5		ug/L		99	56 - 152
2-Chlorotoluene	50.0	47.6		ug/L		95	70 - 125
4-Chlorotoluene	50.0	48.3		ug/L		97	68 - 124
1,2-Dibromo-3-Chloropropane	50.0	29.4		ug/L		59	56 - 123
1,2-Dibromoethane	50.0	44.3		ug/L		89	70 - 125
Dibromomethane	50.0	48.4		ug/L		97	70 - 120
1,2-Dichlorobenzene	50.0	46.7		ug/L		93	70 - 125
1,3-Dichlorobenzene	50.0	48.6		ug/L		97	70 - 125
1,4-Dichlorobenzene	50.0	47.8		ug/L		96	70 - 120
Dichlorodifluoromethane	50.0	49.4		ug/L		99	40 - 159

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: LCS 500-554494/4
Matrix: Water
Analysis Batch: 554494

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	50.0	53.9		ug/L		108	70 - 125
1,2-Dichloroethane	50.0	59.9		ug/L		120	68 - 127
1,1-Dichloroethene	50.0	47.1		ug/L		94	67 - 122
cis-1,2-Dichloroethene	50.0	48.8		ug/L		98	70 - 125
trans-1,2-Dichloroethene	50.0	50.4		ug/L		101	70 - 125
1,2-Dichloropropane	50.0	54.4		ug/L		109	67 - 130
1,3-Dichloropropane	50.0	44.8		ug/L		90	62 - 136
2,2-Dichloropropane	50.0	57.1		ug/L		114	58 - 139
1,1-Dichloropropene	50.0	52.5		ug/L		105	70 - 121
cis-1,3-Dichloropropene	50.0	43.6		ug/L		87	64 - 127
trans-1,3-Dichloropropene	50.0	41.9		ug/L		84	62 - 128
Ethylbenzene	50.0	53.6		ug/L		107	70 - 123
Hexachlorobutadiene	50.0	57.0		ug/L		114	51 - 150
Isopropylbenzene	50.0	49.5		ug/L		99	70 - 126
p-Isopropyltoluene	50.0	54.3		ug/L		109	70 - 125
Methylene Chloride	50.0	45.0		ug/L		90	69 - 125
Methyl tert-butyl ether	50.0	52.0		ug/L		104	55 - 123
Naphthalene	50.0	40.1		ug/L		80	53 - 144
N-Propylbenzene	50.0	50.0		ug/L		100	69 - 127
Styrene	50.0	49.4		ug/L		99	70 - 120
1,1,1,2-Tetrachloroethane	50.0	46.1		ug/L		92	70 - 125
1,1,2,2-Tetrachloroethane	50.0	37.0		ug/L		74	62 - 140
Tetrachloroethene	50.0	54.1		ug/L		108	70 - 128
Toluene	50.0	49.6		ug/L		99	70 - 125
1,2,3-Trichlorobenzene	50.0	44.6		ug/L		89	51 - 145
1,2,4-Trichlorobenzene	50.0	45.5		ug/L		91	57 - 137
1,1,1-Trichloroethane	50.0	52.2		ug/L		104	70 - 125
1,1,2-Trichloroethane	50.0	44.4		ug/L		89	71 - 130
Trichloroethene	50.0	52.1		ug/L		104	70 - 125
Trichlorofluoromethane	50.0	49.2		ug/L		98	55 - 128
1,2,3-Trichloropropane	50.0	40.4		ug/L		81	50 - 133
1,2,4-Trimethylbenzene	50.0	49.9		ug/L		100	70 - 123
1,3,5-Trimethylbenzene	50.0	50.6		ug/L		101	70 - 123
Vinyl chloride	50.0	51.3		ug/L		103	64 - 126
Xylenes, Total	100	107		ug/L		107	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		75 - 126
Toluene-d8 (Surr)	94		75 - 120
4-Bromofluorobenzene (Surr)	88		72 - 124
Dibromofluoromethane (Surr)	95		75 - 120

Lab Sample ID: 500-185479-12 MS
Matrix: Ground Water
Analysis Batch: 554494

Client Sample ID: P-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.15		50.0	52.0		ug/L		104	70 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: 500-185479-12 MS

Matrix: Ground Water

Analysis Batch: 554494

Client Sample ID: P-14

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Bromobenzene	<0.36		50.0	45.5		ug/L		91	70 - 122
Bromochloromethane	<0.43		50.0	49.8		ug/L		100	65 - 122
Bromodichloromethane	<0.37		50.0	47.7		ug/L		95	69 - 120
Bromoform	<0.48		50.0	37.1		ug/L		74	56 - 132
Bromomethane	<0.80		50.0	53.4		ug/L		107	40 - 152
n-Butylbenzene	<0.39		50.0	54.5		ug/L		109	68 - 125
sec-Butylbenzene	<0.40		50.0	53.8		ug/L		108	70 - 123
tert-Butylbenzene	<0.40		50.0	51.8		ug/L		104	70 - 121
Carbon tetrachloride	<0.38		50.0	52.4		ug/L		105	59 - 133
Chlorobenzene	<0.39		50.0	50.4		ug/L		101	70 - 120
Dibromochloromethane	<0.49		50.0	40.4		ug/L		81	68 - 125
Chloroethane	<0.51		50.0	57.8		ug/L		116	48 - 136
Chloroform	<0.37		50.0	51.2		ug/L		102	70 - 120
Chloromethane	<0.32		50.0	47.1		ug/L		94	56 - 152
2-Chlorotoluene	<0.31		50.0	48.1		ug/L		96	70 - 125
4-Chlorotoluene	<0.35		50.0	49.6		ug/L		99	68 - 124
1,2-Dibromo-3-Chloropropane	<2.0		50.0	30.2		ug/L		60	56 - 123
1,2-Dibromoethane	<0.39		50.0	43.5		ug/L		87	70 - 125
Dibromomethane	<0.27		50.0	50.3		ug/L		101	70 - 120
1,2-Dichlorobenzene	<0.33		50.0	47.9		ug/L		96	70 - 125
1,3-Dichlorobenzene	<0.40		50.0	48.7		ug/L		97	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	48.1		ug/L		96	70 - 120
Dichlorodifluoromethane	<0.67		50.0	45.4		ug/L		91	40 - 159
1,1-Dichloroethane	<0.41		50.0	54.6		ug/L		109	70 - 125
1,2-Dichloroethane	<0.39		50.0	61.7		ug/L		123	68 - 127
1,1-Dichloroethene	<0.39		50.0	47.9		ug/L		96	67 - 122
cis-1,2-Dichloroethene	<0.41		50.0	49.6		ug/L		99	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	50.6		ug/L		101	70 - 125
1,2-Dichloropropane	<0.43		50.0	56.1		ug/L		112	67 - 130
1,3-Dichloropropane	<0.36		50.0	45.5		ug/L		91	62 - 136
2,2-Dichloropropane	<0.44		50.0	53.9		ug/L		108	58 - 139
1,1-Dichloropropene	<0.30		50.0	52.1		ug/L		104	70 - 121
cis-1,3-Dichloropropene	<0.42		50.0	41.8		ug/L		84	64 - 127
trans-1,3-Dichloropropene	<0.36		50.0	40.9		ug/L		82	62 - 128
Ethylbenzene	<0.18		50.0	53.4		ug/L		107	70 - 123
Hexachlorobutadiene	<0.45		50.0	59.5		ug/L		119	51 - 150
Isopropylbenzene	<0.39		50.0	49.6		ug/L		99	70 - 126
p-Isopropyltoluene	<0.36		50.0	54.9		ug/L		110	70 - 125
Methylene Chloride	<1.6		50.0	46.0		ug/L		92	69 - 125
Methyl tert-butyl ether	<0.39		50.0	52.5		ug/L		105	55 - 123
Naphthalene	<0.34		50.0	39.6		ug/L		79	53 - 144
N-Propylbenzene	<0.41		50.0	50.8		ug/L		102	69 - 127
Styrene	<0.39		50.0	50.0		ug/L		100	70 - 120
1,1,1,2-Tetrachloroethane	<0.46		50.0	46.4		ug/L		93	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	37.9		ug/L		76	62 - 140
Tetrachloroethene	<0.37		50.0	52.5		ug/L		105	70 - 128
Toluene	<0.15		50.0	50.0		ug/L		100	70 - 125
1,2,3-Trichlorobenzene	<0.46		50.0	44.4		ug/L		89	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	44.2		ug/L		88	57 - 137

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: 500-185479-12 MS

Matrix: Ground Water

Analysis Batch: 554494

Client Sample ID: P-14

Prep Type: Total/NA

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result			Result	Qualifier				
1,1,1-Trichloroethane	<0.38		50.0	51.8		ug/L		104	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	44.6		ug/L		89	71 - 130
Trichloroethene	3.8		50.0	55.8		ug/L		104	70 - 125
Trichlorofluoromethane	<0.43		50.0	47.4		ug/L		95	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	40.6		ug/L		81	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	50.8		ug/L		102	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	51.3		ug/L		103	70 - 123
Vinyl chloride	<0.20		50.0	49.0		ug/L		98	64 - 126
Xylenes, Total	<0.22		100	108		ug/L		108	70 - 125
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	111		75 - 126						
Toluene-d8 (Surr)	93		75 - 120						
4-Bromofluorobenzene (Surr)	88		72 - 124						
Dibromofluoromethane (Surr)	96		75 - 120						

Lab Sample ID: 500-185479-12 MSD

Matrix: Ground Water

Analysis Batch: 554494

Client Sample ID: P-14

Prep Type: Total/NA

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result			Result	Qualifier						
Benzene	<0.15		50.0	53.5		ug/L		107	70 - 120	3	20
Bromobenzene	<0.36		50.0	47.8		ug/L		96	70 - 122	5	20
Bromochloromethane	<0.43		50.0	52.0		ug/L		104	65 - 122	4	20
Bromodichloromethane	<0.37		50.0	49.1		ug/L		98	69 - 120	3	20
Bromoform	<0.48		50.0	38.9		ug/L		78	56 - 132	5	20
Bromomethane	<0.80		50.0	55.7		ug/L		111	40 - 152	4	20
n-Butylbenzene	<0.39		50.0	55.4		ug/L		111	68 - 125	2	20
sec-Butylbenzene	<0.40		50.0	55.1		ug/L		110	70 - 123	2	20
tert-Butylbenzene	<0.40		50.0	53.2		ug/L		106	70 - 121	3	20
Carbon tetrachloride	<0.38		50.0	53.9		ug/L		108	59 - 133	3	20
Chlorobenzene	<0.39		50.0	51.5		ug/L		103	70 - 120	2	20
Dibromochloromethane	<0.49		50.0	43.2		ug/L		86	68 - 125	7	20
Chloroethane	<0.51		50.0	59.0		ug/L		118	48 - 136	2	20
Chloroform	<0.37		50.0	53.1		ug/L		106	70 - 120	4	20
Chloromethane	<0.32		50.0	48.7		ug/L		97	56 - 152	3	20
2-Chlorotoluene	<0.31		50.0	49.8		ug/L		100	70 - 125	3	20
4-Chlorotoluene	<0.35		50.0	50.7		ug/L		101	68 - 124	2	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	32.2		ug/L		64	56 - 123	6	20
1,2-Dibromoethane	<0.39		50.0	46.3		ug/L		93	70 - 125	6	20
Dibromomethane	<0.27		50.0	52.6		ug/L		105	70 - 120	4	20
1,2-Dichlorobenzene	<0.33		50.0	49.8		ug/L		100	70 - 125	4	20
1,3-Dichlorobenzene	<0.40		50.0	50.1		ug/L		100	70 - 125	3	20
1,4-Dichlorobenzene	<0.36		50.0	49.9		ug/L		100	70 - 120	4	20
Dichlorodifluoromethane	<0.67		50.0	48.5		ug/L		97	40 - 159	7	20
1,1-Dichloroethane	<0.41		50.0	55.9		ug/L		112	70 - 125	2	20
1,2-Dichloroethane	<0.39		50.0	63.6		ug/L		127	68 - 127	3	20
1,1-Dichloroethene	<0.39		50.0	49.5		ug/L		99	67 - 122	3	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: 500-185479-12 MSD
Matrix: Ground Water
Analysis Batch: 554494

Client Sample ID: P-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	<0.41		50.0	51.6		ug/L		103	70 - 125	4	20
trans-1,2-Dichloroethene	<0.35		50.0	52.0		ug/L		104	70 - 125	3	20
1,2-Dichloropropane	<0.43		50.0	56.8		ug/L		114	67 - 130	1	20
1,3-Dichloropropane	<0.36		50.0	46.9		ug/L		94	62 - 136	3	20
2,2-Dichloropropane	<0.44		50.0	56.5		ug/L		113	58 - 139	5	20
1,1-Dichloropropene	<0.30		50.0	53.3		ug/L		107	70 - 121	2	20
cis-1,3-Dichloropropene	<0.42		50.0	43.2		ug/L		86	64 - 127	3	20
trans-1,3-Dichloropropene	<0.36		50.0	42.4		ug/L		85	62 - 128	4	20
Ethylbenzene	<0.18		50.0	54.6		ug/L		109	70 - 123	2	20
Hexachlorobutadiene	<0.45		50.0	61.4		ug/L		123	51 - 150	3	20
Isopropylbenzene	<0.39		50.0	51.0		ug/L		102	70 - 126	3	20
p-Isopropyltoluene	<0.36		50.0	55.7		ug/L		111	70 - 125	1	20
Methylene Chloride	<1.6		50.0	47.7		ug/L		95	69 - 125	4	20
Methyl tert-butyl ether	<0.39		50.0	55.1		ug/L		110	55 - 123	5	20
Naphthalene	<0.34		50.0	42.9		ug/L		86	53 - 144	8	20
N-Propylbenzene	<0.41		50.0	51.7		ug/L		103	69 - 127	2	20
Styrene	<0.39		50.0	51.3		ug/L		103	70 - 120	3	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	47.7		ug/L		95	70 - 125	3	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	39.7		ug/L		79	62 - 140	5	20
Tetrachloroethene	<0.37		50.0	53.0		ug/L		106	70 - 128	1	20
Toluene	<0.15		50.0	50.8		ug/L		102	70 - 125	1	20
1,2,3-Trichlorobenzene	<0.46		50.0	47.8		ug/L		96	51 - 145	7	20
1,2,4-Trichlorobenzene	<0.34		50.0	47.0		ug/L		94	57 - 137	6	20
1,1,1-Trichloroethane	<0.38		50.0	54.1		ug/L		108	70 - 125	4	20
1,1,2-Trichloroethane	<0.35		50.0	46.3		ug/L		93	71 - 130	4	20
Trichloroethene	3.8		50.0	56.8		ug/L		106	70 - 125	2	20
Trichlorofluoromethane	<0.43		50.0	49.0		ug/L		98	55 - 128	3	20
1,2,3-Trichloropropane	<0.41		50.0	42.5		ug/L		85	50 - 133	5	20
1,2,4-Trimethylbenzene	<0.36		50.0	52.2		ug/L		104	70 - 123	3	20
1,3,5-Trimethylbenzene	<0.25		50.0	52.5		ug/L		105	70 - 123	2	20
Vinyl chloride	<0.20		50.0	50.9		ug/L		102	64 - 126	4	20
Xylenes, Total	<0.22		100	110		ug/L		110	70 - 125	2	20

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
1,2-Dichloroethane-d4 (Surr)	112		75 - 126
Toluene-d8 (Surr)	93		75 - 120
4-Bromofluorobenzene (Surr)	89		72 - 124
Dibromofluoromethane (Surr)	97		75 - 120

Lab Sample ID: MB 500-554501/7
Matrix: Water
Analysis Batch: 554501

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 10:39	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 10:39	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 10:39	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 10:39	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: MB 500-554501/7
Matrix: Water
Analysis Batch: 554501

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 10:39	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 10:39	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 10:39	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 10:39	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 10:39	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 10:39	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 10:39	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 10:39	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 10:39	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 10:39	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 10:39	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 10:39	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 10:39	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 10:39	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 10:39	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 10:39	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 10:39	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 10:39	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 10:39	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 10:39	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 10:39	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 10:39	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 10:39	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 10:39	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 10:39	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 10:39	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 10:39	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 10:39	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 10:39	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 10:39	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 10:39	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 10:39	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 10:39	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 10:39	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 10:39	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 10:39	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 10:39	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 10:39	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 10:39	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 10:39	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 10:39	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 10:39	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 10:39	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 10:39	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 10:39	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 10:39	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 10:39	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 10:39	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 10:39	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: MB 500-554501/7
Matrix: Water
Analysis Batch: 554501

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 10:39	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 10:39	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 10:39	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 10:39	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 10:39	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 10:39	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 10:39	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	90		75 - 126		07/30/20 10:39	1
Toluene-d8 (Surr)	101		75 - 120		07/30/20 10:39	1
4-Bromofluorobenzene (Surr)	107		72 - 124		07/30/20 10:39	1
Dibromofluoromethane (Surr)	96		75 - 120		07/30/20 10:39	1

Lab Sample ID: LCS 500-554501/5
Matrix: Water
Analysis Batch: 554501

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	50.0	39.8		ug/L		80	70 - 120
Bromobenzene	50.0	44.8		ug/L		90	70 - 122
Bromochloromethane	50.0	45.7		ug/L		91	65 - 122
Bromodichloromethane	50.0	39.6		ug/L		79	69 - 120
Bromoform	50.0	41.1		ug/L		82	56 - 132
Bromomethane	50.0	43.6		ug/L		87	40 - 152
n-Butylbenzene	50.0	47.3		ug/L		95	68 - 125
sec-Butylbenzene	50.0	43.4		ug/L		87	70 - 123
tert-Butylbenzene	50.0	43.6		ug/L		87	70 - 121
Carbon tetrachloride	50.0	42.2		ug/L		84	59 - 133
Chlorobenzene	50.0	44.4		ug/L		89	70 - 120
Dibromochloromethane	50.0	45.4		ug/L		91	68 - 125
Chloroethane	50.0	46.0		ug/L		92	48 - 136
Chloroform	50.0	42.0		ug/L		84	70 - 120
Chloromethane	50.0	46.9		ug/L		94	56 - 152
2-Chlorotoluene	50.0	44.3		ug/L		89	70 - 125
4-Chlorotoluene	50.0	41.8		ug/L		84	68 - 124
1,2-Dibromo-3-Chloropropane	50.0	30.3		ug/L		61	56 - 123
1,2-Dibromoethane	50.0	45.5		ug/L		91	70 - 125
Dibromomethane	50.0	40.5		ug/L		81	70 - 120
1,2-Dichlorobenzene	50.0	45.1		ug/L		90	70 - 125
1,3-Dichlorobenzene	50.0	43.1		ug/L		86	70 - 125
1,4-Dichlorobenzene	50.0	43.6		ug/L		87	70 - 120
Dichlorodifluoromethane	50.0	34.0		ug/L		68	40 - 159
1,1-Dichloroethane	50.0	46.0		ug/L		92	70 - 125
1,2-Dichloroethane	50.0	39.2		ug/L		78	68 - 127
1,1-Dichloroethene	50.0	43.6		ug/L		87	67 - 122
cis-1,2-Dichloroethene	50.0	45.3		ug/L		91	70 - 125
trans-1,2-Dichloroethene	50.0	46.5		ug/L		93	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: LCS 500-554501/5
Matrix: Water
Analysis Batch: 554501

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	50.0	45.6		ug/L		91	67 - 130
1,3-Dichloropropane	50.0	44.3		ug/L		89	62 - 136
2,2-Dichloropropane	50.0	44.0		ug/L		88	58 - 139
1,1-Dichloropropene	50.0	42.3		ug/L		85	70 - 121
cis-1,3-Dichloropropene	50.0	42.2		ug/L		84	64 - 127
trans-1,3-Dichloropropene	50.0	41.7		ug/L		83	62 - 128
Ethylbenzene	50.0	50.4		ug/L		101	70 - 123
Hexachlorobutadiene	50.0	42.1		ug/L		84	51 - 150
Isopropylbenzene	50.0	47.2		ug/L		94	70 - 126
p-Isopropyltoluene	50.0	45.0		ug/L		90	70 - 125
Methylene Chloride	50.0	41.6		ug/L		83	69 - 125
Methyl tert-butyl ether	50.0	34.4		ug/L		69	55 - 123
Naphthalene	50.0	36.8		ug/L		74	53 - 144
N-Propylbenzene	50.0	46.5		ug/L		93	69 - 127
Styrene	50.0	47.5		ug/L		95	70 - 120
1,1,1,2-Tetrachloroethane	50.0	47.2		ug/L		94	70 - 125
1,1,2,2-Tetrachloroethane	50.0	42.2		ug/L		84	62 - 140
Tetrachloroethene	50.0	51.4		ug/L		103	70 - 128
Toluene	50.0	43.4		ug/L		87	70 - 125
1,2,3-Trichlorobenzene	50.0	37.6		ug/L		75	51 - 145
1,2,4-Trichlorobenzene	50.0	39.9		ug/L		80	57 - 137
1,1,1-Trichloroethane	50.0	47.1		ug/L		94	70 - 125
1,1,2-Trichloroethane	50.0	45.0		ug/L		90	71 - 130
Trichloroethene	50.0	46.5		ug/L		93	70 - 125
Trichlorofluoromethane	50.0	39.4		ug/L		79	55 - 128
1,2,3-Trichloropropane	50.0	39.3		ug/L		79	50 - 133
1,2,4-Trimethylbenzene	50.0	43.7		ug/L		87	70 - 123
1,3,5-Trimethylbenzene	50.0	44.3		ug/L		89	70 - 123
Vinyl chloride	50.0	44.7		ug/L		89	64 - 126
Xylenes, Total	100	96.3		ug/L		96	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	84		75 - 126
Toluene-d8 (Surr)	105		75 - 120
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane (Surr)	96		75 - 120

Lab Sample ID: 500-185479-13 MS
Matrix: Ground Water
Analysis Batch: 554501

Client Sample ID: P-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.15		50.0	49.2		ug/L		98	70 - 120
Bromobenzene	<0.36		50.0	46.4		ug/L		93	70 - 122
Bromochloromethane	<0.43		50.0	54.5		ug/L		109	65 - 122
Bromodichloromethane	<0.37		50.0	46.0		ug/L		92	69 - 120
Bromoform	<0.48		50.0	46.3		ug/L		93	56 - 132
Bromomethane	<0.80		50.0	50.8		ug/L		102	40 - 152

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: 500-185479-13 MS

Matrix: Ground Water

Analysis Batch: 554501

Client Sample ID: P-15

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
n-Butylbenzene	<0.39		50.0	45.2		ug/L		90	68 - 125
sec-Butylbenzene	<0.40		50.0	47.1		ug/L		94	70 - 123
tert-Butylbenzene	<0.40		50.0	43.3		ug/L		87	70 - 121
Carbon tetrachloride	<0.38		50.0	49.2		ug/L		98	59 - 133
Chlorobenzene	<0.39		50.0	46.6		ug/L		93	70 - 120
Dibromochloromethane	<0.49		50.0	43.7		ug/L		87	68 - 125
Chloroethane	<0.51		50.0	49.1		ug/L		98	48 - 136
Chloroform	<0.37		50.0	48.5		ug/L		97	70 - 120
Chloromethane	<0.32		50.0	52.3		ug/L		105	56 - 152
2-Chlorotoluene	<0.31		50.0	44.7		ug/L		89	70 - 125
4-Chlorotoluene	<0.35		50.0	43.2		ug/L		86	68 - 124
1,2-Dibromo-3-Chloropropane	<2.0		50.0	36.6		ug/L		73	56 - 123
1,2-Dibromoethane	<0.39		50.0	46.3		ug/L		93	70 - 125
Dibromomethane	<0.27		50.0	50.1		ug/L		100	70 - 120
1,2-Dichlorobenzene	<0.33		50.0	47.6		ug/L		95	70 - 125
1,3-Dichlorobenzene	<0.40		50.0	47.2		ug/L		94	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	46.1		ug/L		92	70 - 120
Dichlorodifluoromethane	<0.67		50.0	35.9		ug/L		72	40 - 159
1,1-Dichloroethane	<0.41		50.0	48.8		ug/L		98	70 - 125
1,2-Dichloroethane	<0.39		50.0	50.9		ug/L		102	68 - 127
1,1-Dichloroethene	<0.39		50.0	49.1		ug/L		98	67 - 122
cis-1,2-Dichloroethene	<0.41		50.0	50.3		ug/L		101	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	52.1		ug/L		104	70 - 125
1,2-Dichloropropane	<0.43		50.0	53.1		ug/L		106	67 - 130
1,3-Dichloropropane	<0.36		50.0	40.9		ug/L		82	62 - 136
2,2-Dichloropropane	<0.44		50.0	47.7		ug/L		95	58 - 139
1,1-Dichloropropene	<0.30		50.0	50.2		ug/L		100	70 - 121
cis-1,3-Dichloropropene	<0.42		50.0	41.6		ug/L		83	64 - 127
trans-1,3-Dichloropropene	<0.36		50.0	35.9		ug/L		72	62 - 128
Ethylbenzene	<0.18		50.0	50.7		ug/L		101	70 - 123
Hexachlorobutadiene	<0.45		50.0	41.0		ug/L		82	51 - 150
Isopropylbenzene	<0.39		50.0	46.0		ug/L		92	70 - 126
p-Isopropyltoluene	<0.36		50.0	47.6		ug/L		95	70 - 125
Methylene Chloride	<1.6		50.0	48.4		ug/L		97	69 - 125
Methyl tert-butyl ether	<0.39		50.0	41.9		ug/L		84	55 - 123
Naphthalene	<0.34		50.0	41.5		ug/L		83	53 - 144
N-Propylbenzene	<0.41		50.0	46.7		ug/L		93	69 - 127
Styrene	<0.39		50.0	46.2		ug/L		92	70 - 120
1,1,1,2-Tetrachloroethane	<0.46		50.0	50.4		ug/L		101	70 - 125
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	47.6		ug/L		95	62 - 140
Tetrachloroethene	<0.37		50.0	44.7		ug/L		89	70 - 128
Toluene	<0.15		50.0	45.7		ug/L		91	70 - 125
1,2,3-Trichlorobenzene	<0.46		50.0	40.3		ug/L		81	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	36.3		ug/L		73	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	54.1		ug/L		108	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	41.8		ug/L		84	71 - 130
Trichloroethene	<0.16		50.0	46.7		ug/L		93	70 - 125
Trichlorofluoromethane	<0.43		50.0	43.8		ug/L		88	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	45.2		ug/L		90	50 - 133

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: 500-185479-13 MS

Matrix: Ground Water

Analysis Batch: 554501

Client Sample ID: P-15

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	<0.36		50.0	41.7		ug/L		83	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	45.6		ug/L		91	70 - 123
Vinyl chloride	<0.20		50.0	50.7		ug/L		101	64 - 126
Xylenes, Total	<0.22		100	92.9		ug/L		93	70 - 125

Surrogate	MS %Recovery	MS Qualifier	MS Limits
1,2-Dichloroethane-d4 (Surr)	104		75 - 126
Toluene-d8 (Surr)	101		75 - 120
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane (Surr)	105		75 - 120

Lab Sample ID: 500-185479-13 MSD

Matrix: Ground Water

Analysis Batch: 554501

Client Sample ID: P-15

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.15		50.0	49.0		ug/L		98	70 - 120	0	20
Bromobenzene	<0.36		50.0	50.2		ug/L		100	70 - 122	8	20
Bromochloromethane	<0.43		50.0	48.8		ug/L		98	65 - 122	11	20
Bromodichloromethane	<0.37		50.0	46.1		ug/L		92	69 - 120	0	20
Bromoform	<0.48		50.0	42.3		ug/L		85	56 - 132	9	20
Bromomethane	<0.80		50.0	48.5		ug/L		97	40 - 152	5	20
n-Butylbenzene	<0.39		50.0	48.3		ug/L		97	68 - 125	7	20
sec-Butylbenzene	<0.40		50.0	49.5		ug/L		99	70 - 123	5	20
tert-Butylbenzene	<0.40		50.0	50.2		ug/L		100	70 - 121	15	20
Carbon tetrachloride	<0.38		50.0	46.5		ug/L		93	59 - 133	6	20
Chlorobenzene	<0.39		50.0	46.4		ug/L		93	70 - 120	0	20
Dibromochloromethane	<0.49		50.0	45.9		ug/L		92	68 - 125	5	20
Chloroethane	<0.51		50.0	47.4		ug/L		95	48 - 136	3	20
Chloroform	<0.37		50.0	43.3		ug/L		87	70 - 120	11	20
Chloromethane	<0.32		50.0	50.4		ug/L		101	56 - 152	4	20
2-Chlorotoluene	<0.31		50.0	49.0		ug/L		98	70 - 125	9	20
4-Chlorotoluene	<0.35		50.0	48.8		ug/L		98	68 - 124	12	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	35.5		ug/L		71	56 - 123	3	20
1,2-Dibromoethane	<0.39		50.0	47.0		ug/L		94	70 - 125	2	20
Dibromomethane	<0.27		50.0	47.5		ug/L		95	70 - 120	5	20
1,2-Dichlorobenzene	<0.33		50.0	50.5		ug/L		101	70 - 125	6	20
1,3-Dichlorobenzene	<0.40		50.0	46.2		ug/L		92	70 - 125	2	20
1,4-Dichlorobenzene	<0.36		50.0	45.4		ug/L		91	70 - 120	1	20
Dichlorodifluoromethane	<0.67		50.0	36.9		ug/L		74	40 - 159	3	20
1,1-Dichloroethane	<0.41		50.0	47.1		ug/L		94	70 - 125	4	20
1,2-Dichloroethane	<0.39		50.0	49.6		ug/L		99	68 - 127	3	20
1,1-Dichloroethene	<0.39		50.0	48.1		ug/L		96	67 - 122	2	20
cis-1,2-Dichloroethene	<0.41		50.0	44.4		ug/L		89	70 - 125	12	20
trans-1,2-Dichloroethene	<0.35		50.0	49.7		ug/L		99	70 - 125	5	20
1,2-Dichloropropane	<0.43		50.0	52.8		ug/L		106	67 - 130	1	20
1,3-Dichloropropane	<0.36		50.0	42.6		ug/L		85	62 - 136	4	20
2,2-Dichloropropane	<0.44		50.0	39.9		ug/L		80	58 - 139	18	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: 500-185479-13 MSD
Matrix: Ground Water
Analysis Batch: 554501

Client Sample ID: P-15
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-Dichloropropene	<0.30		50.0	47.4		ug/L		95	70 - 121	6	20
cis-1,3-Dichloropropene	<0.42		50.0	38.5		ug/L		77	64 - 127	8	20
trans-1,3-Dichloropropene	<0.36		50.0	38.3		ug/L		77	62 - 128	7	20
Ethylbenzene	<0.18		50.0	48.1		ug/L		96	70 - 123	5	20
Hexachlorobutadiene	<0.45		50.0	43.3		ug/L		87	51 - 150	5	20
Isopropylbenzene	<0.39		50.0	47.2		ug/L		94	70 - 126	3	20
p-Isopropyltoluene	<0.36		50.0	45.5		ug/L		91	70 - 125	4	20
Methylene Chloride	<1.6		50.0	45.6		ug/L		91	69 - 125	6	20
Methyl tert-butyl ether	<0.39		50.0	40.1		ug/L		80	55 - 123	4	20
Naphthalene	<0.34		50.0	42.7		ug/L		85	53 - 144	3	20
N-Propylbenzene	<0.41		50.0	51.0		ug/L		102	69 - 127	9	20
Styrene	<0.39		50.0	43.2		ug/L		86	70 - 120	7	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	46.4		ug/L		93	70 - 125	8	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	50.4		ug/L		101	62 - 140	6	20
Tetrachloroethene	<0.37		50.0	47.1		ug/L		94	70 - 128	5	20
Toluene	<0.15		50.0	42.6		ug/L		85	70 - 125	7	20
1,2,3-Trichlorobenzene	<0.46		50.0	41.2		ug/L		82	51 - 145	2	20
1,2,4-Trichlorobenzene	<0.34		50.0	40.2		ug/L		80	57 - 137	10	20
1,1,1-Trichloroethane	<0.38		50.0	46.9		ug/L		94	70 - 125	14	20
1,1,2-Trichloroethane	<0.35		50.0	41.9		ug/L		84	71 - 130	0	20
Trichloroethene	<0.16		50.0	48.5		ug/L		97	70 - 125	4	20
Trichlorofluoromethane	<0.43		50.0	41.9		ug/L		84	55 - 128	4	20
1,2,3-Trichloropropane	<0.41		50.0	48.6		ug/L		97	50 - 133	7	20
1,2,4-Trimethylbenzene	<0.36		50.0	49.4		ug/L		99	70 - 123	17	20
1,3,5-Trimethylbenzene	<0.25		50.0	51.1		ug/L		102	70 - 123	12	20
Vinyl chloride	<0.20		50.0	45.9		ug/L		92	64 - 126	10	20
Xylenes, Total	<0.22		100	89.2		ug/L		89	70 - 125	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		75 - 126
Toluene-d8 (Surr)	99		75 - 120
4-Bromofluorobenzene (Surr)	97		72 - 124
Dibromofluoromethane (Surr)	96		75 - 120

Lab Sample ID: MB 500-554509/7
Matrix: Water
Analysis Batch: 554509

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/30/20 11:07	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/30/20 11:07	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/30/20 11:07	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/30/20 11:07	1
Bromoform	<0.48		1.0	0.48	ug/L			07/30/20 11:07	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/30/20 11:07	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 11:07	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 11:07	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/30/20 11:07	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: MB 500-554509/7

Matrix: Water

Analysis Batch: 554509

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/30/20 11:07	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/30/20 11:07	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/30/20 11:07	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/30/20 11:07	1
Chloroform	<0.37		2.0	0.37	ug/L			07/30/20 11:07	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/30/20 11:07	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/30/20 11:07	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/30/20 11:07	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/30/20 11:07	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/30/20 11:07	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/30/20 11:07	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/30/20 11:07	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/30/20 11:07	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/30/20 11:07	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/30/20 11:07	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/30/20 11:07	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/30/20 11:07	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/30/20 11:07	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/30/20 11:07	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/30/20 11:07	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/30/20 11:07	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/30/20 11:07	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/30/20 11:07	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/30/20 11:07	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/30/20 11:07	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/30/20 11:07	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/30/20 11:07	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/30/20 11:07	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/30/20 11:07	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/30/20 11:07	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/30/20 11:07	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/30/20 11:07	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/30/20 11:07	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/30/20 11:07	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/30/20 11:07	1
Styrene	<0.39		1.0	0.39	ug/L			07/30/20 11:07	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/30/20 11:07	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/30/20 11:07	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/30/20 11:07	1
Toluene	<0.15		0.50	0.15	ug/L			07/30/20 11:07	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/30/20 11:07	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/30/20 11:07	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/30/20 11:07	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/30/20 11:07	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/30/20 11:07	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/30/20 11:07	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/30/20 11:07	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/30/20 11:07	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/30/20 11:07	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: MB 500-554509/7
Matrix: Water
Analysis Batch: 554509

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/30/20 11:07	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/30/20 11:07	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		07/30/20 11:07	1
Toluene-d8 (Surr)	98		75 - 120		07/30/20 11:07	1
4-Bromofluorobenzene (Surr)	95		72 - 124		07/30/20 11:07	1
Dibromofluoromethane (Surr)	100		75 - 120		07/30/20 11:07	1

Lab Sample ID: LCS 500-554509/5
Matrix: Water
Analysis Batch: 554509

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Benzene	50.0	43.6		ug/L		87	70 - 120
Bromobenzene	50.0	43.5		ug/L		87	70 - 122
Bromochloromethane	50.0	45.4		ug/L		91	65 - 122
Bromodichloromethane	50.0	42.2		ug/L		84	69 - 120
Bromoform	50.0	39.6		ug/L		79	56 - 132
Bromomethane	50.0	48.8		ug/L		98	40 - 152
n-Butylbenzene	50.0	40.3		ug/L		81	68 - 125
sec-Butylbenzene	50.0	40.3		ug/L		81	70 - 123
tert-Butylbenzene	50.0	40.4		ug/L		81	70 - 121
Carbon tetrachloride	50.0	45.9		ug/L		92	59 - 133
Chlorobenzene	50.0	42.8		ug/L		86	70 - 120
Dibromochloromethane	50.0	41.7		ug/L		83	68 - 125
Chloroethane	50.0	50.1		ug/L		100	48 - 136
Chloroform	50.0	40.3		ug/L		81	70 - 120
Chloromethane	50.0	43.7		ug/L		87	56 - 152
2-Chlorotoluene	50.0	40.2		ug/L		80	70 - 125
4-Chlorotoluene	50.0	40.9		ug/L		82	68 - 124
1,2-Dibromo-3-Chloropropane	50.0	33.5		ug/L		67	56 - 123
1,2-Dibromoethane	50.0	43.7		ug/L		87	70 - 125
Dibromomethane	50.0	43.8		ug/L		88	70 - 120
1,2-Dichlorobenzene	50.0	42.0		ug/L		84	70 - 125
1,3-Dichlorobenzene	50.0	42.2		ug/L		84	70 - 125
1,4-Dichlorobenzene	50.0	41.7		ug/L		83	70 - 120
Dichlorodifluoromethane	50.0	42.8		ug/L		86	40 - 159
1,1-Dichloroethane	50.0	50.0		ug/L		100	70 - 125
1,2-Dichloroethane	50.0	46.7		ug/L		93	68 - 127
1,1-Dichloroethene	50.0	44.2		ug/L		88	67 - 122
cis-1,2-Dichloroethene	50.0	43.7		ug/L		87	70 - 125
trans-1,2-Dichloroethene	50.0	44.2		ug/L		88	70 - 125
1,2-Dichloropropane	50.0	52.5		ug/L		105	67 - 130
1,3-Dichloropropane	50.0	41.5		ug/L		83	62 - 136
2,2-Dichloropropane	50.0	45.0		ug/L		90	58 - 139
1,1-Dichloropropene	50.0	43.5		ug/L		87	70 - 121
cis-1,3-Dichloropropene	50.0	41.0		ug/L		82	64 - 127

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: LCS 500-554509/5
Matrix: Water
Analysis Batch: 554509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	39.9		ug/L		80	62 - 128
Ethylbenzene	50.0	43.0		ug/L		86	70 - 123
Hexachlorobutadiene	50.0	43.1		ug/L		86	51 - 150
Isopropylbenzene	50.0	42.4		ug/L		85	70 - 126
p-Isopropyltoluene	50.0	40.7		ug/L		81	70 - 125
Methylene Chloride	50.0	43.7		ug/L		87	69 - 125
Methyl tert-butyl ether	50.0	36.0		ug/L		72	55 - 123
Naphthalene	50.0	47.3		ug/L		95	53 - 144
N-Propylbenzene	50.0	41.8		ug/L		84	69 - 127
Styrene	50.0	41.2		ug/L		82	70 - 120
1,1,1,2-Tetrachloroethane	50.0	42.2		ug/L		84	70 - 125
1,1,2,2-Tetrachloroethane	50.0	41.5		ug/L		83	62 - 140
Tetrachloroethene	50.0	46.0		ug/L		92	70 - 128
Toluene	50.0	43.6		ug/L		87	70 - 125
1,2,3-Trichlorobenzene	50.0	55.0		ug/L		110	51 - 145
1,2,4-Trichlorobenzene	50.0	47.5		ug/L		95	57 - 137
1,1,1-Trichloroethane	50.0	44.7		ug/L		89	70 - 125
1,1,2-Trichloroethane	50.0	42.9		ug/L		86	71 - 130
Trichloroethene	50.0	46.9		ug/L		94	70 - 125
Trichlorofluoromethane	50.0	43.6		ug/L		87	55 - 128
1,2,3-Trichloropropane	50.0	43.1		ug/L		86	50 - 133
1,2,4-Trimethylbenzene	50.0	40.8		ug/L		82	70 - 123
1,3,5-Trimethylbenzene	50.0	40.9		ug/L		82	70 - 123
Vinyl chloride	50.0	51.3		ug/L		103	64 - 126
Xylenes, Total	100	83.3		ug/L		83	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		75 - 126
Toluene-d8 (Surr)	99		75 - 120
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane (Surr)	98		75 - 120

Lab Sample ID: 500-185479-22 MS
Matrix: Ground Water
Analysis Batch: 554509

Client Sample ID: MW-24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.15		50.0	47.6		ug/L		95	70 - 120
Bromobenzene	<0.36		50.0	49.0		ug/L		98	70 - 122
Bromochloromethane	<0.43		50.0	51.0		ug/L		102	65 - 122
Bromodichloromethane	<0.37		50.0	45.5		ug/L		91	69 - 120
Bromoform	<0.48		50.0	46.2		ug/L		92	56 - 132
Bromomethane	<0.80		50.0	56.8		ug/L		114	40 - 152
n-Butylbenzene	<0.39		50.0	42.7		ug/L		85	68 - 125
sec-Butylbenzene	<0.40		50.0	44.3		ug/L		89	70 - 123
tert-Butylbenzene	<0.40		50.0	45.2		ug/L		90	70 - 121
Carbon tetrachloride	<0.38		50.0	49.1		ug/L		98	59 - 133
Chlorobenzene	<0.39		50.0	47.5		ug/L		95	70 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: 500-185479-22 MS

Matrix: Ground Water

Analysis Batch: 554509

Client Sample ID: MW-24

Prep Type: Total/NA

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result			Result	Qualifier				
Dibromochloromethane	<0.49		50.0	47.1		ug/L		94	68 - 125
Chloroethane	<0.51		50.0	58.6		ug/L		117	48 - 136
Chloroform	<0.37		50.0	44.7		ug/L		89	70 - 120
Chloromethane	<0.32		50.0	50.6		ug/L		101	56 - 152
2-Chlorotoluene	<0.31		50.0	45.3		ug/L		91	70 - 125
4-Chlorotoluene	<0.35		50.0	44.9		ug/L		90	68 - 124
1,2-Dibromo-3-Chloropropane	<2.0		50.0	35.3		ug/L		71	56 - 123
1,2-Dibromoethane	<0.39		50.0	47.9		ug/L		96	70 - 125
Dibromomethane	<0.27		50.0	49.0		ug/L		98	70 - 120
1,2-Dichlorobenzene	<0.33		50.0	47.3		ug/L		95	70 - 125
1,3-Dichlorobenzene	<0.40		50.0	46.5		ug/L		93	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	46.1		ug/L		92	70 - 120
Dichlorodifluoromethane	<0.67		50.0	47.9		ug/L		96	40 - 159
1,1-Dichloroethane	<0.41		50.0	55.7		ug/L		111	70 - 125
1,2-Dichloroethane	<0.39		50.0	52.5		ug/L		105	68 - 127
1,1-Dichloroethene	<0.39		50.0	48.9		ug/L		98	67 - 122
cis-1,2-Dichloroethene	<0.41		50.0	48.2		ug/L		96	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	47.7		ug/L		95	70 - 125
1,2-Dichloropropane	<0.43		50.0	57.3		ug/L		115	67 - 130
1,3-Dichloropropane	<0.36		50.0	46.0		ug/L		92	62 - 136
2,2-Dichloropropane	<0.44		50.0	45.7		ug/L		91	58 - 139
1,1-Dichloropropene	<0.30		50.0	47.1		ug/L		94	70 - 121
cis-1,3-Dichloropropene	<0.42		50.0	44.4		ug/L		89	64 - 127
trans-1,3-Dichloropropene	<0.36		50.0	43.4		ug/L		87	62 - 128
Ethylbenzene	<0.18		50.0	46.7		ug/L		93	70 - 123
Hexachlorobutadiene	<0.45		50.0	44.5		ug/L		89	51 - 150
Isopropylbenzene	<0.39		50.0	46.4		ug/L		93	70 - 126
p-Isopropyltoluene	<0.36		50.0	44.4		ug/L		89	70 - 125
Methylene Chloride	<1.6		50.0	48.4		ug/L		97	69 - 125
Methyl tert-butyl ether	<0.39		50.0	40.2		ug/L		80	55 - 123
Naphthalene	<0.34		50.0	44.6		ug/L		89	53 - 144
N-Propylbenzene	<0.41		50.0	45.5		ug/L		91	69 - 127
Styrene	<0.39		50.0	46.1		ug/L		92	70 - 120
1,1,1,2-Tetrachloroethane	<0.46		50.0	47.2		ug/L		94	70 - 125
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	46.8		ug/L		94	62 - 140
Tetrachloroethene	<0.37		50.0	48.9		ug/L		98	70 - 128
Toluene	<0.15		50.0	47.3		ug/L		95	70 - 125
1,2,3-Trichlorobenzene	<0.46		50.0	48.5		ug/L		97	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	45.9		ug/L		92	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	48.0		ug/L		96	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	48.4		ug/L		97	71 - 130
Trichloroethene	72		50.0	126		ug/L		107	70 - 125
Trichlorofluoromethane	<0.43		50.0	49.9		ug/L		100	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	49.8		ug/L		100	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	44.8		ug/L		90	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	45.1		ug/L		90	70 - 123
Vinyl chloride	<0.20		50.0	58.8		ug/L		118	64 - 126
Xylenes, Total	<0.22		100	91.0		ug/L		91	70 - 125

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: 500-185479-22 MS
Matrix: Ground Water
Analysis Batch: 554509

Client Sample ID: MW-24
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		75 - 126
Toluene-d8 (Surr)	98		75 - 120
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane (Surr)	103		75 - 120

Lab Sample ID: 500-185479-22 MSD
Matrix: Ground Water
Analysis Batch: 554509

Client Sample ID: MW-24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.15		50.0	47.8		ug/L		96	70 - 120	0	20
Bromobenzene	<0.36		50.0	50.3		ug/L		101	70 - 122	3	20
Bromochloromethane	<0.43		50.0	50.5		ug/L		101	65 - 122	1	20
Bromodichloromethane	<0.37		50.0	45.5		ug/L		91	69 - 120	0	20
Bromoform	<0.48		50.0	47.0		ug/L		94	56 - 132	2	20
Bromomethane	<0.80		50.0	53.8		ug/L		108	40 - 152	5	20
n-Butylbenzene	<0.39		50.0	43.4		ug/L		87	68 - 125	2	20
sec-Butylbenzene	<0.40		50.0	46.0		ug/L		92	70 - 123	4	20
tert-Butylbenzene	<0.40		50.0	46.9		ug/L		94	70 - 121	4	20
Carbon tetrachloride	<0.38		50.0	48.8		ug/L		98	59 - 133	1	20
Chlorobenzene	<0.39		50.0	48.3		ug/L		97	70 - 120	2	20
Dibromochloromethane	<0.49		50.0	47.3		ug/L		95	68 - 125	1	20
Chloroethane	<0.51		50.0	54.9		ug/L		110	48 - 136	7	20
Chloroform	<0.37		50.0	45.2		ug/L		90	70 - 120	1	20
Chloromethane	<0.32		50.0	47.8		ug/L		96	56 - 152	6	20
2-Chlorotoluene	<0.31		50.0	46.3		ug/L		93	70 - 125	2	20
4-Chlorotoluene	<0.35		50.0	46.5		ug/L		93	68 - 124	3	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	36.4		ug/L		73	56 - 123	3	20
1,2-Dibromoethane	<0.39		50.0	48.9		ug/L		98	70 - 125	2	20
Dibromomethane	<0.27		50.0	48.0		ug/L		96	70 - 120	2	20
1,2-Dichlorobenzene	<0.33		50.0	48.1		ug/L		96	70 - 125	2	20
1,3-Dichlorobenzene	<0.40		50.0	48.0		ug/L		96	70 - 125	3	20
1,4-Dichlorobenzene	<0.36		50.0	47.5		ug/L		95	70 - 120	3	20
Dichlorodifluoromethane	<0.67		50.0	44.6		ug/L		89	40 - 159	7	20
1,1-Dichloroethane	<0.41		50.0	55.6		ug/L		111	70 - 125	0	20
1,2-Dichloroethane	<0.39		50.0	52.1		ug/L		104	68 - 127	1	20
1,1-Dichloroethene	<0.39		50.0	48.2		ug/L		96	67 - 122	1	20
cis-1,2-Dichloroethene	<0.41		50.0	48.7		ug/L		97	70 - 125	1	20
trans-1,2-Dichloroethene	<0.35		50.0	48.0		ug/L		96	70 - 125	1	20
1,2-Dichloropropane	<0.43		50.0	57.4		ug/L		115	67 - 130	0	20
1,3-Dichloropropane	<0.36		50.0	46.2		ug/L		92	62 - 136	0	20
2,2-Dichloropropane	<0.44		50.0	46.4		ug/L		93	58 - 139	2	20
1,1-Dichloropropene	<0.30		50.0	47.7		ug/L		95	70 - 121	1	20
cis-1,3-Dichloropropene	<0.42		50.0	45.3		ug/L		91	64 - 127	2	20
trans-1,3-Dichloropropene	<0.36		50.0	44.1		ug/L		88	62 - 128	2	20
Ethylbenzene	<0.18		50.0	48.2		ug/L		96	70 - 123	3	20
Hexachlorobutadiene	<0.45		50.0	45.6		ug/L		91	51 - 150	2	20
Isopropylbenzene	<0.39		50.0	48.3		ug/L		97	70 - 126	4	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: 500-185479-22 MSD
Matrix: Ground Water
Analysis Batch: 554509

Client Sample ID: MW-24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	<0.36		50.0	45.8		ug/L		92	70 - 125	3	20
Methylene Chloride	<1.6		50.0	47.6		ug/L		95	69 - 125	2	20
Methyl tert-butyl ether	<0.39		50.0	40.0		ug/L		80	55 - 123	0	20
Naphthalene	<0.34		50.0	51.4		ug/L		103	53 - 144	14	20
N-Propylbenzene	<0.41		50.0	47.2		ug/L		94	69 - 127	4	20
Styrene	<0.39		50.0	47.2		ug/L		94	70 - 120	2	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	48.3		ug/L		97	70 - 125	2	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	48.1		ug/L		96	62 - 140	3	20
Tetrachloroethene	<0.37		50.0	50.5		ug/L		101	70 - 128	3	20
Toluene	<0.15		50.0	48.4		ug/L		97	70 - 125	2	20
1,2,3-Trichlorobenzene	<0.46		50.0	56.7		ug/L		113	51 - 145	16	20
1,2,4-Trichlorobenzene	<0.34		50.0	48.4		ug/L		97	57 - 137	5	20
1,1,1-Trichloroethane	<0.38		50.0	48.1		ug/L		96	70 - 125	0	20
1,1,2-Trichloroethane	<0.35		50.0	49.2		ug/L		98	71 - 130	2	20
Trichloroethene	72		50.0	125		ug/L		106	70 - 125	1	20
Trichlorofluoromethane	<0.43		50.0	46.7		ug/L		93	55 - 128	7	20
1,2,3-Trichloropropane	<0.41		50.0	49.3		ug/L		99	50 - 133	1	20
1,2,4-Trimethylbenzene	<0.36		50.0	46.3		ug/L		93	70 - 123	3	20
1,3,5-Trimethylbenzene	<0.25		50.0	46.6		ug/L		93	70 - 123	3	20
Vinyl chloride	<0.20		50.0	55.2		ug/L		110	64 - 126	6	20
Xylenes, Total	<0.22		100	93.6		ug/L		94	70 - 125	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		75 - 126
Toluene-d8 (Surr)	100		75 - 120
4-Bromofluorobenzene (Surr)	94		72 - 124
Dibromofluoromethane (Surr)	102		75 - 120

Lab Sample ID: MB 500-554716/6
Matrix: Water
Analysis Batch: 554716

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/31/20 10:26	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/31/20 10:26	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/31/20 10:26	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/31/20 10:26	1
Bromoform	<0.48		1.0	0.48	ug/L			07/31/20 10:26	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/31/20 10:26	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/31/20 10:26	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/20 10:26	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/31/20 10:26	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/31/20 10:26	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/31/20 10:26	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/31/20 10:26	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/31/20 10:26	1
Chloroform	<0.37		2.0	0.37	ug/L			07/31/20 10:26	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/31/20 10:26	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: MB 500-554716/6
Matrix: Water
Analysis Batch: 554716

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/31/20 10:26	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/31/20 10:26	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/31/20 10:26	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/31/20 10:26	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/31/20 10:26	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/31/20 10:26	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/31/20 10:26	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/31/20 10:26	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/31/20 10:26	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/31/20 10:26	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/31/20 10:26	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/31/20 10:26	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/31/20 10:26	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/31/20 10:26	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/31/20 10:26	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/31/20 10:26	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/31/20 10:26	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/31/20 10:26	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/31/20 10:26	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/31/20 10:26	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/31/20 10:26	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/31/20 10:26	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/31/20 10:26	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/31/20 10:26	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/31/20 10:26	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/31/20 10:26	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/31/20 10:26	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/31/20 10:26	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/31/20 10:26	1
Styrene	<0.39		1.0	0.39	ug/L			07/31/20 10:26	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/31/20 10:26	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/31/20 10:26	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/31/20 10:26	1
Toluene	<0.15		0.50	0.15	ug/L			07/31/20 10:26	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/31/20 10:26	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/31/20 10:26	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/31/20 10:26	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/31/20 10:26	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/31/20 10:26	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/31/20 10:26	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/31/20 10:26	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/31/20 10:26	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/31/20 10:26	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/31/20 10:26	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/31/20 10:26	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		07/31/20 10:26	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: MB 500-554716/6
Matrix: Water
Analysis Batch: 554716

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	93		75 - 120		07/31/20 10:26	1
4-Bromofluorobenzene (Surr)	93		72 - 124		07/31/20 10:26	1
Dibromofluoromethane (Surr)	93		75 - 120		07/31/20 10:26	1

Lab Sample ID: LCS 500-554716/4
Matrix: Water
Analysis Batch: 554716

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
Benzene	50.0	49.2		ug/L		98	70 - 120
Bromobenzene	50.0	43.6		ug/L		87	70 - 122
Bromochloromethane	50.0	46.5		ug/L		93	65 - 122
Bromodichloromethane	50.0	45.2		ug/L		90	69 - 120
Bromoform	50.0	36.4		ug/L		73	56 - 132
Bromomethane	50.0	53.2		ug/L		106	40 - 152
n-Butylbenzene	50.0	54.3		ug/L		109	68 - 125
sec-Butylbenzene	50.0	52.0		ug/L		104	70 - 123
tert-Butylbenzene	50.0	49.5		ug/L		99	70 - 121
Carbon tetrachloride	50.0	50.6		ug/L		101	59 - 133
Chlorobenzene	50.0	48.8		ug/L		98	70 - 120
Dibromochloromethane	50.0	39.8		ug/L		80	68 - 125
Chloroethane	50.0	56.8		ug/L		114	48 - 136
Chloroform	50.0	48.1		ug/L		96	70 - 120
Chloromethane	50.0	47.2		ug/L		94	56 - 152
2-Chlorotoluene	50.0	46.1		ug/L		92	70 - 125
4-Chlorotoluene	50.0	47.2		ug/L		94	68 - 124
1,2-Dibromo-3-Chloropropane	50.0	28.7		ug/L		57	56 - 123
1,2-Dibromoethane	50.0	42.9		ug/L		86	70 - 125
Dibromomethane	50.0	47.2		ug/L		94	70 - 120
1,2-Dichlorobenzene	50.0	45.4		ug/L		91	70 - 125
1,3-Dichlorobenzene	50.0	47.1		ug/L		94	70 - 125
1,4-Dichlorobenzene	50.0	46.2		ug/L		92	70 - 120
Dichlorodifluoromethane	50.0	46.9		ug/L		94	40 - 159
1,1-Dichloroethane	50.0	51.7		ug/L		103	70 - 125
1,2-Dichloroethane	50.0	57.5		ug/L		115	68 - 127
1,1-Dichloroethene	50.0	45.5		ug/L		91	67 - 122
cis-1,2-Dichloroethene	50.0	47.3		ug/L		95	70 - 125
trans-1,2-Dichloroethene	50.0	48.1		ug/L		96	70 - 125
1,2-Dichloropropane	50.0	51.3		ug/L		103	67 - 130
1,3-Dichloropropane	50.0	43.0		ug/L		86	62 - 136
2,2-Dichloropropane	50.0	54.7		ug/L		109	58 - 139
1,1-Dichloropropene	50.0	50.9		ug/L		102	70 - 121
cis-1,3-Dichloropropene	50.0	41.2		ug/L		82	64 - 127
trans-1,3-Dichloropropene	50.0	40.4		ug/L		81	62 - 128
Ethylbenzene	50.0	52.5		ug/L		105	70 - 123
Hexachlorobutadiene	50.0	58.8		ug/L		118	51 - 150
Isopropylbenzene	50.0	47.7		ug/L		95	70 - 126
p-Isopropyltoluene	50.0	53.3		ug/L		107	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

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

Lab Sample ID: LCS 500-554716/4
Matrix: Water
Analysis Batch: 554716

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	50.0	43.3		ug/L		87	69 - 125
Methyl tert-butyl ether	50.0	49.4		ug/L		99	55 - 123
Naphthalene	50.0	39.0		ug/L		78	53 - 144
N-Propylbenzene	50.0	48.9		ug/L		98	69 - 127
Styrene	50.0	48.6		ug/L		97	70 - 120
1,1,1,2-Tetrachloroethane	50.0	44.7		ug/L		89	70 - 125
1,1,2,2-Tetrachloroethane	50.0	36.7		ug/L		73	62 - 140
Tetrachloroethene	50.0	52.4		ug/L		105	70 - 128
Toluene	50.0	48.3		ug/L		97	70 - 125
1,2,3-Trichlorobenzene	50.0	44.9		ug/L		90	51 - 145
1,2,4-Trichlorobenzene	50.0	44.9		ug/L		90	57 - 137
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	70 - 125
1,1,2-Trichloroethane	50.0	43.0		ug/L		86	71 - 130
Trichloroethene	50.0	49.8		ug/L		100	70 - 125
Trichlorofluoromethane	50.0	48.4		ug/L		97	55 - 128
1,2,3-Trichloropropane	50.0	38.4		ug/L		77	50 - 133
1,2,4-Trimethylbenzene	50.0	48.6		ug/L		97	70 - 123
1,3,5-Trimethylbenzene	50.0	49.1		ug/L		98	70 - 123
Vinyl chloride	50.0	50.5		ug/L		101	64 - 126
Xylenes, Total	100	105		ug/L		105	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	109		75 - 126
Toluene-d8 (Surr)	94		75 - 120
4-Bromofluorobenzene (Surr)	88		72 - 124
Dibromofluoromethane (Surr)	95		75 - 120

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-2

Date Collected: 07/23/20 13:00

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 14:20	JDD	TAL CHI

Client Sample ID: MW-3

Date Collected: 07/22/20 13:00

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 14:48	JDD	TAL CHI

Client Sample ID: P-4

Date Collected: 07/22/20 13:30

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 15:16	JDD	TAL CHI

Client Sample ID: MW-5

Date Collected: 07/23/20 09:30

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554716	07/31/20 14:09	JDD	TAL CHI

Client Sample ID: P-6

Date Collected: 07/21/20 13:45

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 15:43	JDD	TAL CHI

Client Sample ID: MW-7

Date Collected: 07/22/20 14:00

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 16:11	JDD	TAL CHI

Client Sample ID: MW-8

Date Collected: 07/20/20 09:30

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 16:38	JDD	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-9
Date Collected: 07/22/20 11:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-8
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 17:06	JDD	TAL CHI

Client Sample ID: P-10
Date Collected: 07/22/20 10:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-9
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 17:34	JDD	TAL CHI

Client Sample ID: MW-11
Date Collected: 07/22/20 09:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-10
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 18:02	JDD	TAL CHI

Client Sample ID: MW-13
Date Collected: 07/23/20 10:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-11
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 18:30	JDD	TAL CHI

Client Sample ID: P-14
Date Collected: 07/23/20 10:15
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-12
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554494	07/30/20 18:57	JDD	TAL CHI

Client Sample ID: P-15
Date Collected: 07/23/20 14:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-13
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554501	07/30/20 15:44	JDD	TAL CHI

Client Sample ID: MW-16
Date Collected: 07/22/20 14:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-14
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554501	07/30/20 16:09	JDD	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-17

Date Collected: 07/20/20 11:45

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-15

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554501	07/30/20 16:34	JDD	TAL CHI

Client Sample ID: P-18

Date Collected: 07/20/20 11:30

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-16

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554501	07/30/20 17:00	JDD	TAL CHI

Client Sample ID: P-19

Date Collected: 07/20/20 11:15

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-17

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554501	07/30/20 17:25	JDD	TAL CHI

Client Sample ID: P-20

Date Collected: 07/21/20 14:00

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-18

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554501	07/30/20 17:50	JDD	TAL CHI

Client Sample ID: MW-21

Date Collected: 07/23/20 12:30

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-19

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554501	07/30/20 19:06	JDD	TAL CHI

Client Sample ID: MW-22

Date Collected: 07/21/20 11:15

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-20

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554501	07/30/20 18:15	JDD	TAL CHI

Client Sample ID: P-23

Date Collected: 07/20/20 14:45

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-21

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554501	07/30/20 18:41	JDD	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-24
Date Collected: 07/20/20 10:15
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-22
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 12:50	JDD	TAL CHI

Client Sample ID: P-25D
Date Collected: 07/20/20 14:15
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-23
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 13:16	JDD	TAL CHI

Client Sample ID: P-25S
Date Collected: 07/20/20 14:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-24
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 14:07	JDD	TAL CHI

Client Sample ID: MW-26
Date Collected: 07/23/20 12:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-25
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 14:33	JDD	TAL CHI

Client Sample ID: P-27
Date Collected: 07/23/20 11:30
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-26
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 14:59	JDD	TAL CHI

Client Sample ID: MW-29
Date Collected: 07/22/20 12:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-27
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 15:25	JDD	TAL CHI

Client Sample ID: P-30
Date Collected: 07/22/20 12:15
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-28
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 15:51	JDD	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Client Sample ID: MW-31

Date Collected: 07/22/20 11:30

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-29

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 16:17	JDD	TAL CHI

Client Sample ID: Trip Blank

Date Collected: 07/20/20 00:00

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-30

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 11:33	JDD	TAL CHI

Client Sample ID: Albright

Date Collected: 07/22/20 12:45

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-31

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 16:43	JDD	TAL CHI

Client Sample ID: Ogbum

Date Collected: 07/20/20 10:00

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-32

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 17:09	JDD	TAL CHI

Client Sample ID: Burton

Date Collected: 07/23/20 14:00

Date Received: 07/25/20 11:40

Lab Sample ID: 500-185479-33

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554509	07/30/20 17:35	JDD	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-185479-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

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

Chain of Custody Record

388568



Environment Testing
TestAmerica

Address: _____

Regulatory Program: DW NPDES RCRA Other:

TAL-8210

Client Contact Company Name: Cedar Corp Address: 604 Wilson Ave City/State/Zip: Menomonie WI 54751 Phone: 715-235-9081 Fax: Project Name: Town of Warren Site: P O #		Project Manager: Mitch Everson Tel/Email:		Site Contact: Kirsten Lee Lab Contact: Sample F.		Date: 7/24/20 Carrier:		COC No: 1 of 3 COCs Sampler: KAL For Lab Use Only: Walk-in Client: Lab Sampling:	
		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) Perform MS/MSD (Y/N) VOCs		500-185479 COC 		Job / SDG No.: 500-185479	
								Sample Specific Notes:	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)		
MW-2	7/23	1300		GW	3		X		
MW-3	7/22	1300							
P-4	7/22	1330							
MW-5	7/23	0930							
P-6	7/21	1345							
MW-7	7/22	1400							
MW-8	7/20	0930							
MW-9	7/22	1100							
P-10	7/22	1030							
MW-11	7/22	0930							
MW-13	7/23	1000							
P-14	7/23	1015							
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other									
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown									
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: 0.9 Corr'd:		Therm ID No.:			
Relinquished by: <i>Kirsten Lee</i>		Company: Cedar Corp		Date/Time: 7/24/20 0900		Received by:		Company:	
Relinquished by:		Company:		Date/Time:		Received by:		Company:	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company: TA-GH	
						Date/Time: 7/25/20		1140	

Chain of Custody Record

397152



Environment Testing
TestAmerica

TAL-8210

Address: _____

Regulatory Program: DW NPDES RCRA Other:

Client Contact		Project Manager: Mitch Evenson		Site Contact: Kirsten Lee		Date: 7/24/20		COC No: 2 of 3 COCs	
Company Name: Cedar Corp		Tel/Email:		Lab Contact: Sandict		Carrier:		Sampler: K-AL	
Address:		Analysis Turnaround Time							
City/State/Zip:		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day							
Phone:		Filtered Sample (Y/N) Perform MS / MSD (Y/N) VCES							
Fax:									
Project Name: Town of Wampanoag									
Site:									
P O #		For Lab Use Only:							
		Walk-in Client: _____ Lab Sampling: _____ Job / SDG No.: 500-185479							

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Sample Specific Notes:
13 P-15	7/23	1430		GW	3		X	
14 MW-16	7/22	1430		↓	↓	↓	↓	
15 MW-17	7/20	1145						
16 P-18	7/20	1130						
17 P-19	7/20	1115						
18 P-20	7/21	1400						
19 MW-21	7/23	1230						
20 MW-22	7/21	1115						
21 P-23	7/20	1445						
22 MW-24	7/20	1015						
23 P-25D	7/20	1415						
24 P-25S	7/20	1400						

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months
---	---

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____	
Relinquished by: Kirsten Lee	Company: Cedar Corp	Date/Time: 7/24/20	Received by:	Company:	Date/Time:		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:		
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Stephanie Hernandez	Company: TA-GH1	Date/Time: 7/25/20 1140		

Chain of Custody Record 397153  eurofins

Environment Testing
TestAmerica

Address: _____

Regulatory Program: DW NPDES RCRA Other: _____

TAL-8210

Client Contact		Project Manager: Mitch Evenson		Site Contact: Kirsten Lee		Date: 7/24/20		COC No:			
Company Name: Cedar Corp		Tel/Email:		Lab Contact: Sample F		Carrier:		3 of 3 COCs			
Address:		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS/MSD (Y/N) VOCs				Sampler: VIAL			
City/State/Zip:		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only: Walk-in Client: _____ Lab Sampling: _____			
Phone:		TAT if different from Below _____									
Fax:		<input type="checkbox"/> 2 weeks									
Project Name: Town of Warren		<input type="checkbox"/> 1 week									
Site:		<input type="checkbox"/> 2 days		Job / SDG No.:		500-185479		Sample Specific Notes:			
P O #		<input type="checkbox"/> 1 day									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp. G=Grab)	Matrix	# of Cont.					
25	MW-26	7/23	1200		GW	3	X				
26	P-27	7/23	1130								
27	MW-29	7/22	1200								
28	P-30	7/22	1215								
29	MW-31	7/22	1130								
30	Tap Blank										
31	with Albright	7/22	1245		GW	3					
32	Ogden	7/20	1000								
33	Blurton	7/23	1400								
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____											
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Cor'd: _____		Therm ID No.:					
Relinquished by: <u>Kirsten Lee</u>		Company: Cedar Corp		Date/Time: 7/24/20 0900		Received by:		Company: _____ Date/Time: _____			
Relinquished by:		Company:		Date/Time:		Received by:		Company: _____ Date/Time: _____			
Relinquished by:		Company:		Date/Time:		Received in Laboratory by: <u>Stephanie Hernandez</u>		Company: TA-GH Date/Time: 7/25/20 1140			

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-185479-1

Login Number: 185479

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

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



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-201789-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
7/16/2021 3:39:53 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	11
QC Association	12
Surrogate Summary	13
QC Sample Results	14
Chronicle	18
Certification Summary	19
Chain of Custody	20
Receipt Checklists	21

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Job ID: 500-201789-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-201789-1

Comments

No additional comments.

Receipt

The samples were received on 7/2/2021 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.2° C and 2.5° C.

Receipt Exceptions

Received 1 VOA vial broken for sample 1.

GC/MS VOA

Method 8260B: Methylene chloride was detected in the following samples: P-32 (500-201789-1) and MW-33 (500-201789-2). The method blank associated with these samples was below the reporting limit for Methylene chloride. Methylene chloride is a known lab contaminant; therefore all low level detects for this compound could be suspected as lab contamination.

Method 8260B: The laboratory control sample (LCS) for analytical batch 500-609058 recovered outside control limits for the following analyte: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) associated with batch 500-609058 recovered above the upper control limit for Bromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Client Sample ID: P-32

Lab Sample ID: 500-201789-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.6	J	10	1.7	ug/L	1		8260B	Total/NA
Bromodichloromethane	0.99	J	1.0	0.37	ug/L	1		8260B	Total/NA
Bromoform	0.49	J	1.0	0.48	ug/L	1		8260B	Total/NA
Chloroform	0.70	J	2.0	0.37	ug/L	1		8260B	Total/NA
Dibromochloromethane	1.2		1.0	0.49	ug/L	1		8260B	Total/NA
Methylene Chloride	10		5.0	1.6	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	3.1	J	5.0	2.1	ug/L	1		8260B	Total/NA
Toluene	0.19	J	0.50	0.15	ug/L	1		8260B	Total/NA

Client Sample ID: MW-33

Lab Sample ID: 500-201789-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.0	J	10	1.7	ug/L	1		8260B	Total/NA
Methylene Chloride	9.7		5.0	1.6	ug/L	1		8260B	Total/NA
Trichlorofluoromethane	0.57	J	1.0	0.43	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-201789-1	P-32	Water	06/30/21 13:25	07/02/21 09:45	
500-201789-2	MW-33	Water	06/30/21 13:05	07/02/21 09:45	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Client Sample ID: P-32

Lab Sample ID: 500-201789-1

Date Collected: 06/30/21 13:25

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.6	J	10	1.7	ug/L			07/13/21 16:05	1
Benzene	<0.15		0.50	0.15	ug/L			07/13/21 16:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/13/21 16:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/13/21 16:05	1
Bromodichloromethane	0.99	J	1.0	0.37	ug/L			07/13/21 16:05	1
Bromoform	0.49	J	1.0	0.48	ug/L			07/13/21 16:05	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/13/21 16:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/13/21 16:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/13/21 16:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/13/21 16:05	1
Chloroform	0.70	J	2.0	0.37	ug/L			07/13/21 16:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/13/21 16:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/13/21 16:05	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/13/21 16:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/13/21 16:05	1
Dibromochloromethane	1.2		1.0	0.49	ug/L			07/13/21 16:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/13/21 16:05	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/13/21 16:05	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/13/21 16:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/13/21 16:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/13/21 16:05	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/13/21 16:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/13/21 16:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/13/21 16:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/13/21 16:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/13/21 16:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/13/21 16:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/13/21 16:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/13/21 16:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/13/21 16:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/13/21 16:05	1
Bromomethane	<0.80	^c *	3.0	0.80	ug/L			07/13/21 16:05	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/13/21 16:05	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/13/21 16:05	1
Methylene Chloride	10		5.0	1.6	ug/L			07/13/21 16:05	1
2-Butanone (MEK)	3.1	J	5.0	2.1	ug/L			07/13/21 16:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/13/21 16:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/13/21 16:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/13/21 16:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/13/21 16:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/13/21 16:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/13/21 16:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/13/21 16:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/13/21 16:05	1
Styrene	<0.39		1.0	0.39	ug/L			07/13/21 16:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/13/21 16:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/13/21 16:05	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/13/21 16:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/13/21 16:05	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-201789-1

Client Sample ID: P-32

Lab Sample ID: 500-201789-1

Date Collected: 06/30/21 13:25

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/13/21 16:05	1
Toluene	0.19	J	0.50	0.15	ug/L			07/13/21 16:05	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/13/21 16:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/13/21 16:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/13/21 16:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/13/21 16:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/13/21 16:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/13/21 16:05	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/13/21 16:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/13/21 16:05	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/13/21 16:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/13/21 16:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/13/21 16:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/13/21 16:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/13/21 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		72 - 124		07/13/21 16:05	1
Dibromofluoromethane	109		75 - 120		07/13/21 16:05	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		07/13/21 16:05	1
Toluene-d8 (Surr)	96		75 - 120		07/13/21 16:05	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Client Sample ID: MW-33

Lab Sample ID: 500-201789-2

Date Collected: 06/30/21 13:05

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.0	J	10	1.7	ug/L			07/13/21 16:33	1
Benzene	<0.15		0.50	0.15	ug/L			07/13/21 16:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/13/21 16:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/13/21 16:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/13/21 16:33	1
Bromoform	<0.48		1.0	0.48	ug/L			07/13/21 16:33	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/13/21 16:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/13/21 16:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/13/21 16:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/13/21 16:33	1
Chloroform	<0.37		2.0	0.37	ug/L			07/13/21 16:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/13/21 16:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/13/21 16:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/13/21 16:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/13/21 16:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/13/21 16:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/13/21 16:33	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/13/21 16:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/13/21 16:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/13/21 16:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/13/21 16:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/13/21 16:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/13/21 16:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/13/21 16:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/13/21 16:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/13/21 16:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/13/21 16:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/13/21 16:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/13/21 16:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/13/21 16:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/13/21 16:33	1
Bromomethane	<0.80	^c *	3.0	0.80	ug/L			07/13/21 16:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/13/21 16:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/13/21 16:33	1
Methylene Chloride	9.7		5.0	1.6	ug/L			07/13/21 16:33	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/13/21 16:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/13/21 16:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/13/21 16:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/13/21 16:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/13/21 16:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/13/21 16:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/13/21 16:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/13/21 16:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/13/21 16:33	1
Styrene	<0.39		1.0	0.39	ug/L			07/13/21 16:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/13/21 16:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/13/21 16:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/13/21 16:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/13/21 16:33	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Client Sample ID: MW-33
Date Collected: 06/30/21 13:05
Date Received: 07/02/21 09:45

Lab Sample ID: 500-201789-2
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/13/21 16:33	1
Toluene	<0.15		0.50	0.15	ug/L			07/13/21 16:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/13/21 16:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/13/21 16:33	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/13/21 16:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/13/21 16:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/13/21 16:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/13/21 16:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/13/21 16:33	1
Trichlorofluoromethane	0.57	J	1.0	0.43	ug/L			07/13/21 16:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/13/21 16:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/13/21 16:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/13/21 16:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/13/21 16:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/13/21 16:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		72 - 124		07/13/21 16:33	1
Dibromofluoromethane	108		75 - 120		07/13/21 16:33	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		07/13/21 16:33	1
Toluene-d8 (Surr)	96		75 - 120		07/13/21 16:33	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

GC/MS VOA

Analysis Batch: 609058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201789-1	P-32	Total/NA	Water	8260B	
500-201789-2	MW-33	Total/NA	Water	8260B	
MB 500-609058/6	Method Blank	Total/NA	Water	8260B	
LCS 500-609058/4	Lab Control Sample	Total/NA	Water	8260B	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-201789-1	P-32	87	109	113	96
500-201789-2	MW-33	86	108	113	96
LCS 500-609058/4	Lab Control Sample	88	107	113	97
MB 500-609058/6	Method Blank	89	106	111	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-609058/6
Matrix: Water
Analysis Batch: 609058

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/13/21 10:30	1
Benzene	<0.15		0.50	0.15	ug/L			07/13/21 10:30	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/13/21 10:30	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/13/21 10:30	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/13/21 10:30	1
Bromoform	<0.48		1.0	0.48	ug/L			07/13/21 10:30	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/13/21 10:30	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/13/21 10:30	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/13/21 10:30	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/13/21 10:30	1
Chloroform	<0.37		2.0	0.37	ug/L			07/13/21 10:30	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/13/21 10:30	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/13/21 10:30	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/13/21 10:30	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/13/21 10:30	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/13/21 10:30	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/13/21 10:30	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/13/21 10:30	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/13/21 10:30	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/13/21 10:30	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/13/21 10:30	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/13/21 10:30	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/13/21 10:30	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/13/21 10:30	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/13/21 10:30	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/13/21 10:30	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/13/21 10:30	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/13/21 10:30	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/13/21 10:30	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/13/21 10:30	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/13/21 10:30	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/13/21 10:30	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/13/21 10:30	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/13/21 10:30	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/13/21 10:30	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/13/21 10:30	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/13/21 10:30	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/13/21 10:30	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/13/21 10:30	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/13/21 10:30	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/13/21 10:30	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/13/21 10:30	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/13/21 10:30	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/13/21 10:30	1
Styrene	<0.39		1.0	0.39	ug/L			07/13/21 10:30	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/13/21 10:30	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/13/21 10:30	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/13/21 10:30	1

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

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

Lab Sample ID: MB 500-609058/6
Matrix: Water
Analysis Batch: 609058

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/13/21 10:30	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/13/21 10:30	1
Toluene	<0.15		0.50	0.15	ug/L			07/13/21 10:30	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/13/21 10:30	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/13/21 10:30	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/13/21 10:30	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/13/21 10:30	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/13/21 10:30	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/13/21 10:30	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/13/21 10:30	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/13/21 10:30	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/13/21 10:30	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/13/21 10:30	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/13/21 10:30	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/13/21 10:30	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/13/21 10:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124		07/13/21 10:30	1
Dibromofluoromethane	106		75 - 120		07/13/21 10:30	1
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		07/13/21 10:30	1
Toluene-d8 (Surr)	98		75 - 120		07/13/21 10:30	1

Lab Sample ID: LCS 500-609058/4
Matrix: Water
Analysis Batch: 609058

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	52.3		ug/L		105	40 - 143
Benzene	50.0	51.9		ug/L		104	70 - 120
Bromobenzene	50.0	46.7		ug/L		93	70 - 122
Bromochloromethane	50.0	53.0		ug/L		106	65 - 122
Bromodichloromethane	50.0	52.8		ug/L		106	69 - 120
Bromoform	50.0	54.1		ug/L		108	56 - 132
Carbon disulfide	50.0	51.7		ug/L		103	66 - 120
Carbon tetrachloride	50.0	63.5		ug/L		127	59 - 133
Chlorobenzene	50.0	47.6		ug/L		95	70 - 120
Chloroethane	50.0	50.0		ug/L		100	48 - 136
Chloroform	50.0	51.4		ug/L		103	70 - 120
2-Chlorotoluene	50.0	46.4		ug/L		93	70 - 125
4-Chlorotoluene	50.0	47.1		ug/L		94	68 - 124
cis-1,2-Dichloroethene	50.0	49.4		ug/L		99	70 - 125
cis-1,3-Dichloropropene	50.0	49.9		ug/L		100	64 - 127
Dibromochloromethane	50.0	49.7		ug/L		99	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	46.8		ug/L		94	56 - 123
Ethylene Dibromide	50.0	47.2		ug/L		94	70 - 125
Dichlorodifluoromethane	50.0	62.8		ug/L		126	40 - 159
1,1-Dichloroethane	50.0	45.7		ug/L		91	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

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

Lab Sample ID: LCS 500-609058/4

Matrix: Water

Analysis Batch: 609058

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	51.5		ug/L		103	68 - 127
1,1-Dichloroethene	50.0	51.7		ug/L		103	67 - 122
1,2-Dichloropropane	50.0	42.6		ug/L		85	67 - 130
1,3-Dichloropropane	50.0	50.0		ug/L		100	62 - 136
2,2-Dichloropropane	50.0	56.1		ug/L		112	58 - 139
1,1-Dichloropropene	50.0	57.3		ug/L		115	70 - 121
Ethylbenzene	50.0	48.6		ug/L		97	70 - 123
Hexachlorobutadiene	50.0	47.6		ug/L		95	51 - 150
Isopropylbenzene	50.0	48.8		ug/L		98	70 - 126
1,3-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 125
Bromomethane	50.0	88.2	*	ug/L		176	40 - 152
Chloromethane	50.0	38.2		ug/L		76	56 - 152
Dibromomethane	50.0	55.2		ug/L		110	70 - 120
Methylene Chloride	50.0	46.9		ug/L		94	69 - 125
2-Butanone (MEK)	50.0	49.1		ug/L		98	46 - 144
Methyl tert-butyl ether	50.0	51.8		ug/L		104	55 - 123
Naphthalene	50.0	36.5		ug/L		73	53 - 144
n-Butylbenzene	50.0	49.0		ug/L		98	68 - 125
N-Propylbenzene	50.0	47.9		ug/L		96	69 - 127
1,2-Dichlorobenzene	50.0	46.3		ug/L		93	70 - 125
1,4-Dichlorobenzene	50.0	48.0		ug/L		96	70 - 120
p-Isopropyltoluene	50.0	47.9		ug/L		96	70 - 125
sec-Butylbenzene	50.0	48.1		ug/L		96	70 - 123
Styrene	50.0	50.8		ug/L		102	70 - 120
tert-Butylbenzene	50.0	46.4		ug/L		93	70 - 121
1,1,1,2-Tetrachloroethane	50.0	51.7		ug/L		103	70 - 125
1,1,2,2-Tetrachloroethane	50.0	41.3		ug/L		83	62 - 140
Tetrachloroethene	50.0	54.0		ug/L		108	70 - 128
Tetrahydrofuran	100	76.5		ug/L		77	59 - 139
Toluene	50.0	48.5		ug/L		97	70 - 125
trans-1,2-Dichloroethene	50.0	50.7		ug/L		101	70 - 125
trans-1,3-Dichloropropene	50.0	50.9		ug/L		102	62 - 128
1,2,3-Trichlorobenzene	50.0	38.3		ug/L		77	51 - 145
1,2,4-Trichlorobenzene	50.0	42.6		ug/L		85	57 - 137
1,1,1-Trichloroethane	50.0	59.4		ug/L		119	70 - 125
1,1,2-Trichloroethane	50.0	46.5		ug/L		93	71 - 130
Trichloroethene	50.0	55.7		ug/L		111	70 - 125
Trichlorofluoromethane	50.0	63.8		ug/L		128	55 - 128
1,2,3-Trichloropropane	50.0	46.3		ug/L		93	50 - 133
1,2,4-Trimethylbenzene	50.0	48.7		ug/L		97	70 - 123
1,3,5-Trimethylbenzene	50.0	48.6		ug/L		97	70 - 123
Vinyl chloride	50.0	47.1		ug/L		94	64 - 126
Xylenes, Total	100	99.6		ug/L		100	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	88		72 - 124
Dibromofluoromethane	107		75 - 120
1,2-Dichloroethane-d4 (Surr)	113		75 - 126

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

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

Lab Sample ID: LCS 500-609058/4
Matrix: Water
Analysis Batch: 609058

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

<i>Surrogate</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>Toluene-d8 (Surr)</i>	97		75 - 120

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Client Sample ID: P-32

Date Collected: 06/30/21 13:25

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201789-1

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	609058	07/13/21 16:05	JDD	TAL CHI

Client Sample ID: MW-33

Date Collected: 06/30/21 13:05

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201789-2

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	609058	07/13/21 16:33	JDD	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201789-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

1

2

3

4

5

6

7

8

9

10

11

12

13


14

15

Address _____

Regulatory Program: DW NPDES RCRA Other

TAL-8210

Client Contact		Project Manager		Site Contact		Date		COC No	
Company Name Cedar Corporation		Tel/Email		Lab Contact Fredrick, Sandie		Carrier		1 of 1 COCs	
Address 604 Wilson Avenue		Analysis Turnaround Time		 500-201789 COC		Filtered Sample (Y/N) Perform MS/MSD (Y/N) VOCs		Sampler BJI	
City/State/Zip Menomonee / WI / 54751		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____						For Lab Use Only	
Phone 715-235-9081 (Tel)		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Walk-in Client	
Project Name Town of Warren								Lab Sampling	
Site								Job / SDG No	
P O #								500-201789	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes		
1 2 P-32		6-30-21	1:25		Water	3	X		
MW-33		6-30-21	1:05		Water	3	↓		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other _____									
Possible Hazard Identification Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) 1,2-70, 2, 2, 9-72, 5 <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments: Will need EDDs in the future, no GEM IDs created yet									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd		Corr'd		Therm ID No	
Relinquished by Kurt K...		Company Cedar Corp		Date/Time 7/1/21 1000		Received by		Company	
Relinquished by		Company		Date/Time		Received by		Company	
Relinquished by		Company		Date/Time		Received in Laboratory by Steve Scott		Company EPA-CH#	
								7/2/21 0945	

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-201789-1

Login Number: 201789

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.2,2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-201791-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
7/19/2021 11:24:04 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	7
Sample Summary	8
Client Sample Results	9
Definitions	71
QC Association	72
Surrogate Summary	73
QC Sample Results	74
Chronicle	87
Certification Summary	92
Chain of Custody	93
Receipt Checklists	96

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Job ID: 500-201791-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-201791-1

Comments

No additional comments.

Receipt

The samples were received on 7/2/2021 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.2° C and 2.5° C.

Receipt Exceptions

Received 1 VOA vial broken for sample 15.

GC/MS VOA

Method 8260B: The following sample(s) had pH outside the required criteria when verified by the laboratory. The samples were analyzed within the 14-day holding time specified for preserved samples: MW-1 (500-201791-1), P-6 (500-201791-5), MW-17 (500-201791-16), P-19 (500-201791-18), P-20 (500-201791-19) and P-23 (500-201791-22). These vials were preserved with ascorbic acid.

Method 8260B: The matrix spike duplicate (MSD) for the following sample was analyzed outside the 12 hour tune window. No further action was taken. P-27 (500-201791-28)

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-1

Lab Sample ID: 500-201791-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.7	J	10	1.7	ug/L	1		8260B	Total/NA
Trichloroethene	2.7		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 500-201791-2

No Detections.

Client Sample ID: P-4

Lab Sample ID: 500-201791-3

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	9.3		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 500-201791-4

No Detections.

Client Sample ID: P-6

Lab Sample ID: 500-201791-5

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.2	J	10	1.7	ug/L	1		8260B	Total/NA
Trichloroethene	0.42	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 500-201791-6

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.64		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-8

Lab Sample ID: 500-201791-7

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	82		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 500-201791-8

No Detections.

Client Sample ID: P-10

Lab Sample ID: 500-201791-9

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	31		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 500-201791-10

No Detections.

Client Sample ID: MW-3

Lab Sample ID: 500-201791-11

No Detections.

Client Sample ID: MW-13

Lab Sample ID: 500-201791-12

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.7		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-14

Lab Sample ID: 500-201791-13

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.2		0.50	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-15

Lab Sample ID: 500-201791-14

No Detections.

Client Sample ID: MW-16

Lab Sample ID: 500-201791-15

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	65		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 500-201791-16

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	89		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-18

Lab Sample ID: 500-201791-17

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.3	J	10	1.7	ug/L	1		8260B	Total/NA
Trichloroethene	38		0.50	0.16	ug/L	1		8260B	Total/NA
Xylenes, Total	0.22	J	1.0	0.22	ug/L	1		8260B	Total/NA

Client Sample ID: P-19

Lab Sample ID: 500-201791-18

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.8	J	10	1.7	ug/L	1		8260B	Total/NA
Benzene	0.19	J	0.50	0.15	ug/L	1		8260B	Total/NA
Trichloroethene	2.5		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-20

Lab Sample ID: 500-201791-19

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.2	J	10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: MW-21

Lab Sample ID: 500-201791-20

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	100		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-22

Lab Sample ID: 500-201791-21

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	140		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-23

Lab Sample ID: 500-201791-22

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	20		10	1.7	ug/L	1		8260B	Total/NA
Trichloroethene	0.17	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-24

Lab Sample ID: 500-201791-23

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	53		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-25S

Lab Sample ID: 500-201791-24

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	47		0.50	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-25D

Lab Sample ID: 500-201791-25

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	140		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-26

Lab Sample ID: 500-201791-26

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	100		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-28

Lab Sample ID: 500-201791-27

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.9		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-27

Lab Sample ID: 500-201791-28

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.21	J	0.50	0.15	ug/L	1		8260B	Total/NA
Chloromethane	0.47	J	1.0	0.32	ug/L	1		8260B	Total/NA
Trichloroethene	0.69		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-29

Lab Sample ID: 500-201791-29

No Detections.

Client Sample ID: P-30

Lab Sample ID: 500-201791-30

No Detections.

Client Sample ID: MW-31

Lab Sample ID: 500-201791-31

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	21		0.50	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Euofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-201791-1	MW-1	Water	06/30/21 11:40	07/02/21 09:45	
500-201791-2	MW-2	Water	06/29/21 12:25	07/02/21 09:45	
500-201791-3	P-4	Water	06/28/21 12:40	07/02/21 09:45	
500-201791-4	MW-5	Water	06/28/21 14:50	07/02/21 09:45	
500-201791-5	P-6	Water	06/29/21 10:30	07/02/21 09:45	
500-201791-6	MW-7	Water	06/30/21 09:05	07/02/21 09:45	
500-201791-7	MW-8	Water	06/30/21 09:20	07/02/21 09:45	
500-201791-8	MW-9	Water	06/28/21 11:40	07/02/21 09:45	
500-201791-9	P-10	Water	06/28/21 11:15	07/02/21 09:45	
500-201791-10	MW-11	Water	06/28/21 10:40	07/02/21 09:45	
500-201791-11	MW-3	Water	06/28/21 12:15	07/02/21 09:45	
500-201791-12	MW-13	Water	06/28/21 10:05	07/02/21 09:45	
500-201791-13	P-14	Water	06/28/21 09:40	07/02/21 09:45	
500-201791-14	P-15	Water	06/28/21 09:00	07/02/21 09:45	
500-201791-15	MW-16	Water	06/29/21 12:05	07/02/21 09:45	
500-201791-16	MW-17	Water	06/30/21 11:05	07/02/21 09:45	
500-201791-17	P-18	Water	06/30/21 11:20	07/02/21 09:45	
500-201791-18	P-19	Water	06/30/21 10:20	07/02/21 09:45	
500-201791-19	P-20	Water	06/29/21 11:05	07/02/21 09:45	
500-201791-20	MW-21	Water	06/30/21 14:05	07/02/21 09:45	
500-201791-21	MW-22	Water	06/29/21 15:15	07/02/21 09:45	
500-201791-22	P-23	Water	06/30/21 15:50	07/02/21 09:45	
500-201791-23	MW-24	Water	06/30/21 09:45	07/02/21 09:45	
500-201791-24	P-25S	Water	06/30/21 12:10	07/02/21 09:45	
500-201791-25	P-25D	Water	06/30/21 12:30	07/02/21 09:45	
500-201791-26	MW-26	Water	06/30/21 08:15	07/02/21 09:45	
500-201791-27	MW-28	Water	06/30/21 08:40	07/02/21 09:45	
500-201791-28	P-27	Water	06/29/21 14:35	07/02/21 09:45	
500-201791-29	MW-29	Water	06/28/21 14:25	07/02/21 09:45	
500-201791-30	P-30	Water	06/28/21 14:05	07/02/21 09:45	
500-201791-31	MW-31	Water	06/28/21 13:25	07/02/21 09:45	

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-1

Lab Sample ID: 500-201791-1

Date Collected: 06/30/21 11:40

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.7	J	10	1.7	ug/L			07/09/21 17:18	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 17:18	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 17:18	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 17:18	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 17:18	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 17:18	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 17:18	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 17:18	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 17:18	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 17:18	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 17:18	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 17:18	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 17:18	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 17:18	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 17:18	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 17:18	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 17:18	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 17:18	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 17:18	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 17:18	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 17:18	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 17:18	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 17:18	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 17:18	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 17:18	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 17:18	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 17:18	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 17:18	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 17:18	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 17:18	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 17:18	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 17:18	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 17:18	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 17:18	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 17:18	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 17:18	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 17:18	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 17:18	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 17:18	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 17:18	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 17:18	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 17:18	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 17:18	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 17:18	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 17:18	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 17:18	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 17:18	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 17:18	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 17:18	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-1

Lab Sample ID: 500-201791-1

Date Collected: 06/30/21 11:40

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 17:18	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 17:18	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 17:18	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 17:18	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 17:18	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 17:18	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 17:18	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 17:18	1
Trichloroethene	2.7		0.50	0.16	ug/L			07/09/21 17:18	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 17:18	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 17:18	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 17:18	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 17:18	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 17:18	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		07/09/21 17:18	1
Dibromofluoromethane	103		75 - 120		07/09/21 17:18	1
1,2-Dichloroethane-d4 (Surr)	93		75 - 126		07/09/21 17:18	1
Toluene-d8 (Surr)	97		75 - 120		07/09/21 17:18	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-2

Lab Sample ID: 500-201791-2

Date Collected: 06/29/21 12:25

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 17:43	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 17:43	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 17:43	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 17:43	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 17:43	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 17:43	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 17:43	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 17:43	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 17:43	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 17:43	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 17:43	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 17:43	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 17:43	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 17:43	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 17:43	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 17:43	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 17:43	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 17:43	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 17:43	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 17:43	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 17:43	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 17:43	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 17:43	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 17:43	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 17:43	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 17:43	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 17:43	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 17:43	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 17:43	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 17:43	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 17:43	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 17:43	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 17:43	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 17:43	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 17:43	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 17:43	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 17:43	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 17:43	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 17:43	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 17:43	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 17:43	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 17:43	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 17:43	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 17:43	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 17:43	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 17:43	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 17:43	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 17:43	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 17:43	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-2

Lab Sample ID: 500-201791-2

Date Collected: 06/29/21 12:25

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 17:43	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 17:43	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 17:43	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 17:43	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 17:43	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 17:43	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 17:43	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 17:43	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/09/21 17:43	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 17:43	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 17:43	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 17:43	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 17:43	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 17:43	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		07/09/21 17:43	1
Dibromofluoromethane	102		75 - 120		07/09/21 17:43	1
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		07/09/21 17:43	1
Toluene-d8 (Surr)	95		75 - 120		07/09/21 17:43	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-4

Lab Sample ID: 500-201791-3

Date Collected: 06/28/21 12:40

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 12:15	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 12:15	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 12:15	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 12:15	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 12:15	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 12:15	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 12:15	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 12:15	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 12:15	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 12:15	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 12:15	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 12:15	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 12:15	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 12:15	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 12:15	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 12:15	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 12:15	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 12:15	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 12:15	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 12:15	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 12:15	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 12:15	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 12:15	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 12:15	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 12:15	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 12:15	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 12:15	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 12:15	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 12:15	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 12:15	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 12:15	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 12:15	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 12:15	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 12:15	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 12:15	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 12:15	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 12:15	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 12:15	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 12:15	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 12:15	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 12:15	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 12:15	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 12:15	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 12:15	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 12:15	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 12:15	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 12:15	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 12:15	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 12:15	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-4

Lab Sample ID: 500-201791-3

Date Collected: 06/28/21 12:40

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 12:15	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 12:15	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 12:15	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 12:15	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 12:15	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 12:15	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 12:15	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 12:15	1
Trichloroethene	9.3		0.50	0.16	ug/L			07/09/21 12:15	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 12:15	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 12:15	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 12:15	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 12:15	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 12:15	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 12:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124					07/09/21 12:15	1
Dibromofluoromethane	98		75 - 120					07/09/21 12:15	1
1,2-Dichloroethane-d4 (Surr)	88		75 - 126					07/09/21 12:15	1
Toluene-d8 (Surr)	97		75 - 120					07/09/21 12:15	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-5

Lab Sample ID: 500-201791-4

Date Collected: 06/28/21 14:50

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 12:40	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 12:40	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 12:40	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 12:40	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 12:40	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 12:40	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 12:40	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 12:40	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 12:40	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 12:40	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 12:40	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 12:40	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 12:40	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 12:40	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 12:40	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 12:40	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 12:40	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 12:40	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 12:40	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 12:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 12:40	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 12:40	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 12:40	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 12:40	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 12:40	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 12:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 12:40	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 12:40	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 12:40	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 12:40	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 12:40	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 12:40	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 12:40	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 12:40	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 12:40	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 12:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 12:40	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 12:40	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 12:40	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 12:40	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 12:40	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 12:40	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 12:40	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 12:40	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 12:40	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 12:40	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 12:40	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 12:40	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 12:40	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-5
Date Collected: 06/28/21 14:50
Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-4
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 12:40	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 12:40	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 12:40	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 12:40	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 12:40	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 12:40	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 12:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 12:40	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/09/21 12:40	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 12:40	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 12:40	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 12:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 12:40	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 12:40	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 12:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		07/09/21 12:40	1
Dibromofluoromethane	96		75 - 120		07/09/21 12:40	1
1,2-Dichloroethane-d4 (Surr)	86		75 - 126		07/09/21 12:40	1
Toluene-d8 (Surr)	98		75 - 120		07/09/21 12:40	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-6

Lab Sample ID: 500-201791-5

Date Collected: 06/29/21 10:30

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.2	J	10	1.7	ug/L			07/09/21 18:08	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 18:08	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 18:08	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 18:08	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 18:08	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 18:08	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 18:08	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 18:08	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 18:08	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 18:08	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 18:08	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 18:08	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 18:08	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 18:08	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 18:08	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 18:08	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 18:08	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 18:08	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 18:08	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 18:08	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 18:08	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 18:08	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 18:08	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 18:08	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 18:08	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 18:08	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 18:08	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 18:08	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 18:08	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 18:08	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 18:08	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 18:08	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 18:08	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 18:08	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 18:08	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 18:08	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 18:08	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 18:08	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 18:08	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 18:08	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 18:08	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 18:08	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 18:08	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 18:08	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 18:08	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 18:08	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 18:08	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 18:08	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 18:08	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-6

Lab Sample ID: 500-201791-5

Date Collected: 06/29/21 10:30

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 18:08	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 18:08	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 18:08	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 18:08	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 18:08	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 18:08	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 18:08	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 18:08	1
Trichloroethene	0.42	J	0.50	0.16	ug/L			07/09/21 18:08	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 18:08	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 18:08	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 18:08	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 18:08	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 18:08	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 18:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		07/09/21 18:08	1
Dibromofluoromethane	102		75 - 120		07/09/21 18:08	1
1,2-Dichloroethane-d4 (Surr)	91		75 - 126		07/09/21 18:08	1
Toluene-d8 (Surr)	96		75 - 120		07/09/21 18:08	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-7

Lab Sample ID: 500-201791-6

Date Collected: 06/30/21 09:05

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 11:55	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 11:55	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 11:55	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 11:55	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 11:55	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 11:55	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 11:55	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 11:55	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 11:55	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 11:55	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 11:55	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 11:55	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 11:55	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 11:55	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 11:55	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 11:55	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 11:55	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 11:55	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 11:55	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 11:55	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 11:55	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 11:55	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 11:55	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 11:55	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 11:55	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 11:55	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 11:55	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 11:55	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 11:55	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 11:55	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 11:55	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 11:55	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 11:55	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 11:55	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 11:55	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 11:55	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 11:55	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 11:55	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 11:55	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 11:55	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 11:55	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 11:55	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 11:55	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 11:55	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 11:55	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 11:55	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 11:55	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 11:55	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 11:55	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-7

Lab Sample ID: 500-201791-6

Date Collected: 06/30/21 09:05

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 11:55	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 11:55	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 11:55	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 11:55	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 11:55	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 11:55	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 11:55	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 11:55	1
Trichloroethene	0.64		0.50	0.16	ug/L			07/12/21 11:55	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 11:55	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 11:55	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 11:55	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 11:55	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 11:55	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 11:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124		07/12/21 11:55	1
Dibromofluoromethane	97		75 - 120		07/12/21 11:55	1
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		07/12/21 11:55	1
Toluene-d8 (Surr)	102		75 - 120		07/12/21 11:55	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-8

Lab Sample ID: 500-201791-7

Date Collected: 06/30/21 09:20

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 12:21	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 12:21	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 12:21	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 12:21	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 12:21	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 12:21	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 12:21	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 12:21	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 12:21	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 12:21	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 12:21	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 12:21	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 12:21	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 12:21	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 12:21	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 12:21	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 12:21	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 12:21	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 12:21	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 12:21	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 12:21	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 12:21	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 12:21	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 12:21	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 12:21	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 12:21	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 12:21	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 12:21	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 12:21	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 12:21	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 12:21	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 12:21	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 12:21	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 12:21	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 12:21	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 12:21	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 12:21	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 12:21	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 12:21	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 12:21	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 12:21	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 12:21	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 12:21	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 12:21	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 12:21	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 12:21	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 12:21	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 12:21	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 12:21	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-8
Date Collected: 06/30/21 09:20
Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-7
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 12:21	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 12:21	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 12:21	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 12:21	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 12:21	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 12:21	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 12:21	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 12:21	1
Trichloroethene	82		0.50	0.16	ug/L			07/12/21 12:21	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 12:21	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 12:21	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 12:21	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 12:21	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 12:21	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 12:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		07/12/21 12:21	1
Dibromofluoromethane	99		75 - 120		07/12/21 12:21	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/12/21 12:21	1
Toluene-d8 (Surr)	101		75 - 120		07/12/21 12:21	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-9

Lab Sample ID: 500-201791-8

Date Collected: 06/28/21 11:40

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 13:05	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 13:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 13:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 13:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 13:05	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 13:05	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 13:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 13:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 13:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 13:05	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 13:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 13:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 13:05	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 13:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 13:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 13:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 13:05	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 13:05	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 13:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 13:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 13:05	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 13:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 13:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 13:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 13:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 13:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 13:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 13:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 13:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 13:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 13:05	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 13:05	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 13:05	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 13:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 13:05	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 13:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 13:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 13:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 13:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 13:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 13:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 13:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 13:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 13:05	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 13:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 13:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 13:05	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 13:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 13:05	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-9

Lab Sample ID: 500-201791-8

Date Collected: 06/28/21 11:40

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 13:05	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 13:05	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 13:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 13:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 13:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 13:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 13:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 13:05	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/09/21 13:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 13:05	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 13:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 13:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 13:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 13:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 13:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124					07/09/21 13:05	1
Dibromofluoromethane	100		75 - 120					07/09/21 13:05	1
1,2-Dichloroethane-d4 (Surr)	88		75 - 126					07/09/21 13:05	1
Toluene-d8 (Surr)	98		75 - 120					07/09/21 13:05	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-10

Lab Sample ID: 500-201791-9

Date Collected: 06/28/21 11:15

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 13:30	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 13:30	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 13:30	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 13:30	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 13:30	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 13:30	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 13:30	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 13:30	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 13:30	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 13:30	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 13:30	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 13:30	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 13:30	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 13:30	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 13:30	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 13:30	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 13:30	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 13:30	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 13:30	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 13:30	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 13:30	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 13:30	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 13:30	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 13:30	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 13:30	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 13:30	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 13:30	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 13:30	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 13:30	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 13:30	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 13:30	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 13:30	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 13:30	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 13:30	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 13:30	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 13:30	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 13:30	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 13:30	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 13:30	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 13:30	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 13:30	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 13:30	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 13:30	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 13:30	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 13:30	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 13:30	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 13:30	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 13:30	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 13:30	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-10

Lab Sample ID: 500-201791-9

Date Collected: 06/28/21 11:15

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 13:30	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 13:30	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 13:30	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 13:30	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 13:30	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 13:30	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 13:30	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 13:30	1
Trichloroethene	31		0.50	0.16	ug/L			07/09/21 13:30	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 13:30	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 13:30	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 13:30	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 13:30	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 13:30	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 13:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124					07/09/21 13:30	1
Dibromofluoromethane	99		75 - 120					07/09/21 13:30	1
1,2-Dichloroethane-d4 (Surr)	88		75 - 126					07/09/21 13:30	1
Toluene-d8 (Surr)	99		75 - 120					07/09/21 13:30	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-11

Lab Sample ID: 500-201791-10

Date Collected: 06/28/21 10:40

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 13:56	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 13:56	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 13:56	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 13:56	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 13:56	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 13:56	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 13:56	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 13:56	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 13:56	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 13:56	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 13:56	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 13:56	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 13:56	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 13:56	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 13:56	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 13:56	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 13:56	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 13:56	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 13:56	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 13:56	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 13:56	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 13:56	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 13:56	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 13:56	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 13:56	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 13:56	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 13:56	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 13:56	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 13:56	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 13:56	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 13:56	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 13:56	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 13:56	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 13:56	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 13:56	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 13:56	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 13:56	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 13:56	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 13:56	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 13:56	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 13:56	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 13:56	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 13:56	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 13:56	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 13:56	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 13:56	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 13:56	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 13:56	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 13:56	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-11
Date Collected: 06/28/21 10:40
Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-10
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 13:56	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 13:56	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 13:56	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 13:56	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 13:56	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 13:56	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 13:56	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 13:56	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/09/21 13:56	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 13:56	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 13:56	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 13:56	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 13:56	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 13:56	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		07/09/21 13:56	1
Dibromofluoromethane	101		75 - 120		07/09/21 13:56	1
1,2-Dichloroethane-d4 (Surr)	88		75 - 126		07/09/21 13:56	1
Toluene-d8 (Surr)	97		75 - 120		07/09/21 13:56	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-3

Lab Sample ID: 500-201791-11

Date Collected: 06/28/21 12:15

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 14:21	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 14:21	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 14:21	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 14:21	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 14:21	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 14:21	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 14:21	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 14:21	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 14:21	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 14:21	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 14:21	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 14:21	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 14:21	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 14:21	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 14:21	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 14:21	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 14:21	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 14:21	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 14:21	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 14:21	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 14:21	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 14:21	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 14:21	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 14:21	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 14:21	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 14:21	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 14:21	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 14:21	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 14:21	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 14:21	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 14:21	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 14:21	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 14:21	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 14:21	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 14:21	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 14:21	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 14:21	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 14:21	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 14:21	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 14:21	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 14:21	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 14:21	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 14:21	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 14:21	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 14:21	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 14:21	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 14:21	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 14:21	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 14:21	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-3
Date Collected: 06/28/21 12:15
Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-11
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 14:21	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 14:21	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 14:21	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 14:21	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 14:21	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 14:21	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 14:21	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 14:21	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/09/21 14:21	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 14:21	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 14:21	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 14:21	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 14:21	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 14:21	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 14:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124		07/09/21 14:21	1
Dibromofluoromethane	98		75 - 120		07/09/21 14:21	1
1,2-Dichloroethane-d4 (Surr)	88		75 - 126		07/09/21 14:21	1
Toluene-d8 (Surr)	98		75 - 120		07/09/21 14:21	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-13

Lab Sample ID: 500-201791-12

Date Collected: 06/28/21 10:05

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 14:47	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 14:47	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 14:47	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 14:47	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 14:47	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 14:47	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 14:47	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 14:47	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 14:47	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 14:47	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 14:47	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 14:47	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 14:47	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 14:47	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 14:47	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 14:47	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 14:47	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 14:47	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 14:47	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 14:47	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 14:47	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 14:47	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 14:47	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 14:47	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 14:47	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 14:47	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 14:47	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 14:47	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 14:47	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 14:47	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 14:47	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 14:47	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 14:47	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 14:47	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 14:47	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 14:47	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 14:47	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 14:47	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 14:47	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 14:47	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 14:47	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 14:47	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 14:47	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 14:47	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 14:47	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 14:47	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 14:47	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 14:47	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 14:47	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-13
Date Collected: 06/28/21 10:05
Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-12
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 14:47	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 14:47	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 14:47	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 14:47	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 14:47	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 14:47	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 14:47	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 14:47	1
Trichloroethene	1.7		0.50	0.16	ug/L			07/09/21 14:47	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 14:47	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 14:47	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 14:47	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 14:47	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 14:47	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 14:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		07/09/21 14:47	1
Dibromofluoromethane	100		75 - 120		07/09/21 14:47	1
1,2-Dichloroethane-d4 (Surr)	92		75 - 126		07/09/21 14:47	1
Toluene-d8 (Surr)	96		75 - 120		07/09/21 14:47	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-14

Lab Sample ID: 500-201791-13

Date Collected: 06/28/21 09:40

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 15:12	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 15:12	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 15:12	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 15:12	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 15:12	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 15:12	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 15:12	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 15:12	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 15:12	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 15:12	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 15:12	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 15:12	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 15:12	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 15:12	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 15:12	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 15:12	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 15:12	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 15:12	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 15:12	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 15:12	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 15:12	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 15:12	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 15:12	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 15:12	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 15:12	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 15:12	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 15:12	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 15:12	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 15:12	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 15:12	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 15:12	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 15:12	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 15:12	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 15:12	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 15:12	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 15:12	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 15:12	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 15:12	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 15:12	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 15:12	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 15:12	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 15:12	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 15:12	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 15:12	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 15:12	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 15:12	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 15:12	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 15:12	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 15:12	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-14

Lab Sample ID: 500-201791-13

Date Collected: 06/28/21 09:40

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 15:12	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 15:12	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 15:12	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 15:12	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 15:12	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 15:12	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 15:12	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 15:12	1
Trichloroethene	3.2		0.50	0.16	ug/L			07/09/21 15:12	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 15:12	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 15:12	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 15:12	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 15:12	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 15:12	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124		07/09/21 15:12	1
Dibromofluoromethane	102		75 - 120		07/09/21 15:12	1
1,2-Dichloroethane-d4 (Surr)	88		75 - 126		07/09/21 15:12	1
Toluene-d8 (Surr)	97		75 - 120		07/09/21 15:12	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-15

Lab Sample ID: 500-201791-14

Date Collected: 06/28/21 09:00

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 15:37	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 15:37	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 15:37	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 15:37	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 15:37	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 15:37	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 15:37	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 15:37	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 15:37	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 15:37	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 15:37	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 15:37	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 15:37	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 15:37	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 15:37	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 15:37	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 15:37	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 15:37	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 15:37	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 15:37	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 15:37	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 15:37	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 15:37	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 15:37	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 15:37	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 15:37	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 15:37	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 15:37	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 15:37	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 15:37	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 15:37	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 15:37	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 15:37	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 15:37	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 15:37	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 15:37	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 15:37	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 15:37	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 15:37	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 15:37	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 15:37	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 15:37	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 15:37	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 15:37	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 15:37	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 15:37	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 15:37	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 15:37	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 15:37	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-15

Lab Sample ID: 500-201791-14

Date Collected: 06/28/21 09:00

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 15:37	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 15:37	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 15:37	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 15:37	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 15:37	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 15:37	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 15:37	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 15:37	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/09/21 15:37	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 15:37	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 15:37	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 15:37	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 15:37	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 15:37	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		07/09/21 15:37	1
Dibromofluoromethane	99		75 - 120		07/09/21 15:37	1
1,2-Dichloroethane-d4 (Surr)	90		75 - 126		07/09/21 15:37	1
Toluene-d8 (Surr)	97		75 - 120		07/09/21 15:37	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-16

Lab Sample ID: 500-201791-15

Date Collected: 06/29/21 12:05

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 12:47	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 12:47	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 12:47	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 12:47	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 12:47	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 12:47	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 12:47	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 12:47	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 12:47	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 12:47	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 12:47	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 12:47	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 12:47	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 12:47	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 12:47	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 12:47	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 12:47	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 12:47	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 12:47	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 12:47	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 12:47	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 12:47	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 12:47	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 12:47	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 12:47	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 12:47	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 12:47	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 12:47	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 12:47	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 12:47	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 12:47	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 12:47	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 12:47	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 12:47	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 12:47	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 12:47	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 12:47	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 12:47	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 12:47	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 12:47	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 12:47	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 12:47	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 12:47	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 12:47	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 12:47	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 12:47	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 12:47	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 12:47	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 12:47	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-16

Lab Sample ID: 500-201791-15

Date Collected: 06/29/21 12:05

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 12:47	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 12:47	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 12:47	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 12:47	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 12:47	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 12:47	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 12:47	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 12:47	1
Trichloroethene	65		0.50	0.16	ug/L			07/12/21 12:47	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 12:47	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 12:47	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 12:47	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 12:47	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 12:47	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 12:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		07/12/21 12:47	1
Dibromofluoromethane	98		75 - 120		07/12/21 12:47	1
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		07/12/21 12:47	1
Toluene-d8 (Surr)	101		75 - 120		07/12/21 12:47	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-17

Lab Sample ID: 500-201791-16

Date Collected: 06/30/21 11:05

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 13:13	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 13:13	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 13:13	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 13:13	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 13:13	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 13:13	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 13:13	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 13:13	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 13:13	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 13:13	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 13:13	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 13:13	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 13:13	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 13:13	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 13:13	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 13:13	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 13:13	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 13:13	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 13:13	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 13:13	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 13:13	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 13:13	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 13:13	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 13:13	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 13:13	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 13:13	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 13:13	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 13:13	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 13:13	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 13:13	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 13:13	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 13:13	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 13:13	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 13:13	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 13:13	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 13:13	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 13:13	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 13:13	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 13:13	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 13:13	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 13:13	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 13:13	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 13:13	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 13:13	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 13:13	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 13:13	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 13:13	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 13:13	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 13:13	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-17
Date Collected: 06/30/21 11:05
Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-16
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 13:13	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 13:13	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 13:13	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 13:13	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 13:13	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 13:13	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 13:13	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 13:13	1
Trichloroethene	89		0.50	0.16	ug/L			07/12/21 13:13	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 13:13	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 13:13	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 13:13	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 13:13	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 13:13	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 13:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		07/12/21 13:13	1
Dibromofluoromethane	100		75 - 120		07/12/21 13:13	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/12/21 13:13	1
Toluene-d8 (Surr)	102		75 - 120		07/12/21 13:13	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-18

Lab Sample ID: 500-201791-17

Date Collected: 06/30/21 11:20

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.3	J	10	1.7	ug/L			07/12/21 13:40	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 13:40	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 13:40	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 13:40	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 13:40	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 13:40	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 13:40	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 13:40	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 13:40	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 13:40	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 13:40	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 13:40	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 13:40	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 13:40	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 13:40	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 13:40	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 13:40	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 13:40	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 13:40	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 13:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 13:40	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 13:40	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 13:40	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 13:40	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 13:40	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 13:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 13:40	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 13:40	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 13:40	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 13:40	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 13:40	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 13:40	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 13:40	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 13:40	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 13:40	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 13:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 13:40	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 13:40	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 13:40	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 13:40	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 13:40	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 13:40	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 13:40	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 13:40	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 13:40	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 13:40	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 13:40	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 13:40	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 13:40	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-18

Lab Sample ID: 500-201791-17

Date Collected: 06/30/21 11:20

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 13:40	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 13:40	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 13:40	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 13:40	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 13:40	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 13:40	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 13:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 13:40	1
Trichloroethene	38		0.50	0.16	ug/L			07/12/21 13:40	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 13:40	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 13:40	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 13:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 13:40	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 13:40	1
Xylenes, Total	0.22	J	1.0	0.22	ug/L			07/12/21 13:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		07/12/21 13:40	1
Dibromofluoromethane	98		75 - 120		07/12/21 13:40	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		07/12/21 13:40	1
Toluene-d8 (Surr)	102		75 - 120		07/12/21 13:40	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-19

Lab Sample ID: 500-201791-18

Date Collected: 06/30/21 10:20

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	7.8	J	10	1.7	ug/L			07/12/21 14:06	1
Benzene	0.19	J	0.50	0.15	ug/L			07/12/21 14:06	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 14:06	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 14:06	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 14:06	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 14:06	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 14:06	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 14:06	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 14:06	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 14:06	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 14:06	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 14:06	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 14:06	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 14:06	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 14:06	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 14:06	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 14:06	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 14:06	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 14:06	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 14:06	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 14:06	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 14:06	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 14:06	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 14:06	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 14:06	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 14:06	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 14:06	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 14:06	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 14:06	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 14:06	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 14:06	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 14:06	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 14:06	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 14:06	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 14:06	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 14:06	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 14:06	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 14:06	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 14:06	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 14:06	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 14:06	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 14:06	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 14:06	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 14:06	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 14:06	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 14:06	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 14:06	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 14:06	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 14:06	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-19

Lab Sample ID: 500-201791-18

Date Collected: 06/30/21 10:20

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 14:06	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 14:06	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 14:06	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 14:06	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 14:06	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 14:06	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 14:06	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 14:06	1
Trichloroethene	2.5		0.50	0.16	ug/L			07/12/21 14:06	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 14:06	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 14:06	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 14:06	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 14:06	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 14:06	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 14:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		07/12/21 14:06	1
Dibromofluoromethane	100		75 - 120		07/12/21 14:06	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126		07/12/21 14:06	1
Toluene-d8 (Surr)	101		75 - 120		07/12/21 14:06	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-20

Lab Sample ID: 500-201791-19

Date Collected: 06/29/21 11:05

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.2	J	10	1.7	ug/L			07/12/21 14:31	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 14:31	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 14:31	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 14:31	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 14:31	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 14:31	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 14:31	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 14:31	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 14:31	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 14:31	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 14:31	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 14:31	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 14:31	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 14:31	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 14:31	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 14:31	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 14:31	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 14:31	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 14:31	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 14:31	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 14:31	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 14:31	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 14:31	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 14:31	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 14:31	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 14:31	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 14:31	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 14:31	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 14:31	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 14:31	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 14:31	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 14:31	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 14:31	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 14:31	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 14:31	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 14:31	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 14:31	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 14:31	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 14:31	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 14:31	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 14:31	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 14:31	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 14:31	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 14:31	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 14:31	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 14:31	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 14:31	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 14:31	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 14:31	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-20

Lab Sample ID: 500-201791-19

Date Collected: 06/29/21 11:05

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 14:31	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 14:31	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 14:31	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 14:31	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 14:31	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 14:31	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 14:31	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 14:31	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/12/21 14:31	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 14:31	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 14:31	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 14:31	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 14:31	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 14:31	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 14:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		07/12/21 14:31	1
Dibromofluoromethane	99		75 - 120		07/12/21 14:31	1
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		07/12/21 14:31	1
Toluene-d8 (Surr)	101		75 - 120		07/12/21 14:31	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-21

Lab Sample ID: 500-201791-20

Date Collected: 06/30/21 14:05

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 14:57	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 14:57	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 14:57	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 14:57	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 14:57	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 14:57	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 14:57	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 14:57	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 14:57	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 14:57	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 14:57	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 14:57	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 14:57	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 14:57	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 14:57	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 14:57	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 14:57	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 14:57	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 14:57	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 14:57	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 14:57	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 14:57	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 14:57	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 14:57	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 14:57	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 14:57	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 14:57	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 14:57	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 14:57	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 14:57	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 14:57	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 14:57	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 14:57	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 14:57	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 14:57	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 14:57	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 14:57	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 14:57	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 14:57	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 14:57	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 14:57	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 14:57	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 14:57	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 14:57	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 14:57	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 14:57	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 14:57	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 14:57	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 14:57	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-21

Lab Sample ID: 500-201791-20

Date Collected: 06/30/21 14:05

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 14:57	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 14:57	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 14:57	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 14:57	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 14:57	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 14:57	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 14:57	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 14:57	1
Trichloroethene	100		0.50	0.16	ug/L			07/12/21 14:57	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 14:57	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 14:57	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 14:57	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 14:57	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 14:57	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 14:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/12/21 14:57	1
Dibromofluoromethane	100		75 - 120		07/12/21 14:57	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/12/21 14:57	1
Toluene-d8 (Surr)	101		75 - 120		07/12/21 14:57	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-22

Lab Sample ID: 500-201791-21

Date Collected: 06/29/21 15:15

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 17:57	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 17:57	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 17:57	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 17:57	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 17:57	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 17:57	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 17:57	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 17:57	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 17:57	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 17:57	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 17:57	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 17:57	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 17:57	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 17:57	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 17:57	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 17:57	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 17:57	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 17:57	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 17:57	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 17:57	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 17:57	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 17:57	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 17:57	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 17:57	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 17:57	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 17:57	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 17:57	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 17:57	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 17:57	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 17:57	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 17:57	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 17:57	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 17:57	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 17:57	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 17:57	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 17:57	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 17:57	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 17:57	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 17:57	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 17:57	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 17:57	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 17:57	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 17:57	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 17:57	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 17:57	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 17:57	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 17:57	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 17:57	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 17:57	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-22

Lab Sample ID: 500-201791-21

Date Collected: 06/29/21 15:15

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 17:57	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 17:57	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 17:57	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 17:57	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 17:57	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 17:57	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 17:57	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 17:57	1
Trichloroethene	140		0.50	0.16	ug/L			07/12/21 17:57	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 17:57	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 17:57	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 17:57	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 17:57	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 17:57	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 17:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124					07/12/21 17:57	1
Dibromofluoromethane	100		75 - 120					07/12/21 17:57	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126					07/12/21 17:57	1
Toluene-d8 (Surr)	102		75 - 120					07/12/21 17:57	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-23

Lab Sample ID: 500-201791-22

Date Collected: 06/30/21 15:50

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20		10	1.7	ug/L			07/12/21 15:23	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 15:23	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 15:23	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 15:23	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 15:23	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 15:23	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 15:23	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 15:23	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 15:23	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 15:23	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 15:23	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 15:23	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 15:23	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 15:23	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 15:23	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 15:23	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 15:23	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 15:23	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 15:23	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 15:23	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 15:23	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 15:23	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 15:23	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 15:23	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 15:23	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 15:23	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 15:23	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 15:23	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 15:23	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 15:23	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 15:23	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 15:23	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 15:23	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 15:23	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 15:23	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 15:23	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 15:23	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 15:23	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 15:23	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 15:23	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 15:23	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 15:23	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 15:23	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 15:23	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 15:23	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 15:23	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 15:23	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 15:23	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 15:23	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-23

Lab Sample ID: 500-201791-22

Date Collected: 06/30/21 15:50

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 15:23	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 15:23	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 15:23	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 15:23	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 15:23	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 15:23	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 15:23	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 15:23	1
Trichloroethene	0.17	J	0.50	0.16	ug/L			07/12/21 15:23	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 15:23	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 15:23	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 15:23	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 15:23	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 15:23	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 15:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/12/21 15:23	1
Dibromofluoromethane	100		75 - 120		07/12/21 15:23	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		07/12/21 15:23	1
Toluene-d8 (Surr)	100		75 - 120		07/12/21 15:23	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-24

Lab Sample ID: 500-201791-23

Date Collected: 06/30/21 09:45

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 15:48	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 15:48	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 15:48	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 15:48	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 15:48	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 15:48	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 15:48	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 15:48	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 15:48	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 15:48	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 15:48	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 15:48	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 15:48	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 15:48	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 15:48	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 15:48	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 15:48	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 15:48	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 15:48	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 15:48	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 15:48	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 15:48	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 15:48	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 15:48	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 15:48	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 15:48	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 15:48	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 15:48	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 15:48	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 15:48	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 15:48	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 15:48	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 15:48	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 15:48	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 15:48	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 15:48	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 15:48	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 15:48	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 15:48	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 15:48	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 15:48	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 15:48	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 15:48	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 15:48	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 15:48	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 15:48	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 15:48	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 15:48	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 15:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-24
Date Collected: 06/30/21 09:45
Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-23
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 15:48	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 15:48	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 15:48	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 15:48	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 15:48	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 15:48	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 15:48	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 15:48	1
Trichloroethene	53		0.50	0.16	ug/L			07/12/21 15:48	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 15:48	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 15:48	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 15:48	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 15:48	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 15:48	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		07/12/21 15:48	1
Dibromofluoromethane	99		75 - 120		07/12/21 15:48	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126		07/12/21 15:48	1
Toluene-d8 (Surr)	101		75 - 120		07/12/21 15:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-25S

Lab Sample ID: 500-201791-24

Date Collected: 06/30/21 12:10

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 16:14	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 16:14	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 16:14	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 16:14	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 16:14	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 16:14	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 16:14	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 16:14	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 16:14	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 16:14	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 16:14	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 16:14	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 16:14	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 16:14	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 16:14	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 16:14	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 16:14	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 16:14	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 16:14	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 16:14	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 16:14	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 16:14	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 16:14	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 16:14	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 16:14	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 16:14	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 16:14	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 16:14	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 16:14	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 16:14	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 16:14	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 16:14	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 16:14	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 16:14	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 16:14	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 16:14	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 16:14	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 16:14	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 16:14	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 16:14	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 16:14	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 16:14	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 16:14	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 16:14	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 16:14	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 16:14	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 16:14	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 16:14	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 16:14	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-25S

Lab Sample ID: 500-201791-24

Date Collected: 06/30/21 12:10

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 16:14	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 16:14	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 16:14	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 16:14	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 16:14	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 16:14	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 16:14	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 16:14	1
Trichloroethene	47		0.50	0.16	ug/L			07/12/21 16:14	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 16:14	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 16:14	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 16:14	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 16:14	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 16:14	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124		07/12/21 16:14	1
Dibromofluoromethane	102		75 - 120		07/12/21 16:14	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		07/12/21 16:14	1
Toluene-d8 (Surr)	103		75 - 120		07/12/21 16:14	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-25D

Lab Sample ID: 500-201791-25

Date Collected: 06/30/21 12:30

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 18:49	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 18:49	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 18:49	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 18:49	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 18:49	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 18:49	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 18:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 18:49	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 18:49	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 18:49	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 18:49	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 18:49	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 18:49	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 18:49	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 18:49	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 18:49	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 18:49	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 18:49	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 18:49	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 18:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 18:49	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 18:49	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 18:49	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 18:49	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 18:49	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 18:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 18:49	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 18:49	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 18:49	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 18:49	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 18:49	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 18:49	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 18:49	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 18:49	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 18:49	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 18:49	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 18:49	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 18:49	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 18:49	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 18:49	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 18:49	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 18:49	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 18:49	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 18:49	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 18:49	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 18:49	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 18:49	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 18:49	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 18:49	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-25D

Lab Sample ID: 500-201791-25

Date Collected: 06/30/21 12:30

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 18:49	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 18:49	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 18:49	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 18:49	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 18:49	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 18:49	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 18:49	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 18:49	1
Trichloroethene	140		0.50	0.16	ug/L			07/12/21 18:49	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 18:49	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 18:49	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 18:49	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 18:49	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 18:49	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		07/12/21 18:49	1
Dibromofluoromethane	101		75 - 120		07/12/21 18:49	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/12/21 18:49	1
Toluene-d8 (Surr)	102		75 - 120		07/12/21 18:49	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-26

Lab Sample ID: 500-201791-26

Date Collected: 06/30/21 08:15

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 16:40	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 16:40	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 16:40	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 16:40	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 16:40	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 16:40	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 16:40	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 16:40	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 16:40	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 16:40	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 16:40	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 16:40	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 16:40	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 16:40	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 16:40	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 16:40	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 16:40	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 16:40	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 16:40	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 16:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 16:40	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 16:40	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 16:40	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 16:40	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 16:40	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 16:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 16:40	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 16:40	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 16:40	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 16:40	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 16:40	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 16:40	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 16:40	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 16:40	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 16:40	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 16:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 16:40	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 16:40	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 16:40	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 16:40	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 16:40	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 16:40	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 16:40	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 16:40	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 16:40	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 16:40	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 16:40	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 16:40	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 16:40	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-26
Date Collected: 06/30/21 08:15
Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-26
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 16:40	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 16:40	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 16:40	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 16:40	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 16:40	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 16:40	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 16:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 16:40	1
Trichloroethene	100		0.50	0.16	ug/L			07/12/21 16:40	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 16:40	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 16:40	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 16:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 16:40	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 16:40	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		07/12/21 16:40	1
Dibromofluoromethane	101		75 - 120		07/12/21 16:40	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		07/12/21 16:40	1
Toluene-d8 (Surr)	101		75 - 120		07/12/21 16:40	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-28

Lab Sample ID: 500-201791-27

Date Collected: 06/30/21 08:40

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 17:05	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 17:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 17:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 17:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 17:05	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 17:05	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 17:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 17:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 17:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 17:05	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 17:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 17:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 17:05	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 17:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 17:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 17:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 17:05	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 17:05	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 17:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 17:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 17:05	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 17:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 17:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 17:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 17:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 17:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 17:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 17:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 17:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 17:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 17:05	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 17:05	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 17:05	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 17:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 17:05	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 17:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 17:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 17:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 17:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 17:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 17:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 17:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 17:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 17:05	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 17:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 17:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 17:05	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 17:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 17:05	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-28

Lab Sample ID: 500-201791-27

Date Collected: 06/30/21 08:40

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 17:05	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 17:05	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 17:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 17:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 17:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 17:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 17:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 17:05	1
Trichloroethene	2.9		0.50	0.16	ug/L			07/12/21 17:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 17:05	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 17:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 17:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 17:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 17:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 17:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124		07/12/21 17:05	1
Dibromofluoromethane	102		75 - 120		07/12/21 17:05	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		07/12/21 17:05	1
Toluene-d8 (Surr)	102		75 - 120		07/12/21 17:05	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-27

Lab Sample ID: 500-201791-28

Date Collected: 06/29/21 14:35

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/12/21 17:31	1
Benzene	0.21	J	0.50	0.15	ug/L			07/12/21 17:31	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 17:31	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 17:31	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 17:31	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 17:31	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 17:31	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 17:31	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 17:31	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 17:31	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 17:31	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 17:31	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 17:31	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 17:31	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 17:31	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 17:31	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 17:31	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 17:31	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 17:31	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 17:31	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 17:31	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 17:31	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 17:31	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 17:31	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 17:31	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 17:31	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 17:31	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 17:31	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 17:31	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 17:31	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 17:31	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 17:31	1
Chloromethane	0.47	J	1.0	0.32	ug/L			07/12/21 17:31	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 17:31	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 17:31	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 17:31	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 17:31	1
Naphthalene	<0.34	F2	1.0	0.34	ug/L			07/12/21 17:31	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 17:31	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 17:31	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 17:31	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 17:31	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 17:31	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 17:31	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 17:31	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 17:31	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 17:31	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 17:31	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 17:31	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-27

Lab Sample ID: 500-201791-28

Date Collected: 06/29/21 14:35

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 17:31	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 17:31	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 17:31	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 17:31	1
1,2,3-Trichlorobenzene	<0.46	F2	1.0	0.46	ug/L			07/12/21 17:31	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 17:31	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 17:31	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 17:31	1
Trichloroethene	0.69		0.50	0.16	ug/L			07/12/21 17:31	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 17:31	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 17:31	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 17:31	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 17:31	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 17:31	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/12/21 17:31	1
Dibromofluoromethane	101		75 - 120		07/12/21 17:31	1
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		07/12/21 17:31	1
Toluene-d8 (Surr)	100		75 - 120		07/12/21 17:31	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-29

Lab Sample ID: 500-201791-29

Date Collected: 06/28/21 14:25

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 16:02	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 16:02	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 16:02	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 16:02	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 16:02	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 16:02	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 16:02	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 16:02	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 16:02	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 16:02	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 16:02	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 16:02	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 16:02	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 16:02	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 16:02	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 16:02	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 16:02	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 16:02	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 16:02	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 16:02	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 16:02	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 16:02	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 16:02	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 16:02	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 16:02	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 16:02	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 16:02	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 16:02	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 16:02	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 16:02	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 16:02	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 16:02	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 16:02	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 16:02	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 16:02	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 16:02	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 16:02	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 16:02	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 16:02	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 16:02	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 16:02	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 16:02	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 16:02	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 16:02	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 16:02	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 16:02	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 16:02	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 16:02	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 16:02	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-29

Lab Sample ID: 500-201791-29

Date Collected: 06/28/21 14:25

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 16:02	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 16:02	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 16:02	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 16:02	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 16:02	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 16:02	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 16:02	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 16:02	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/09/21 16:02	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 16:02	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 16:02	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 16:02	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 16:02	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 16:02	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 16:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124					07/09/21 16:02	1
Dibromofluoromethane	101		75 - 120					07/09/21 16:02	1
1,2-Dichloroethane-d4 (Surr)	92		75 - 126					07/09/21 16:02	1
Toluene-d8 (Surr)	96		75 - 120					07/09/21 16:02	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-30

Lab Sample ID: 500-201791-30

Date Collected: 06/28/21 14:05

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 16:27	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 16:27	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 16:27	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 16:27	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 16:27	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 16:27	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 16:27	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 16:27	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 16:27	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 16:27	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 16:27	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 16:27	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 16:27	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 16:27	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 16:27	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 16:27	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 16:27	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 16:27	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 16:27	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 16:27	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 16:27	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 16:27	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 16:27	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 16:27	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 16:27	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 16:27	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 16:27	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 16:27	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 16:27	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 16:27	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 16:27	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 16:27	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 16:27	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 16:27	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 16:27	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 16:27	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 16:27	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 16:27	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 16:27	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 16:27	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 16:27	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 16:27	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 16:27	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 16:27	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 16:27	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 16:27	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 16:27	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 16:27	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 16:27	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-30

Lab Sample ID: 500-201791-30

Date Collected: 06/28/21 14:05

Matrix: Water

Date Received: 07/02/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 16:27	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 16:27	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 16:27	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 16:27	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 16:27	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 16:27	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 16:27	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 16:27	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/09/21 16:27	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 16:27	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 16:27	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 16:27	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 16:27	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 16:27	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 16:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124					07/09/21 16:27	1
Dibromofluoromethane	100		75 - 120					07/09/21 16:27	1
1,2-Dichloroethane-d4 (Surr)	90		75 - 126					07/09/21 16:27	1
Toluene-d8 (Surr)	97		75 - 120					07/09/21 16:27	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-31

Lab Sample ID: 500-201791-31

Date Collected: 06/28/21 13:25

Matrix: Water

Date Received: 07/02/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/09/21 16:53	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 16:53	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 16:53	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 16:53	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 16:53	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 16:53	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 16:53	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 16:53	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 16:53	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 16:53	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 16:53	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 16:53	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 16:53	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 16:53	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 16:53	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 16:53	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 16:53	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 16:53	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 16:53	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 16:53	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 16:53	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 16:53	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 16:53	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 16:53	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 16:53	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 16:53	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 16:53	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 16:53	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 16:53	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 16:53	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 16:53	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 16:53	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 16:53	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 16:53	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 16:53	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 16:53	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 16:53	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/09/21 16:53	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 16:53	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 16:53	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 16:53	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 16:53	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 16:53	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 16:53	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 16:53	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 16:53	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 16:53	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 16:53	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 16:53	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-31
Date Collected: 06/28/21 13:25
Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-31
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 16:53	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 16:53	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 16:53	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 16:53	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 16:53	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 16:53	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 16:53	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 16:53	1
Trichloroethene	21		0.50	0.16	ug/L			07/09/21 16:53	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 16:53	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 16:53	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 16:53	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 16:53	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 16:53	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 16:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		07/09/21 16:53	1
Dibromofluoromethane	100		75 - 120		07/09/21 16:53	1
1,2-Dichloroethane-d4 (Surr)	88		75 - 126		07/09/21 16:53	1
Toluene-d8 (Surr)	97		75 - 120		07/09/21 16:53	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

GC/MS VOA

Analysis Batch: 608506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201791-1	MW-1	Total/NA	Water	8260B	
500-201791-2	MW-2	Total/NA	Water	8260B	
500-201791-3	P-4	Total/NA	Water	8260B	
500-201791-4	MW-5	Total/NA	Water	8260B	
500-201791-5	P-6	Total/NA	Water	8260B	
500-201791-8	MW-9	Total/NA	Water	8260B	
500-201791-9	P-10	Total/NA	Water	8260B	
500-201791-10	MW-11	Total/NA	Water	8260B	
500-201791-11	MW-3	Total/NA	Water	8260B	
500-201791-12	MW-13	Total/NA	Water	8260B	
500-201791-13	P-14	Total/NA	Water	8260B	
500-201791-14	P-15	Total/NA	Water	8260B	
500-201791-29	MW-29	Total/NA	Water	8260B	
500-201791-30	P-30	Total/NA	Water	8260B	
500-201791-31	MW-31	Total/NA	Water	8260B	
MB 500-608506/7	Method Blank	Total/NA	Water	8260B	
LCS 500-608506/5	Lab Control Sample	Total/NA	Water	8260B	
500-201791-5 MS	P-6	Total/NA	Water	8260B	
500-201791-5 MSD	P-6	Total/NA	Water	8260B	

Analysis Batch: 608814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201791-6	MW-7	Total/NA	Water	8260B	
500-201791-7	MW-8	Total/NA	Water	8260B	
500-201791-15	MW-16	Total/NA	Water	8260B	
500-201791-16	MW-17	Total/NA	Water	8260B	
500-201791-17	P-18	Total/NA	Water	8260B	
500-201791-18	P-19	Total/NA	Water	8260B	
500-201791-19	P-20	Total/NA	Water	8260B	
500-201791-20	MW-21	Total/NA	Water	8260B	
500-201791-21	MW-22	Total/NA	Water	8260B	
500-201791-22	P-23	Total/NA	Water	8260B	
500-201791-23	MW-24	Total/NA	Water	8260B	
500-201791-24	P-25S	Total/NA	Water	8260B	
500-201791-25	P-25D	Total/NA	Water	8260B	
500-201791-26	MW-26	Total/NA	Water	8260B	
500-201791-27	MW-28	Total/NA	Water	8260B	
500-201791-28	P-27	Total/NA	Water	8260B	
MB 500-608814/8	Method Blank	Total/NA	Water	8260B	
LCS 500-608814/5	Lab Control Sample	Total/NA	Water	8260B	
500-201791-28 MS	P-27	Total/NA	Water	8260B	
500-201791-28 MSD	P-27	Total/NA	Water	8260B	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (72-124)	DBFM (75-120)	DCA (75-126)	TOL (75-120)
500-201791-1	MW-1	93	103	93	97
500-201791-2	MW-2	91	102	94	95
500-201791-3	P-4	90	98	88	97
500-201791-4	MW-5	92	96	86	98
500-201791-5	P-6	91	102	91	96
500-201791-5 MS	P-6	93	104	91	97
500-201791-5 MSD	P-6	95	104	91	96
500-201791-6	MW-7	94	97	104	102
500-201791-7	MW-8	93	99	106	101
500-201791-8	MW-9	90	100	88	98
500-201791-9	P-10	92	99	88	99
500-201791-10	MW-11	91	101	88	97
500-201791-11	MW-3	89	98	88	98
500-201791-12	MW-13	91	100	92	96
500-201791-13	P-14	89	102	88	97
500-201791-14	P-15	91	99	90	97
500-201791-15	MW-16	93	98	103	101
500-201791-16	MW-17	92	100	106	102
500-201791-17	P-18	92	98	110	102
500-201791-18	P-19	93	100	109	101
500-201791-19	P-20	93	99	104	101
500-201791-20	MW-21	95	100	106	101
500-201791-21	MW-22	94	100	106	102
500-201791-22	P-23	95	100	108	100
500-201791-23	MW-24	93	99	109	101
500-201791-24	P-25S	94	102	108	103
500-201791-25	P-25D	93	101	106	102
500-201791-26	MW-26	93	101	108	101
500-201791-27	MW-28	94	102	108	102
500-201791-28	P-27	95	101	107	100
500-201791-28 MS	P-27	95	103	109	100
500-201791-28 MSD	P-27	96	103	111	102
500-201791-29	MW-29	90	101	92	96
500-201791-30	P-30	92	100	90	97
500-201791-31	MW-31	92	100	88	97
LCS 500-608506/5	Lab Control Sample	95	97	85	99
LCS 500-608814/5	Lab Control Sample	94	102	107	100
MB 500-608506/7	Method Blank	93	102	91	98
MB 500-608814/8	Method Blank	92	101	107	100

Surrogate Legend

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

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-608506/7
Matrix: Water
Analysis Batch: 608506

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

Analyte	MB	MB	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<1.7		10	1.7	ug/L			07/09/21 10:34	1
Benzene	<0.15		0.50	0.15	ug/L			07/09/21 10:34	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/09/21 10:34	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/09/21 10:34	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/09/21 10:34	1
Bromoform	<0.48		1.0	0.48	ug/L			07/09/21 10:34	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/09/21 10:34	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/09/21 10:34	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/09/21 10:34	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/09/21 10:34	1
Chloroform	<0.37		2.0	0.37	ug/L			07/09/21 10:34	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/09/21 10:34	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/09/21 10:34	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/09/21 10:34	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/09/21 10:34	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/09/21 10:34	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/09/21 10:34	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/09/21 10:34	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/09/21 10:34	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/09/21 10:34	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/09/21 10:34	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/09/21 10:34	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/09/21 10:34	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/09/21 10:34	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/09/21 10:34	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/09/21 10:34	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/09/21 10:34	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/09/21 10:34	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 10:34	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/09/21 10:34	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/09/21 10:34	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/09/21 10:34	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/09/21 10:34	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/09/21 10:34	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/09/21 10:34	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/09/21 10:34	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/09/21 10:34	1
Naphthalene	0.375	J	1.0	0.34	ug/L			07/09/21 10:34	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/09/21 10:34	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/09/21 10:34	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/09/21 10:34	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/09/21 10:34	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/09/21 10:34	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 10:34	1
Styrene	<0.39		1.0	0.39	ug/L			07/09/21 10:34	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/09/21 10:34	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/09/21 10:34	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/09/21 10:34	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: MB 500-608506/7
Matrix: Water
Analysis Batch: 608506

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/09/21 10:34	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/09/21 10:34	1
Toluene	<0.15		0.50	0.15	ug/L			07/09/21 10:34	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/09/21 10:34	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/09/21 10:34	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/09/21 10:34	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/09/21 10:34	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/09/21 10:34	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/09/21 10:34	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/09/21 10:34	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/09/21 10:34	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/09/21 10:34	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/09/21 10:34	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/09/21 10:34	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/09/21 10:34	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/09/21 10:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		07/09/21 10:34	1
Dibromofluoromethane	102		75 - 120		07/09/21 10:34	1
1,2-Dichloroethane-d4 (Surr)	91		75 - 126		07/09/21 10:34	1
Toluene-d8 (Surr)	98		75 - 120		07/09/21 10:34	1

Lab Sample ID: LCS 500-608506/5
Matrix: Water
Analysis Batch: 608506

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	35.2		ug/L		70	40 - 143
Benzene	50.0	45.7		ug/L		91	70 - 120
Bromobenzene	50.0	52.3		ug/L		105	70 - 122
Bromochloromethane	50.0	47.4		ug/L		95	65 - 122
Bromodichloromethane	50.0	43.1		ug/L		86	69 - 120
Bromoform	50.0	44.9		ug/L		90	56 - 132
Carbon disulfide	50.0	43.9		ug/L		88	66 - 120
Carbon tetrachloride	50.0	51.6		ug/L		103	59 - 133
Chlorobenzene	50.0	48.9		ug/L		98	70 - 120
Chloroethane	50.0	46.0		ug/L		92	48 - 136
Chloroform	50.0	46.9		ug/L		94	70 - 120
2-Chlorotoluene	50.0	48.6		ug/L		97	70 - 125
4-Chlorotoluene	50.0	47.7		ug/L		95	68 - 124
cis-1,2-Dichloroethene	50.0	47.8		ug/L		96	70 - 125
cis-1,3-Dichloropropene	50.0	41.6		ug/L		83	64 - 127
Dibromochloromethane	50.0	46.1		ug/L		92	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	37.9		ug/L		76	56 - 123
Ethylene Dibromide	50.0	46.5		ug/L		93	70 - 125
Dichlorodifluoromethane	50.0	57.0		ug/L		114	40 - 159
1,1-Dichloroethane	50.0	45.9		ug/L		92	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: LCS 500-608506/5
Matrix: Water
Analysis Batch: 608506

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	42.4		ug/L		85	68 - 127
1,1-Dichloroethene	50.0	50.2		ug/L		100	67 - 122
1,2-Dichloropropane	50.0	44.4		ug/L		89	67 - 130
1,3-Dichloropropane	50.0	42.7		ug/L		85	62 - 136
2,2-Dichloropropane	50.0	42.1		ug/L		84	58 - 139
1,1-Dichloropropene	50.0	49.4		ug/L		99	70 - 121
Ethylbenzene	50.0	50.7		ug/L		101	70 - 123
Hexachlorobutadiene	50.0	54.3		ug/L		109	51 - 150
Isopropylbenzene	50.0	52.4		ug/L		105	70 - 126
1,3-Dichlorobenzene	50.0	51.4		ug/L		103	70 - 125
Bromomethane	50.0	55.3		ug/L		111	40 - 152
Chloromethane	50.0	49.1		ug/L		98	56 - 152
Dibromomethane	50.0	43.3		ug/L		87	70 - 120
Methylene Chloride	50.0	44.9		ug/L		90	69 - 125
2-Butanone (MEK)	50.0	37.1		ug/L		74	46 - 144
Methyl tert-butyl ether	50.0	41.2		ug/L		82	55 - 123
Naphthalene	50.0	45.7		ug/L		91	53 - 144
n-Butylbenzene	50.0	50.5		ug/L		101	68 - 125
N-Propylbenzene	50.0	50.8		ug/L		102	69 - 127
1,2-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 125
1,4-Dichlorobenzene	50.0	52.3		ug/L		105	70 - 120
p-Isopropyltoluene	50.0	52.6		ug/L		105	70 - 125
sec-Butylbenzene	50.0	52.9		ug/L		106	70 - 123
Styrene	50.0	49.9		ug/L		100	70 - 120
tert-Butylbenzene	50.0	53.7		ug/L		107	70 - 121
1,1,1,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 125
1,1,2,2-Tetrachloroethane	50.0	44.3		ug/L		89	62 - 140
Tetrachloroethene	50.0	56.4		ug/L		113	70 - 128
Tetrahydrofuran	100	70.2		ug/L		70	59 - 139
Toluene	50.0	48.3		ug/L		97	70 - 125
trans-1,2-Dichloroethene	50.0	51.5		ug/L		103	70 - 125
trans-1,3-Dichloropropene	50.0	40.0		ug/L		80	62 - 128
1,2,3-Trichlorobenzene	50.0	49.1		ug/L		98	51 - 145
1,2,4-Trichlorobenzene	50.0	49.2		ug/L		98	57 - 137
1,1,1-Trichloroethane	50.0	49.7		ug/L		99	70 - 125
1,1,2-Trichloroethane	50.0	46.6		ug/L		93	71 - 130
Trichloroethene	50.0	52.2		ug/L		104	70 - 125
Trichlorofluoromethane	50.0	54.8		ug/L		110	55 - 128
1,2,3-Trichloropropane	50.0	44.9		ug/L		90	50 - 133
1,2,4-Trimethylbenzene	50.0	49.2		ug/L		98	70 - 123
1,3,5-Trimethylbenzene	50.0	50.5		ug/L		101	70 - 123
Vinyl chloride	50.0	55.6		ug/L		111	64 - 126
Xylenes, Total	100	97.9		ug/L		98	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane	97		75 - 120
1,2-Dichloroethane-d4 (Surr)	85		75 - 126

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: LCS 500-608506/5
Matrix: Water
Analysis Batch: 608506

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

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	99		75 - 120

Lab Sample ID: 500-201791-5 MS
Matrix: Water
Analysis Batch: 608506

Client Sample ID: P-6
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Acetone	5.2	J	50.0	31.9		ug/L		53	40 - 143
Benzene	<0.15		50.0	47.3		ug/L		95	70 - 120
Bromobenzene	<0.36		50.0	52.4		ug/L		105	70 - 122
Bromochloromethane	<0.43		50.0	53.0		ug/L		106	65 - 122
Bromodichloromethane	<0.37		50.0	47.3		ug/L		95	69 - 120
Bromoform	<0.48		50.0	48.6		ug/L		97	56 - 132
Carbon disulfide	<0.45		50.0	45.1		ug/L		90	66 - 120
Carbon tetrachloride	<0.38		50.0	51.4		ug/L		103	59 - 133
Chlorobenzene	<0.39		50.0	51.0		ug/L		102	70 - 120
Chloroethane	<0.51		50.0	49.5		ug/L		99	48 - 136
Chloroform	<0.37		50.0	50.0		ug/L		100	70 - 120
2-Chlorotoluene	<0.31		50.0	46.8		ug/L		94	70 - 125
4-Chlorotoluene	<0.35		50.0	46.6		ug/L		93	68 - 124
cis-1,2-Dichloroethene	<0.41		50.0	51.3		ug/L		103	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	42.7		ug/L		85	64 - 127
Dibromochloromethane	<0.49		50.0	49.5		ug/L		99	68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	39.3		ug/L		79	56 - 123
Ethylene Dibromide	<0.39		50.0	48.3		ug/L		97	70 - 125
Dichlorodifluoromethane	<0.67		50.0	55.7		ug/L		111	40 - 159
1,1-Dichloroethane	<0.41		50.0	48.9		ug/L		98	70 - 125
1,2-Dichloroethane	<0.39		50.0	46.1		ug/L		92	68 - 127
1,1-Dichloroethene	<0.39		50.0	49.3		ug/L		99	67 - 122
1,2-Dichloropropane	<0.43		50.0	47.9		ug/L		96	67 - 130
1,3-Dichloropropane	<0.36		50.0	45.1		ug/L		90	62 - 136
2,2-Dichloropropane	<0.44		50.0	40.5		ug/L		81	58 - 139
1,1-Dichloropropene	<0.30		50.0	49.0		ug/L		98	70 - 121
Ethylbenzene	<0.18		50.0	49.7		ug/L		99	70 - 123
Hexachlorobutadiene	<0.45		50.0	51.7		ug/L		103	51 - 150
Isopropylbenzene	<0.39		50.0	49.9		ug/L		100	70 - 126
1,3-Dichlorobenzene	<0.40		50.0	51.2		ug/L		102	70 - 125
Bromomethane	<0.80		50.0	60.8		ug/L		122	40 - 152
Chloromethane	<0.32		50.0	51.7		ug/L		103	56 - 152
Dibromomethane	<0.27		50.0	46.3		ug/L		93	70 - 120
Methylene Chloride	<1.6		50.0	49.1		ug/L		98	69 - 125
2-Butanone (MEK)	<2.1		50.0	35.0		ug/L		70	46 - 144
Methyl tert-butyl ether	<0.39		50.0	45.7		ug/L		91	55 - 123
Naphthalene	<0.34		50.0	47.5		ug/L		95	53 - 144
n-Butylbenzene	<0.39		50.0	46.3		ug/L		93	68 - 125
N-Propylbenzene	<0.41		50.0	47.6		ug/L		95	69 - 127
1,2-Dichlorobenzene	<0.33		50.0	51.4		ug/L		103	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	51.6		ug/L		103	70 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: 500-201791-5 MS
Matrix: Water
Analysis Batch: 608506

Client Sample ID: P-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	<0.36		50.0	49.7		ug/L		99	70 - 125
sec-Butylbenzene	<0.40		50.0	50.1		ug/L		100	70 - 123
Styrene	<0.39		50.0	51.9		ug/L		104	70 - 120
tert-Butylbenzene	<0.40		50.0	50.8		ug/L		102	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	50.6		ug/L		101	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	44.4		ug/L		89	62 - 140
Tetrachloroethene	<0.37		50.0	54.1		ug/L		108	70 - 128
Tetrahydrofuran	<1.9		100	74.6		ug/L		75	59 - 139
Toluene	<0.15		50.0	48.1		ug/L		96	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	52.2		ug/L		104	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	41.2		ug/L		82	62 - 128
1,2,3-Trichlorobenzene	<0.46		50.0	50.2		ug/L		100	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	48.9		ug/L		98	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	50.8		ug/L		102	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	50.7		ug/L		101	71 - 130
Trichloroethene	0.42	J	50.0	53.7		ug/L		107	70 - 125
Trichlorofluoromethane	<0.43		50.0	56.4		ug/L		113	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	46.7		ug/L		93	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	48.6		ug/L		97	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	49.2		ug/L		98	70 - 123
Vinyl chloride	<0.20		50.0	60.2		ug/L		120	64 - 126
Xylenes, Total	<0.22		100	99.7		ug/L		100	70 - 125

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane	104		75 - 120
1,2-Dichloroethane-d4 (Surr)	91		75 - 126
Toluene-d8 (Surr)	97		75 - 120

Lab Sample ID: 500-201791-5 MSD
Matrix: Water
Analysis Batch: 608506

Client Sample ID: P-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	5.2	J	50.0	37.8		ug/L		65	40 - 143	17	20
Benzene	<0.15		50.0	48.8		ug/L		98	70 - 120	3	20
Bromobenzene	<0.36		50.0	56.3		ug/L		113	70 - 122	7	20
Bromochloromethane	<0.43		50.0	56.1		ug/L		112	65 - 122	6	20
Bromodichloromethane	<0.37		50.0	48.2		ug/L		96	69 - 120	2	20
Bromoform	<0.48		50.0	51.5		ug/L		103	56 - 132	6	20
Carbon disulfide	<0.45		50.0	46.4		ug/L		93	66 - 120	3	20
Carbon tetrachloride	<0.38		50.0	52.0		ug/L		104	59 - 133	1	20
Chlorobenzene	<0.39		50.0	51.4		ug/L		103	70 - 120	1	20
Chloroethane	<0.51		50.0	49.6		ug/L		99	48 - 136	0	20
Chloroform	<0.37		50.0	51.5		ug/L		103	70 - 120	3	20
2-Chlorotoluene	<0.31		50.0	50.0		ug/L		100	70 - 125	7	20
4-Chlorotoluene	<0.35		50.0	49.2		ug/L		98	68 - 124	6	20
cis-1,2-Dichloroethene	<0.41		50.0	52.3		ug/L		105	70 - 125	2	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: 500-201791-5 MSD

Client Sample ID: P-6

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 608506

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	<0.42		50.0	43.9		ug/L		88	64 - 127	3	20
Dibromochloromethane	<0.49		50.0	51.7		ug/L		103	68 - 125	4	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	43.9		ug/L		88	56 - 123	11	20
Ethylene Dibromide	<0.39		50.0	51.4		ug/L		103	70 - 125	6	20
Dichlorodifluoromethane	<0.67		50.0	49.5		ug/L		99	40 - 159	12	20
1,1-Dichloroethane	<0.41		50.0	49.8		ug/L		100	70 - 125	2	20
1,2-Dichloroethane	<0.39		50.0	47.5		ug/L		95	68 - 127	3	20
1,1-Dichloroethene	<0.39		50.0	51.5		ug/L		103	67 - 122	4	20
1,2-Dichloropropane	<0.43		50.0	48.8		ug/L		98	67 - 130	2	20
1,3-Dichloropropane	<0.36		50.0	46.9		ug/L		94	62 - 136	4	20
2,2-Dichloropropane	<0.44		50.0	41.7		ug/L		83	58 - 139	3	20
1,1-Dichloropropene	<0.30		50.0	49.1		ug/L		98	70 - 121	0	20
Ethylbenzene	<0.18		50.0	50.4		ug/L		101	70 - 123	1	20
Hexachlorobutadiene	<0.45		50.0	53.4		ug/L		107	51 - 150	3	20
Isopropylbenzene	<0.39		50.0	52.5		ug/L		105	70 - 126	5	20
1,3-Dichlorobenzene	<0.40		50.0	53.9		ug/L		108	70 - 125	5	20
Bromomethane	<0.80		50.0	62.0		ug/L		124	40 - 152	2	20
Chloromethane	<0.32		50.0	51.8		ug/L		104	56 - 152	0	20
Dibromomethane	<0.27		50.0	48.7		ug/L		97	70 - 120	5	20
Methylene Chloride	<1.6		50.0	50.3		ug/L		101	69 - 125	2	20
2-Butanone (MEK)	<2.1		50.0	36.3		ug/L		73	46 - 144	4	20
Methyl tert-butyl ether	<0.39		50.0	47.5		ug/L		95	55 - 123	4	20
Naphthalene	<0.34		50.0	52.8		ug/L		106	53 - 144	11	20
n-Butylbenzene	<0.39		50.0	48.4		ug/L		97	68 - 125	4	20
N-Propylbenzene	<0.41		50.0	49.3		ug/L		99	69 - 127	3	20
1,2-Dichlorobenzene	<0.33		50.0	54.6		ug/L		109	70 - 125	6	20
1,4-Dichlorobenzene	<0.36		50.0	55.1		ug/L		110	70 - 120	7	20
p-Isopropyltoluene	<0.36		50.0	51.6		ug/L		103	70 - 125	4	20
sec-Butylbenzene	<0.40		50.0	52.2		ug/L		104	70 - 123	4	20
Styrene	<0.39		50.0	52.4		ug/L		105	70 - 120	1	20
tert-Butylbenzene	<0.40		50.0	52.7		ug/L		105	70 - 121	4	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	51.3		ug/L		103	70 - 125	1	20
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	48.9		ug/L		98	62 - 140	10	20
Tetrachloroethene	<0.37		50.0	55.5		ug/L		111	70 - 128	2	20
Tetrahydrofuran	<1.9		100	81.1		ug/L		81	59 - 139	8	20
Toluene	<0.15		50.0	49.4		ug/L		99	70 - 125	3	20
trans-1,2-Dichloroethene	<0.35		50.0	53.4		ug/L		107	70 - 125	2	20
trans-1,3-Dichloropropene	<0.36		50.0	42.8		ug/L		86	62 - 128	4	20
1,2,3-Trichlorobenzene	<0.46		50.0	53.7		ug/L		107	51 - 145	7	20
1,2,4-Trichlorobenzene	<0.34		50.0	50.8		ug/L		102	57 - 137	4	20
1,1,1-Trichloroethane	<0.38		50.0	51.5		ug/L		103	70 - 125	1	20
1,1,2-Trichloroethane	<0.35		50.0	52.4		ug/L		105	71 - 130	3	20
Trichloroethene	0.42	J	50.0	55.5		ug/L		110	70 - 125	3	20
Trichlorofluoromethane	<0.43		50.0	54.9		ug/L		110	55 - 128	3	20
1,2,3-Trichloropropane	<0.41		50.0	52.8		ug/L		106	50 - 133	12	20
1,2,4-Trimethylbenzene	<0.36		50.0	50.7		ug/L		101	70 - 123	4	20
1,3,5-Trimethylbenzene	<0.25		50.0	50.5		ug/L		101	70 - 123	3	20
Vinyl chloride	<0.20		50.0	55.9		ug/L		112	64 - 126	7	20
Xylenes, Total	<0.22		100	101		ug/L		101	70 - 125	1	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

<i>Surrogate</i>	<i>MSD</i>	<i>MSD</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane	104		75 - 120
1,2-Dichloroethane-d4 (Surr)	91		75 - 126
Toluene-d8 (Surr)	96		75 - 120

Lab Sample ID: MB 500-608814/8
Matrix: Water
Analysis Batch: 608814

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

Analyte	MB	MB	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<1.7		10	1.7	ug/L			07/12/21 11:30	1
Benzene	<0.15		0.50	0.15	ug/L			07/12/21 11:30	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/12/21 11:30	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/12/21 11:30	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/12/21 11:30	1
Bromoform	<0.48		1.0	0.48	ug/L			07/12/21 11:30	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/12/21 11:30	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/12/21 11:30	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/12/21 11:30	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/12/21 11:30	1
Chloroform	<0.37		2.0	0.37	ug/L			07/12/21 11:30	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/12/21 11:30	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/12/21 11:30	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/12/21 11:30	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/12/21 11:30	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/12/21 11:30	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/12/21 11:30	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			07/12/21 11:30	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/12/21 11:30	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/12/21 11:30	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/12/21 11:30	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/12/21 11:30	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/12/21 11:30	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/12/21 11:30	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/12/21 11:30	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/12/21 11:30	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/12/21 11:30	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/12/21 11:30	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 11:30	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/12/21 11:30	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/12/21 11:30	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/12/21 11:30	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/12/21 11:30	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/12/21 11:30	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/12/21 11:30	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			07/12/21 11:30	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/12/21 11:30	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/12/21 11:30	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/12/21 11:30	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/12/21 11:30	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/12/21 11:30	1

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: MB 500-608814/8
Matrix: Water
Analysis Batch: 608814

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/12/21 11:30	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/12/21 11:30	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 11:30	1
Styrene	<0.39		1.0	0.39	ug/L			07/12/21 11:30	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/12/21 11:30	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/12/21 11:30	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/12/21 11:30	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/12/21 11:30	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/12/21 11:30	1
Toluene	<0.15		0.50	0.15	ug/L			07/12/21 11:30	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/12/21 11:30	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/12/21 11:30	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/12/21 11:30	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/12/21 11:30	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/12/21 11:30	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/12/21 11:30	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/12/21 11:30	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/12/21 11:30	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/12/21 11:30	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/12/21 11:30	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/12/21 11:30	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/12/21 11:30	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/12/21 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		07/12/21 11:30	1
Dibromofluoromethane	101		75 - 120		07/12/21 11:30	1
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		07/12/21 11:30	1
Toluene-d8 (Surr)	100		75 - 120		07/12/21 11:30	1

Lab Sample ID: LCS 500-608814/5
Matrix: Water
Analysis Batch: 608814

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	46.0		ug/L		92	40 - 143
Benzene	50.0	45.8		ug/L		92	70 - 120
Bromobenzene	50.0	48.1		ug/L		96	70 - 122
Bromochloromethane	50.0	47.8		ug/L		96	65 - 122
Bromodichloromethane	50.0	45.8		ug/L		92	69 - 120
Bromoform	50.0	44.8		ug/L		90	56 - 132
Carbon disulfide	50.0	44.2		ug/L		88	66 - 120
Carbon tetrachloride	50.0	52.3		ug/L		105	59 - 133
Chlorobenzene	50.0	47.5		ug/L		95	70 - 120
Chloroethane	50.0	51.2		ug/L		102	48 - 136
Chloroform	50.0	44.7		ug/L		89	70 - 120
2-Chlorotoluene	50.0	46.3		ug/L		93	70 - 125
4-Chlorotoluene	50.0	46.2		ug/L		92	68 - 124

Eurolins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: LCS 500-608814/5
Matrix: Water
Analysis Batch: 608814

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	50.0	46.5		ug/L		93	70 - 125
cis-1,3-Dichloropropene	50.0	44.8		ug/L		90	64 - 127
Dibromochloromethane	50.0	45.6		ug/L		91	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	35.0		ug/L		70	56 - 123
Ethylene Dibromide	50.0	44.6		ug/L		89	70 - 125
Dichlorodifluoromethane	50.0	32.0		ug/L		64	40 - 159
1,1-Dichloroethane	50.0	51.7		ug/L		103	70 - 125
1,2-Dichloroethane	50.0	51.3		ug/L		103	68 - 127
1,1-Dichloroethene	50.0	47.2		ug/L		94	67 - 122
1,2-Dichloropropane	50.0	51.4		ug/L		103	67 - 130
1,3-Dichloropropane	50.0	45.1		ug/L		90	62 - 136
2,2-Dichloropropane	50.0	52.9		ug/L		106	58 - 139
1,1-Dichloropropene	50.0	48.3		ug/L		97	70 - 121
Ethylbenzene	50.0	47.2		ug/L		94	70 - 123
Hexachlorobutadiene	50.0	47.6		ug/L		95	51 - 150
Isopropylbenzene	50.0	48.8		ug/L		98	70 - 126
1,3-Dichlorobenzene	50.0	47.2		ug/L		94	70 - 125
Bromomethane	50.0	50.8		ug/L		102	40 - 152
Chloromethane	50.0	56.0		ug/L		112	56 - 152
Dibromomethane	50.0	47.3		ug/L		95	70 - 120
Methylene Chloride	50.0	44.7		ug/L		89	69 - 125
2-Butanone (MEK)	50.0	42.5		ug/L		85	46 - 144
Methyl tert-butyl ether	50.0	40.5		ug/L		81	55 - 123
Naphthalene	50.0	37.7		ug/L		75	53 - 144
n-Butylbenzene	50.0	45.2		ug/L		90	68 - 125
N-Propylbenzene	50.0	47.5		ug/L		95	69 - 127
1,2-Dichlorobenzene	50.0	44.7		ug/L		89	70 - 125
1,4-Dichlorobenzene	50.0	46.4		ug/L		93	70 - 120
p-Isopropyltoluene	50.0	47.7		ug/L		95	70 - 125
sec-Butylbenzene	50.0	47.0		ug/L		94	70 - 123
Styrene	50.0	47.1		ug/L		94	70 - 120
tert-Butylbenzene	50.0	47.9		ug/L		96	70 - 121
1,1,1,2-Tetrachloroethane	50.0	49.2		ug/L		98	70 - 125
1,1,2,2-Tetrachloroethane	50.0	43.4		ug/L		87	62 - 140
Tetrachloroethene	50.0	50.3		ug/L		101	70 - 128
Tetrahydrofuran	100	107		ug/L		107	59 - 139
Toluene	50.0	47.0		ug/L		94	70 - 125
trans-1,2-Dichloroethene	50.0	46.6		ug/L		93	70 - 125
trans-1,3-Dichloropropene	50.0	44.4		ug/L		89	62 - 128
1,2,3-Trichlorobenzene	50.0	40.0		ug/L		80	51 - 145
1,2,4-Trichlorobenzene	50.0	41.0		ug/L		82	57 - 137
1,1,1-Trichloroethane	50.0	51.4		ug/L		103	70 - 125
1,1,2-Trichloroethane	50.0	45.6		ug/L		91	71 - 130
Trichloroethene	50.0	49.4		ug/L		99	70 - 125
Trichlorofluoromethane	50.0	50.3		ug/L		101	55 - 128
1,2,3-Trichloropropane	50.0	47.4		ug/L		95	50 - 133
1,2,4-Trimethylbenzene	50.0	47.2		ug/L		94	70 - 123
1,3,5-Trimethylbenzene	50.0	47.1		ug/L		94	70 - 123
Vinyl chloride	50.0	54.3		ug/L		109	64 - 126

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: LCS 500-608814/5

Matrix: Water

Analysis Batch: 608814

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	100	93.5		ug/L		94	70 - 125
Surrogate							
	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	94		72 - 124				
Dibromofluoromethane	102		75 - 120				
1,2-Dichloroethane-d4 (Surr)	107		75 - 126				
Toluene-d8 (Surr)	100		75 - 120				

Lab Sample ID: 500-201791-28 MS

Matrix: Water

Analysis Batch: 608814

Client Sample ID: P-27

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	<1.7		50.0	42.5		ug/L		85	40 - 143
Benzene	0.21	J	50.0	48.0		ug/L		96	70 - 120
Bromobenzene	<0.36		50.0	53.4		ug/L		107	70 - 122
Bromochloromethane	<0.43		50.0	52.7		ug/L		105	65 - 122
Bromodichloromethane	<0.37		50.0	49.6		ug/L		99	69 - 120
Bromoform	<0.48		50.0	50.3		ug/L		101	56 - 132
Carbon disulfide	<0.45		50.0	44.6		ug/L		89	66 - 120
Carbon tetrachloride	<0.38		50.0	55.5		ug/L		111	59 - 133
Chlorobenzene	<0.39		50.0	50.3		ug/L		101	70 - 120
Chloroethane	<0.51		50.0	54.3		ug/L		109	48 - 136
Chloroform	<0.37		50.0	47.9		ug/L		96	70 - 120
2-Chlorotoluene	<0.31		50.0	50.1		ug/L		100	70 - 125
4-Chlorotoluene	<0.35		50.0	50.1		ug/L		100	68 - 124
cis-1,2-Dichloroethene	<0.41		50.0	48.5		ug/L		97	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	46.6		ug/L		93	64 - 127
Dibromochloromethane	<0.49		50.0	49.2		ug/L		98	68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	35.7		ug/L		71	56 - 123
Ethylene Dibromide	<0.39		50.0	49.2		ug/L		98	70 - 125
Dichlorodifluoromethane	<0.67		50.0	32.9		ug/L		66	40 - 159
1,1-Dichloroethane	<0.41		50.0	54.5		ug/L		109	70 - 125
1,2-Dichloroethane	<0.39		50.0	55.9		ug/L		112	68 - 127
1,1-Dichloroethene	<0.39		50.0	48.9		ug/L		98	67 - 122
1,2-Dichloropropane	<0.43		50.0	55.8		ug/L		112	67 - 130
1,3-Dichloropropane	<0.36		50.0	47.8		ug/L		96	62 - 136
2,2-Dichloropropane	<0.44		50.0	52.5		ug/L		105	58 - 139
1,1-Dichloropropene	<0.30		50.0	49.6		ug/L		99	70 - 121
Ethylbenzene	<0.18		50.0	49.5		ug/L		99	70 - 123
Hexachlorobutadiene	<0.45		50.0	47.4		ug/L		95	51 - 150
Isopropylbenzene	<0.39		50.0	53.0		ug/L		106	70 - 126
1,3-Dichlorobenzene	<0.40		50.0	50.5		ug/L		101	70 - 125
Bromomethane	<0.80		50.0	53.9		ug/L		108	40 - 152
Chloromethane	0.47	J	50.0	58.9		ug/L		117	56 - 152
Dibromomethane	<0.27		50.0	51.3		ug/L		103	70 - 120
Methylene Chloride	<1.6		50.0	47.6		ug/L		95	69 - 125
2-Butanone (MEK)	<2.1		50.0	45.4		ug/L		91	46 - 144

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: 500-201791-28 MS

Matrix: Water

Analysis Batch: 608814

Client Sample ID: P-27

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	<0.39		50.0	42.3		ug/L		85	55 - 123
Naphthalene	<0.34	F2	50.0	34.9		ug/L		70	53 - 144
n-Butylbenzene	<0.39		50.0	46.7		ug/L		93	68 - 125
N-Propylbenzene	<0.41		50.0	50.4		ug/L		101	69 - 127
1,2-Dichlorobenzene	<0.33		50.0	47.9		ug/L		96	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	49.3		ug/L		99	70 - 120
p-Isopropyltoluene	<0.36		50.0	50.1		ug/L		100	70 - 125
sec-Butylbenzene	<0.40		50.0	49.9		ug/L		100	70 - 123
Styrene	<0.39		50.0	44.9		ug/L		90	70 - 120
tert-Butylbenzene	<0.40		50.0	51.2		ug/L		102	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	51.6		ug/L		103	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	47.9		ug/L		96	62 - 140
Tetrachloroethene	<0.37		50.0	52.3		ug/L		105	70 - 128
Tetrahydrofuran	<1.9		100	106		ug/L		106	59 - 139
Toluene	<0.15		50.0	49.3		ug/L		99	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	47.7		ug/L		95	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	45.2		ug/L		90	62 - 128
1,2,3-Trichlorobenzene	<0.46	F2	50.0	37.4		ug/L		75	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	39.1		ug/L		78	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	54.0		ug/L		108	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	49.4		ug/L		99	71 - 130
Trichloroethene	0.69		50.0	53.3		ug/L		105	70 - 125
Trichlorofluoromethane	<0.43		50.0	53.3		ug/L		107	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	52.9		ug/L		106	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	49.8		ug/L		100	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	50.4		ug/L		101	70 - 123
Vinyl chloride	<0.20		50.0	56.0		ug/L		112	64 - 126
Xylenes, Total	<0.22		100	99.0		ug/L		99	70 - 125

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane	103		75 - 120
1,2-Dichloroethane-d4 (Surr)	109		75 - 126
Toluene-d8 (Surr)	100		75 - 120

Lab Sample ID: 500-201791-28 MSD

Matrix: Water

Analysis Batch: 608814

Client Sample ID: P-27

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Acetone	<1.7		50.0	36.5		ug/L		73	40 - 143	15	20
Benzene	0.21	J	50.0	46.0		ug/L		92	70 - 120	4	20
Bromobenzene	<0.36		50.0	53.1		ug/L		106	70 - 122	1	20
Bromochloromethane	<0.43		50.0	48.5		ug/L		97	65 - 122	8	20
Bromodichloromethane	<0.37		50.0	48.0		ug/L		96	69 - 120	3	20
Bromoform	<0.48		50.0	49.0		ug/L		98	56 - 132	3	20
Carbon disulfide	<0.45		50.0	42.5		ug/L		85	66 - 120	5	20
Carbon tetrachloride	<0.38		50.0	53.2		ug/L		106	59 - 133	4	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: 500-201791-28 MSD
Matrix: Water
Analysis Batch: 608814

Client Sample ID: P-27
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	<0.39		50.0	49.3		ug/L		99	70 - 120	2	20
Chloroethane	<0.51		50.0	52.0		ug/L		104	48 - 136	4	20
Chloroform	<0.37		50.0	45.9		ug/L		92	70 - 120	4	20
2-Chlorotoluene	<0.31		50.0	50.6		ug/L		101	70 - 125	1	20
4-Chlorotoluene	<0.35		50.0	49.0		ug/L		98	68 - 124	2	20
cis-1,2-Dichloroethene	<0.41		50.0	46.0		ug/L		92	70 - 125	5	20
cis-1,3-Dichloropropene	<0.42		50.0	46.6		ug/L		93	64 - 127	0	20
Dibromochloromethane	<0.49		50.0	48.5		ug/L		97	68 - 125	1	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	38.7		ug/L		77	56 - 123	8	20
Ethylene Dibromide	<0.39		50.0	49.1		ug/L		98	70 - 125	0	20
Dichlorodifluoromethane	<0.67		50.0	31.4		ug/L		63	40 - 159	5	20
1,1-Dichloroethane	<0.41		50.0	51.8		ug/L		104	70 - 125	5	20
1,2-Dichloroethane	<0.39		50.0	53.9		ug/L		108	68 - 127	4	20
1,1-Dichloroethene	<0.39		50.0	45.3		ug/L		91	67 - 122	8	20
1,2-Dichloropropane	<0.43		50.0	52.2		ug/L		104	67 - 130	7	20
1,3-Dichloropropane	<0.36		50.0	48.1		ug/L		96	62 - 136	1	20
2,2-Dichloropropane	<0.44		50.0	50.4		ug/L		101	58 - 139	4	20
1,1-Dichloropropene	<0.30		50.0	47.1		ug/L		94	70 - 121	5	20
Ethylbenzene	<0.18		50.0	49.1		ug/L		98	70 - 123	1	20
Hexachlorobutadiene	<0.45		50.0	49.5		ug/L		99	51 - 150	4	20
Isopropylbenzene	<0.39		50.0	53.5		ug/L		107	70 - 126	1	20
1,3-Dichlorobenzene	<0.40		50.0	49.2		ug/L		98	70 - 125	2	20
Bromomethane	<0.80		50.0	51.7		ug/L		103	40 - 152	4	20
Chloromethane	0.47	J	50.0	55.1		ug/L		109	56 - 152	7	20
Dibromomethane	<0.27		50.0	49.9		ug/L		100	70 - 120	3	20
Methylene Chloride	<1.6		50.0	46.1		ug/L		92	69 - 125	3	20
2-Butanone (MEK)	<2.1		50.0	44.3		ug/L		89	46 - 144	3	20
Methyl tert-butyl ether	<0.39		50.0	40.0		ug/L		80	55 - 123	5	20
Naphthalene	<0.34	F2	50.0	48.0	F2	ug/L		96	53 - 144	32	20
n-Butylbenzene	<0.39		50.0	45.1		ug/L		90	68 - 125	3	20
N-Propylbenzene	<0.41		50.0	50.0		ug/L		100	69 - 127	1	20
1,2-Dichlorobenzene	<0.33		50.0	49.3		ug/L		99	70 - 125	3	20
1,4-Dichlorobenzene	<0.36		50.0	48.5		ug/L		97	70 - 120	2	20
p-Isopropyltoluene	<0.36		50.0	49.6		ug/L		99	70 - 125	1	20
sec-Butylbenzene	<0.40		50.0	50.1		ug/L		100	70 - 123	0	20
Styrene	<0.39		50.0	43.8		ug/L		88	70 - 120	3	20
tert-Butylbenzene	<0.40		50.0	52.5		ug/L		105	70 - 121	2	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	51.2		ug/L		102	70 - 125	1	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	48.4		ug/L		97	62 - 140	1	20
Tetrachloroethene	<0.37		50.0	51.8		ug/L		104	70 - 128	1	20
Tetrahydrofuran	<1.9		100	103		ug/L		103	59 - 139	3	20
Toluene	<0.15		50.0	49.2		ug/L		98	70 - 125	0	20
trans-1,2-Dichloroethene	<0.35		50.0	46.1		ug/L		92	70 - 125	3	20
trans-1,3-Dichloropropene	<0.36		50.0	45.8		ug/L		92	62 - 128	1	20
1,2,3-Trichlorobenzene	<0.46	F2	50.0	55.7	F2	ug/L		111	51 - 145	39	20
1,2,4-Trichlorobenzene	<0.34		50.0	43.7		ug/L		87	57 - 137	11	20
1,1,1-Trichloroethane	<0.38		50.0	51.8		ug/L		104	70 - 125	4	20
1,1,2-Trichloroethane	<0.35		50.0	48.9		ug/L		98	71 - 130	1	20
Trichloroethene	0.69		50.0	50.9		ug/L		100	70 - 125	5	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

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

Lab Sample ID: 500-201791-28 MSD

Matrix: Water

Analysis Batch: 608814

Client Sample ID: P-27

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane	<0.43		50.0	51.8		ug/L		104	55 - 128	3	20
1,2,3-Trichloropropane	<0.41		50.0	52.3		ug/L		105	50 - 133	1	20
1,2,4-Trimethylbenzene	<0.36		50.0	49.5		ug/L		99	70 - 123	1	20
1,3,5-Trimethylbenzene	<0.25		50.0	50.6		ug/L		101	70 - 123	0	20
Vinyl chloride	<0.20		50.0	53.8		ug/L		108	64 - 126	4	20
Xylenes, Total	<0.22		100	96.3		ug/L		96	70 - 125	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		72 - 124
Dibromofluoromethane	103		75 - 120
1,2-Dichloroethane-d4 (Surr)	111		75 - 126
Toluene-d8 (Surr)	102		75 - 120

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-1

Date Collected: 06/30/21 11:40

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 17:18	PMF	TAL CHI

Client Sample ID: MW-2

Date Collected: 06/29/21 12:25

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 17:43	PMF	TAL CHI

Client Sample ID: P-4

Date Collected: 06/28/21 12:40

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 12:15	PMF	TAL CHI

Client Sample ID: MW-5

Date Collected: 06/28/21 14:50

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 12:40	PMF	TAL CHI

Client Sample ID: P-6

Date Collected: 06/29/21 10:30

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 18:08	PMF	TAL CHI

Client Sample ID: MW-7

Date Collected: 06/30/21 09:05

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 11:55	STW	TAL CHI

Client Sample ID: MW-8

Date Collected: 06/30/21 09:20

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 12:21	STW	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-9

Date Collected: 06/28/21 11:40

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 13:05	PMF	TAL CHI

Client Sample ID: P-10

Date Collected: 06/28/21 11:15

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 13:30	PMF	TAL CHI

Client Sample ID: MW-11

Date Collected: 06/28/21 10:40

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 13:56	PMF	TAL CHI

Client Sample ID: MW-3

Date Collected: 06/28/21 12:15

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 14:21	PMF	TAL CHI

Client Sample ID: MW-13

Date Collected: 06/28/21 10:05

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 14:47	PMF	TAL CHI

Client Sample ID: P-14

Date Collected: 06/28/21 09:40

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 15:12	PMF	TAL CHI

Client Sample ID: P-15

Date Collected: 06/28/21 09:00

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608506	07/09/21 15:37	PMF	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-16

Date Collected: 06/29/21 12:05

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 12:47	STW	TAL CHI

Client Sample ID: MW-17

Date Collected: 06/30/21 11:05

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 13:13	STW	TAL CHI

Client Sample ID: P-18

Date Collected: 06/30/21 11:20

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 13:40	STW	TAL CHI

Client Sample ID: P-19

Date Collected: 06/30/21 10:20

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 14:06	STW	TAL CHI

Client Sample ID: P-20

Date Collected: 06/29/21 11:05

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 14:31	STW	TAL CHI

Client Sample ID: MW-21

Date Collected: 06/30/21 14:05

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 14:57	STW	TAL CHI

Client Sample ID: MW-22

Date Collected: 06/29/21 15:15

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 17:57	STW	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: P-23

Date Collected: 06/30/21 15:50

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 15:23	STW	TAL CHI

Client Sample ID: MW-24

Date Collected: 06/30/21 09:45

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-23

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 15:48	STW	TAL CHI

Client Sample ID: P-25S

Date Collected: 06/30/21 12:10

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 16:14	STW	TAL CHI

Client Sample ID: P-25D

Date Collected: 06/30/21 12:30

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 18:49	STW	TAL CHI

Client Sample ID: MW-26

Date Collected: 06/30/21 08:15

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 16:40	STW	TAL CHI

Client Sample ID: MW-28

Date Collected: 06/30/21 08:40

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 17:05	STW	TAL CHI

Client Sample ID: P-27

Date Collected: 06/29/21 14:35

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-28

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	608814	07/12/21 17:31	STW	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Client Sample ID: MW-29

Date Collected: 06/28/21 14:25

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-29

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	608506	07/09/21 16:02	PMF	TAL CHI

Client Sample ID: P-30

Date Collected: 06/28/21 14:05

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-30

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	608506	07/09/21 16:27	PMF	TAL CHI

Client Sample ID: MW-31

Date Collected: 06/28/21 13:25

Date Received: 07/02/21 09:45

Lab Sample ID: 500-201791-31

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	608506	07/09/21 16:53	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-201791-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

1

2

3

4

5

6

7

8

9

10

11

12

13

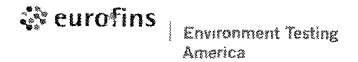
14

15

Eurofins TestAmerica, Chicago

2417 Bond Street
University Park IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

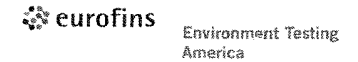


Client Information		Sampler: BJI		Lab PM: Fredrick Sandie		Carrier Tracking No(s)		COC No: 500-92193-41093 1	
Client Contact: Kirsten Lee		Phone		E-Mail: sandra.fredrick@eurofinset.com		State of Origin		Page 1 of 243	
Company: Cedar Corporation				PWSID		Analysis Requested			
Address: 604 Wilson Avenue		Due Date Requested		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Job #: 500-201791	
City: Menomonie		TAT Requested (days):		VOCs				Preservation Codes	
State Zip: WI 54751		Compliance Project Δ Yes Δ No						A HCL M Hexane	
Phone: 715-235-9081(Tel)		PO #: Purchase Order not required						B NaOH N None	
Email: kirsten.lee@cedarcorp.com		WO #:						C Zn Acetate O AsNaO2	
Project Name: Town of Warren		Project #: 50006556						D Nitric Acid P Na2O4S	
Site		SSOW#:						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	
								Total Number of containers	
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	
								Special Instructions/Note	
								Preservation Code:	
1 MW-1		6-30-21		11:40		Water		X	
2 MW-2		6-29-21		12:25		Water			
3 P-4		6-28-21		12:40		Water			
4 MW-5		6-28-21		2:50		Water			
5 P-6		6-29-21		10:30		Water			
6 MW-7		6-30-21		9:05		Water			
7 MW-8		6-30-21		9:20		Water			
8 MW-9		6-28-21		11:40		Water			
9 P-10		6-28-21		11:15		Water			
10 MW-11		6-28-21		10:40		Water			
11 MW-3		6-28-21		12:15		Water			
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements				
Tracking #s 923524205037					5049 4007 0655				
Empty Kit Relinquished by		Date		Time		Method of Shipment.			
Relinquished by: <i>Kirsten Lee</i>		Date/Time: 7/1/21 1000		Company: Cedar Corp		Received by: <i>Shirley Scott</i>		Date/Time: 7/2/21 0945	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact. Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks					
				1.2 → 0.2, 2.9 → 2.5					

Eurofins TestAmerica, Chicago

2417 Bond Street
 University Park IL 60484
 Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record



Client Information		Sampler: BJI		Lab PM: Fredrick Sande		Carrier Tracking No(s)		COC No. 500-92193-41093 2					
Client Contact: Kirsten Lee		Phone		E-Mail: sandra.fredrick@eurofinset.com		State of Origin		Page 2 of 243					
Company: Cedar Corporation		PWSID		Analysis Requested						Job #: 500-201791			
Address: 604 Wilson Avenue		Due Date Requested		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) UOCS						Total Number of Containers		Preservation Codes A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2SO3 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:	
City: Menomonie		TAT Requested (days)											
State Zip: WI 54751		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No											
Phone: 715-235-9081(Tel)		PO #: Purchase Order not required											
Email: kirsten.lee@cedarcorp.com		WO #											
Project Name: Town of Warren		Project #: 50006556		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Special Instructions/Note	
Site		SSOW#		Preservation Code									
12 MW-13		6-28-21 10:05		Water									
13 P-14		6-28-21 9:40		Water									
14 P-15		6-28-21 9:00		Water									
15 MW-16		6-29-21 12:05		Water									
16 MW-17		6-30-21 11:05		Water									
17 P-18		6-30-21 11:20		Water									
18 P-19		6-30-21 10:20		Water									
19 P-20		6-29-21 11:05		Water									
20 MW-21		6-30-21 2:05		Water									
21 MW-22		6-29-21 3:13		Water									
22 P-23		6-30-21 3:50		Water									
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested I II III IV Other (specify)						Special Instructions/QC Requirements							
Empty Kit Relinquished by				Date		Time		Method of Shipment					
Relinquished by: <i>Kirsten Lee</i>		Date/Time: 7/1/21 1000		Company: Cedarcorp		Received by: <i>Shirley Scott</i>		Date/Time: 7/2/21 0945		Company: EPA/CH2			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:			
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks.									

Eurofins TestAmerica, Chicago

2417 Bond Street
University Park IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

eurofins | Environment Testing
America

Client Information		Sampler: BJI		Lab PM: Fredrick Sandie		Carrier Tracking No(s)		COC No: 500-92193-41093 3	
Client Contact: Kirsten Lee		Phone		E-Mail: sandra.fredrick@eurofinset.com		State of Origin		Page 3 of 243	
Company: Cedar Corporation Address: 604 Wilson Avenue City: Menomonie State Zip: WI 54751 Phone: 715-235-9081(Tel) Email: kirsten.lee@cedarcorp.com Project Name: Town of Warren Site:				PWSID		Analysis Requested			
Due Date Requested		TAT Requested (days)		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Job #: 500-201791		Preservation Codes	
PO #		Purchase Order not required		WO #		Project # 50006556		SSOW#	
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		VOCs		Total Number of Containers		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)	VOCs	Total Number of Containers	Special Instructions/Note
23 MW-24	6-30-21	9.45		Water	X	X			
24 P-255	6-30-21	12.10		Water					
25 P-250	6-30-21	12.30		water					
26 MW-26	6-30-21	8.15		water					
27 MW-28	6-30-21	8.40		water					
28 P-27	6-29-21	2.35		water					
29 MW-29	6-28-21	2.25		water					
30 P-30	6-28-21	2.05		water					
31 MW-31	6-28-21	1.25		water					
P-32									
MW-33									
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements				
Empty Kit Relinquished by:			Date		Time		Method of Shipment:		
Relinquished by: <i>Kirsten Lee</i>			Date/Time: 7/1/21 1000		Company: Cedarcorp		Received by: <i>Shirley Scott</i> Date/Time: 7/2/21 0945 Company: EDA CHI		
Relinquished by:			Date/Time:		Company:		Received by: Date/Time: Company:		
Relinquished by:			Date/Time:		Company:		Received by: Date/Time: Company:		
Custody Seals Intact.		Custody Seal No			Cooler Temperature(s) °C and Other Remarks.				
<input type="checkbox"/> Yes <input type="checkbox"/> No									

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-201791-1

Login Number: 201791

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.2,2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-215109-1

Client Project/Site: Town of Warren TCE Investigation

For:

Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
4/27/2022 8:53:17 AM

Sandie Fredrick, Project Manager II
(920)261-1660
Sandra.Fredrick@et.eurofinsus.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	8
Sample Summary	9
Client Sample Results	10
Definitions	110
QC Association	111
Surrogate Summary	113
QC Sample Results	115
Chronicle	134
Certification Summary	142
Chain of Custody	143
Receipt Checklists	148

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Job ID: 500-215109-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-215109-1**

Comments

No additional comments.

Receipt

The samples were received on 4/14/2022 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.3° C and 4.6° C.

Receipt Exceptions

The following sample(s) was listed on the Chain of Custody (COC); however, no sample(s) was received: "Trip Blank"

GC/MS VOA

Method 8260B: Acetone was detected in the following samples: MW-11 (500-215109-20), MW-2 (500-215109-21), P-6 (500-215109-25), P-19 (500-215109-27), MW-29 (500-215109-30), P-27 (500-215109-33), JW-15C (500-215109-39), JW-15B (500-215109-40) and JW-15A (500-215109-41). The method blank associated with these samples was below the reporting limit for Acetone. Acetone is a known lab contaminant; therefore all low level detects for this compound could be suspected as lab contamination.

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



Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-25D

Lab Sample ID: 500-215109-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	160		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-25S

Lab Sample ID: 500-215109-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	63		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-22

Lab Sample ID: 500-215109-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	170		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-18

Lab Sample ID: 500-215109-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	9.1		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-24

Lab Sample ID: 500-215109-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	52		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: Ogburn Wellhouse

Lab Sample ID: 500-215109-6

No Detections.

Client Sample ID: MW-8

Lab Sample ID: 500-215109-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	86		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 500-215109-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.88		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 500-215109-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.1		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-4

Lab Sample ID: 500-215109-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	8.4		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 500-215109-11

No Detections.

Client Sample ID: Albright

Lab Sample ID: 500-215109-12

No Detections.

Client Sample ID: MW-31

Lab Sample ID: 500-215109-13

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	28		0.50	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-30

Lab Sample ID: 500-215109-14

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.4		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 500-215109-15

No Detections.

Client Sample ID: P-10

Lab Sample ID: 500-215109-16

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	28		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-28

Lab Sample ID: 500-215109-17

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.7		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-21

Lab Sample ID: 500-215109-18

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	100		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: Hicks

Lab Sample ID: 500-215109-19

No Detections.

Client Sample ID: MW-11

Lab Sample ID: 500-215109-20

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.9	J	10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 500-215109-21

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: 843 Polen

Lab Sample ID: 500-215109-22

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.4		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 500-215109-23

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	72		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: Willbur

Lab Sample ID: 500-215109-24

No Detections.

Client Sample ID: P-6

Lab Sample ID: 500-215109-25

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11		10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: P-20

Lab Sample ID: 500-215109-26

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-19

Lab Sample ID: 500-215109-27

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.0	J	10	1.7	ug/L	1		8260B	Total/NA
Benzene	0.50		0.50	0.15	ug/L	1		8260B	Total/NA
Tetrahydrofuran	2.0	J	10	1.9	ug/L	1		8260B	Total/NA
Trichloroethene	4.2		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-23

Lab Sample ID: 500-215109-28

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	26		10	1.7	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	2.6	J	5.0	2.1	ug/L	1		8260B	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 500-215109-29

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	130		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-29

Lab Sample ID: 500-215109-30

No Detections.

Client Sample ID: MW-1

Lab Sample ID: 500-215109-31

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.0	J	10	1.7	ug/L	1		8260B	Total/NA
Trichloroethene	33		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-26

Lab Sample ID: 500-215109-32

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	98		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-27

Lab Sample ID: 500-215109-33

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12		10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: MW-33

Lab Sample ID: 500-215109-34

No Detections.

Client Sample ID: P-32

Lab Sample ID: 500-215109-35

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.1		0.50	0.16	ug/L	1		8260B	Total/NA
Trichlorofluoromethane	3.9		1.0	0.43	ug/L	1		8260B	Total/NA

Client Sample ID: JW-18B

Lab Sample ID: 500-215109-36

No Detections.

Client Sample ID: JW-16

Lab Sample ID: 500-215109-37

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-18A

Lab Sample ID: 500-215109-38

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.3		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: JW-15C

Lab Sample ID: 500-215109-39

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.1		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: JW-15B

Lab Sample ID: 500-215109-40

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.7	J	10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: JW-15A

Lab Sample ID: 500-215109-41

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.4	J	10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: JW-14

Lab Sample ID: 500-215109-42

No Detections.

Client Sample ID: JW-17A

Lab Sample ID: 500-215109-43

No Detections.

Client Sample ID: JW-17B

Lab Sample ID: 500-215109-44

No Detections.

Client Sample ID: JW-13

Lab Sample ID: 500-215109-45

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.3		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-15

Lab Sample ID: 500-215109-46

No Detections.

Client Sample ID: 903-Raw 87th Ave

Lab Sample ID: 500-215109-47

No Detections.

Client Sample ID: 904-Raw 87th Ave

Lab Sample ID: 500-215109-48

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12		10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: JW-11

Lab Sample ID: 500-215109-49

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.92		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: P-14

Lab Sample ID: 500-215109-50

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.6		0.50	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Sample Summary

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-215109-1	P-25D	Water	04/11/22 09:00	04/14/22 10:20
500-215109-2	P-25S	Water	04/11/22 09:15	04/14/22 10:20
500-215109-3	MW-22	Water	04/11/22 10:00	04/14/22 10:20
500-215109-4	P-18	Water	04/11/22 12:00	04/14/22 10:20
500-215109-5	MW-24	Water	04/11/22 12:20	04/14/22 10:20
500-215109-6	Ogburn Wellhouse	Water	04/11/22 13:00	04/14/22 10:20
500-215109-7	MW-8	Water	04/11/22 12:45	04/14/22 10:20
500-215109-8	MW-7	Water	04/11/22 13:10	04/14/22 10:20
500-215109-9	MW-13	Water	04/11/22 12:00	04/14/22 10:20
500-215109-10	P-4	Water	04/11/22 13:40	04/14/22 10:20
500-215109-11	MW-3	Water	04/11/22 13:45	04/14/22 10:20
500-215109-12	Albright	Water	04/11/22 14:30	04/14/22 10:20
500-215109-13	MW-31	Water	04/11/22 14:40	04/14/22 10:20
500-215109-14	P-30	Water	04/11/22 14:40	04/14/22 10:20
500-215109-15	MW-9	Water	04/11/22 15:45	04/14/22 10:20
500-215109-16	P-10	Water	04/11/22 15:30	04/14/22 10:20
500-215109-17	MW-28	Water	04/12/22 09:15	04/14/22 10:20
500-215109-18	MW-21	Water	04/12/22 08:45	04/14/22 10:20
500-215109-19	Hicks	Water	04/12/22 10:30	04/14/22 10:20
500-215109-20	MW-11	Water	04/12/22 11:00	04/14/22 10:20
500-215109-21	MW-2	Water	04/12/22 10:15	04/14/22 10:20
500-215109-22	843 Polen	Water	04/12/22 11:30	04/14/22 10:20
500-215109-23	MW-16	Water	04/12/22 10:00	04/14/22 10:20
500-215109-24	Willbur	Water	04/12/22 11:40	04/14/22 10:20
500-215109-25	P-6	Water	04/11/22 10:30	04/14/22 10:20
500-215109-26	P-20	Water	04/11/22 11:00	04/14/22 10:20
500-215109-27	P-19	Water	04/11/22 11:30	04/14/22 10:20
500-215109-28	P-23	Water	04/11/22 11:45	04/14/22 10:20
500-215109-29	MW-17	Water	04/11/22 12:00	04/14/22 10:20
500-215109-30	MW-29	Water	04/11/22 15:00	04/14/22 10:20
500-215109-31	MW-1	Water	04/11/22 08:30	04/14/22 10:20
500-215109-32	MW-26	Water	04/12/22 09:45	04/14/22 10:20
500-215109-33	P-27	Water	04/12/22 09:40	04/14/22 10:20
500-215109-34	MW-33	Water	04/12/22 16:15	04/14/22 10:20
500-215109-35	P-32	Water	04/12/22 16:25	04/14/22 10:20
500-215109-36	JW-18B	Water	04/12/22 16:00	04/14/22 10:20
500-215109-37	JW-16	Water	04/12/22 10:00	04/14/22 10:20
500-215109-38	JW-18A	Water	04/12/22 15:30	04/14/22 10:20
500-215109-39	JW-15C	Water	04/12/22 15:10	04/14/22 10:20
500-215109-40	JW-15B	Water	04/12/22 15:00	04/14/22 10:20
500-215109-41	JW-15A	Water	04/12/22 14:50	04/14/22 10:20
500-215109-42	JW-14	Water	04/12/22 14:30	04/14/22 10:20
500-215109-43	JW-17A	Water	04/12/22 14:45	04/14/22 10:20
500-215109-44	JW-17B	Water	04/12/22 14:40	04/14/22 10:20
500-215109-45	JW-13	Water	04/12/22 14:00	04/14/22 10:20
500-215109-46	P-15	Water	04/12/22 13:00	04/14/22 10:20
500-215109-47	903-Raw 87th Ave	Water	04/12/22 12:10	04/14/22 10:20
500-215109-48	904-Raw 87th Ave	Water	04/12/22 12:20	04/14/22 10:20
500-215109-49	JW-11	Water	04/12/22 13:30	04/14/22 10:20
500-215109-50	P-14	Water	04/12/22 11:50	04/14/22 10:20



Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-25D
Date Collected: 04/11/22 09:00
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 11:38	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 11:38	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 11:38	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 11:38	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 11:38	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 11:38	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 11:38	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 11:38	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 11:38	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 11:38	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 11:38	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 11:38	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 11:38	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 11:38	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 11:38	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 11:38	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 11:38	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 11:38	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 11:38	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 11:38	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 11:38	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 11:38	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 11:38	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 11:38	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 11:38	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 11:38	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 11:38	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 11:38	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 11:38	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 11:38	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 11:38	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 11:38	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 11:38	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 11:38	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 11:38	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 11:38	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 11:38	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 11:38	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 11:38	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 11:38	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 11:38	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 11:38	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 11:38	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 11:38	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 11:38	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 11:38	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 11:38	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 11:38	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 11:38	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-25D
Date Collected: 04/11/22 09:00
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 11:38	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 11:38	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 11:38	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 11:38	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 11:38	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 11:38	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 11:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 11:38	1
Trichloroethene	160		0.50	0.16	ug/L			04/21/22 11:38	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 11:38	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 11:38	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 11:38	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 11:38	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 11:38	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		04/21/22 11:38	1
Dibromofluoromethane (Surr)	99		75 - 120		04/21/22 11:38	1
1,2-Dichloroethane-d4 (Surr)	101		75 - 126		04/21/22 11:38	1
Toluene-d8 (Surr)	99		75 - 120		04/21/22 11:38	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-25S

Lab Sample ID: 500-215109-2

Date Collected: 04/11/22 09:15

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 12:24	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 12:24	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 12:24	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 12:24	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 12:24	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 12:24	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 12:24	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 12:24	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 12:24	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 12:24	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 12:24	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 12:24	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 12:24	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 12:24	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 12:24	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 12:24	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 12:24	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 12:24	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 12:24	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 12:24	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 12:24	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 12:24	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 12:24	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 12:24	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 12:24	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 12:24	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 12:24	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 12:24	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 12:24	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 12:24	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 12:24	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 12:24	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 12:24	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 12:24	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 12:24	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 12:24	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 12:24	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 12:24	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 12:24	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 12:24	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 12:24	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 12:24	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 12:24	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 12:24	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 12:24	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 12:24	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 12:24	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 12:24	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 12:24	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-25S
Date Collected: 04/11/22 09:15
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-2
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 12:24	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 12:24	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 12:24	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 12:24	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 12:24	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 12:24	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 12:24	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 12:24	1
Trichloroethene	63		0.50	0.16	ug/L			04/21/22 12:24	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 12:24	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 12:24	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 12:24	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 12:24	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 12:24	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 12:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124					04/21/22 12:24	1
Dibromofluoromethane (Surr)	103		75 - 120					04/21/22 12:24	1
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					04/21/22 12:24	1
Toluene-d8 (Surr)	100		75 - 120					04/21/22 12:24	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-22

Lab Sample ID: 500-215109-3

Date Collected: 04/11/22 10:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 12:47	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 12:47	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 12:47	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 12:47	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 12:47	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 12:47	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 12:47	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 12:47	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 12:47	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 12:47	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 12:47	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 12:47	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 12:47	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 12:47	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 12:47	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 12:47	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 12:47	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 12:47	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 12:47	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 12:47	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 12:47	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 12:47	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 12:47	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 12:47	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 12:47	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 12:47	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 12:47	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 12:47	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 12:47	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 12:47	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 12:47	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 12:47	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 12:47	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 12:47	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 12:47	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 12:47	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 12:47	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 12:47	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 12:47	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 12:47	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 12:47	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 12:47	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 12:47	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 12:47	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 12:47	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 12:47	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 12:47	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 12:47	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 12:47	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-22
Date Collected: 04/11/22 10:00
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-3
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 12:47	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 12:47	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 12:47	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 12:47	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 12:47	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 12:47	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 12:47	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 12:47	1
Trichloroethene	170		0.50	0.16	ug/L			04/21/22 12:47	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 12:47	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 12:47	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 12:47	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 12:47	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 12:47	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 12:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		04/21/22 12:47	1
Dibromofluoromethane (Surr)	105		75 - 120		04/21/22 12:47	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		04/21/22 12:47	1
Toluene-d8 (Surr)	103		75 - 120		04/21/22 12:47	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-18

Lab Sample ID: 500-215109-4

Date Collected: 04/11/22 12:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 13:33	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 13:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 13:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 13:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 13:33	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 13:33	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 13:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 13:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 13:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 13:33	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 13:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 13:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 13:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 13:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 13:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 13:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 13:33	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 13:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 13:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 13:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 13:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 13:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 13:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 13:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 13:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 13:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 13:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 13:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 13:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 13:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 13:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 13:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 13:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 13:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 13:33	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 13:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 13:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 13:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 13:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 13:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 13:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 13:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 13:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 13:33	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 13:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 13:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 13:33	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 13:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 13:33	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-18

Lab Sample ID: 500-215109-4

Date Collected: 04/11/22 12:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 13:33	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 13:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 13:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 13:33	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 13:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 13:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 13:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 13:33	1
Trichloroethene	9.1		0.50	0.16	ug/L			04/21/22 13:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 13:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 13:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 13:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 13:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 13:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 13:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124		04/21/22 13:33	1
Dibromofluoromethane (Surr)	106		75 - 120		04/21/22 13:33	1
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		04/21/22 13:33	1
Toluene-d8 (Surr)	101		75 - 120		04/21/22 13:33	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-24

Lab Sample ID: 500-215109-5

Date Collected: 04/11/22 12:20

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 13:56	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 13:56	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 13:56	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 13:56	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 13:56	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 13:56	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 13:56	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 13:56	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 13:56	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 13:56	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 13:56	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 13:56	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 13:56	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 13:56	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 13:56	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 13:56	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 13:56	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 13:56	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 13:56	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 13:56	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 13:56	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 13:56	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 13:56	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 13:56	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 13:56	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 13:56	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 13:56	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 13:56	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 13:56	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 13:56	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 13:56	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 13:56	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 13:56	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 13:56	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 13:56	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 13:56	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 13:56	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 13:56	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 13:56	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 13:56	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 13:56	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 13:56	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 13:56	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 13:56	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 13:56	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 13:56	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 13:56	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 13:56	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 13:56	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-24
Date Collected: 04/11/22 12:20
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-5
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 13:56	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 13:56	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 13:56	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 13:56	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 13:56	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 13:56	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 13:56	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 13:56	1
Trichloroethene	52		0.50	0.16	ug/L			04/21/22 13:56	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 13:56	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 13:56	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 13:56	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 13:56	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 13:56	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124		04/21/22 13:56	1
Dibromofluoromethane (Surr)	109		75 - 120		04/21/22 13:56	1
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		04/21/22 13:56	1
Toluene-d8 (Surr)	98		75 - 120		04/21/22 13:56	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: Ogburn Wellhouse

Lab Sample ID: 500-215109-6

Date Collected: 04/11/22 13:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 14:19	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 14:19	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 14:19	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 14:19	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 14:19	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 14:19	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 14:19	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 14:19	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 14:19	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 14:19	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 14:19	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 14:19	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 14:19	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 14:19	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 14:19	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 14:19	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 14:19	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 14:19	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 14:19	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 14:19	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 14:19	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 14:19	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 14:19	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 14:19	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 14:19	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 14:19	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 14:19	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 14:19	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 14:19	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 14:19	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 14:19	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 14:19	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 14:19	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 14:19	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 14:19	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 14:19	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 14:19	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 14:19	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 14:19	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 14:19	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 14:19	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 14:19	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 14:19	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 14:19	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 14:19	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 14:19	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 14:19	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 14:19	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 14:19	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: Ogburn Wellhouse

Lab Sample ID: 500-215109-6

Date Collected: 04/11/22 13:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 14:19	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 14:19	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 14:19	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 14:19	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 14:19	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 14:19	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 14:19	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 14:19	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/21/22 14:19	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 14:19	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 14:19	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 14:19	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 14:19	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 14:19	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 14:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124		04/21/22 14:19	1
Dibromofluoromethane (Surr)	111		75 - 120		04/21/22 14:19	1
1,2-Dichloroethane-d4 (Surr)	114		75 - 126		04/21/22 14:19	1
Toluene-d8 (Surr)	97		75 - 120		04/21/22 14:19	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-8
Date Collected: 04/11/22 12:45
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 14:42	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 14:42	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 14:42	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 14:42	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 14:42	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 14:42	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 14:42	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 14:42	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 14:42	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 14:42	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 14:42	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 14:42	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 14:42	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 14:42	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 14:42	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 14:42	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 14:42	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 14:42	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 14:42	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 14:42	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 14:42	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 14:42	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 14:42	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 14:42	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 14:42	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 14:42	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 14:42	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 14:42	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 14:42	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 14:42	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 14:42	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 14:42	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 14:42	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 14:42	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 14:42	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 14:42	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 14:42	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 14:42	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 14:42	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 14:42	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 14:42	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 14:42	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 14:42	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 14:42	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 14:42	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 14:42	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 14:42	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 14:42	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 14:42	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-8
Date Collected: 04/11/22 12:45
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-7
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 14:42	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 14:42	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 14:42	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 14:42	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 14:42	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 14:42	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 14:42	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 14:42	1
Trichloroethene	86		0.50	0.16	ug/L			04/21/22 14:42	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 14:42	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 14:42	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 14:42	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 14:42	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 14:42	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 14:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124					04/21/22 14:42	1
Dibromofluoromethane (Surr)	108		75 - 120					04/21/22 14:42	1
1,2-Dichloroethane-d4 (Surr)	107		75 - 126					04/21/22 14:42	1
Toluene-d8 (Surr)	101		75 - 120					04/21/22 14:42	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-7
Date Collected: 04/11/22 13:10
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 15:05	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 15:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 15:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 15:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 15:05	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 15:05	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 15:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 15:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 15:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 15:05	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 15:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 15:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 15:05	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 15:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 15:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 15:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 15:05	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 15:05	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 15:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 15:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 15:05	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 15:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 15:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 15:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 15:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 15:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 15:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 15:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 15:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 15:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 15:05	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 15:05	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 15:05	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 15:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 15:05	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 15:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 15:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 15:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 15:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 15:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 15:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 15:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 15:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 15:05	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 15:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 15:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 15:05	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 15:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 15:05	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-7
Date Collected: 04/11/22 13:10
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-8
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 15:05	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 15:05	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 15:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 15:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 15:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 15:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 15:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 15:05	1
Trichloroethene	0.88		0.50	0.16	ug/L			04/21/22 15:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 15:05	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 15:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 15:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 15:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 15:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		04/21/22 15:05	1
Dibromofluoromethane (Surr)	108		75 - 120		04/21/22 15:05	1
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		04/21/22 15:05	1
Toluene-d8 (Surr)	100		75 - 120		04/21/22 15:05	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-13

Lab Sample ID: 500-215109-9

Date Collected: 04/11/22 12:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 15:28	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 15:28	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 15:28	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 15:28	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 15:28	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 15:28	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 15:28	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 15:28	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 15:28	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 15:28	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 15:28	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 15:28	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 15:28	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 15:28	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 15:28	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 15:28	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 15:28	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 15:28	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 15:28	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 15:28	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 15:28	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 15:28	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 15:28	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 15:28	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 15:28	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 15:28	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 15:28	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 15:28	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 15:28	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 15:28	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 15:28	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 15:28	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 15:28	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 15:28	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 15:28	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 15:28	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 15:28	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 15:28	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 15:28	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 15:28	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 15:28	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 15:28	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 15:28	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 15:28	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 15:28	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 15:28	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 15:28	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 15:28	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 15:28	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-13

Lab Sample ID: 500-215109-9

Date Collected: 04/11/22 12:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 15:28	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 15:28	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 15:28	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 15:28	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 15:28	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 15:28	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 15:28	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 15:28	1
Trichloroethene	2.1		0.50	0.16	ug/L			04/21/22 15:28	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 15:28	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 15:28	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 15:28	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 15:28	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 15:28	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124		04/21/22 15:28	1
Dibromofluoromethane (Surr)	104		75 - 120		04/21/22 15:28	1
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		04/21/22 15:28	1
Toluene-d8 (Surr)	99		75 - 120		04/21/22 15:28	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-4

Lab Sample ID: 500-215109-10

Date Collected: 04/11/22 13:40

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 15:51	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 15:51	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 15:51	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 15:51	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 15:51	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 15:51	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 15:51	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 15:51	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 15:51	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 15:51	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 15:51	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 15:51	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 15:51	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 15:51	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 15:51	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 15:51	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 15:51	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 15:51	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 15:51	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 15:51	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 15:51	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 15:51	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 15:51	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 15:51	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 15:51	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 15:51	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 15:51	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 15:51	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 15:51	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 15:51	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 15:51	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 15:51	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 15:51	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 15:51	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 15:51	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 15:51	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 15:51	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 15:51	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 15:51	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 15:51	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 15:51	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 15:51	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 15:51	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 15:51	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 15:51	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 15:51	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 15:51	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 15:51	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 15:51	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-4

Lab Sample ID: 500-215109-10

Date Collected: 04/11/22 13:40

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 15:51	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 15:51	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 15:51	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 15:51	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 15:51	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 15:51	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 15:51	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 15:51	1
Trichloroethene	8.4		0.50	0.16	ug/L			04/21/22 15:51	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 15:51	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 15:51	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 15:51	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 15:51	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 15:51	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 15:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		72 - 124		04/21/22 15:51	1
Dibromofluoromethane (Surr)	113		75 - 120		04/21/22 15:51	1
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		04/21/22 15:51	1
Toluene-d8 (Surr)	99		75 - 120		04/21/22 15:51	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-3
Date Collected: 04/11/22 13:45
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 16:14	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 16:14	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 16:14	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 16:14	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 16:14	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 16:14	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 16:14	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 16:14	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 16:14	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 16:14	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 16:14	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 16:14	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 16:14	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 16:14	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 16:14	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 16:14	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 16:14	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 16:14	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 16:14	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 16:14	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 16:14	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 16:14	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 16:14	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 16:14	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 16:14	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 16:14	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 16:14	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 16:14	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 16:14	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 16:14	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 16:14	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 16:14	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 16:14	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 16:14	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 16:14	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 16:14	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 16:14	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 16:14	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 16:14	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 16:14	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 16:14	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 16:14	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 16:14	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 16:14	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 16:14	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 16:14	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 16:14	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 16:14	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 16:14	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-3
Date Collected: 04/11/22 13:45
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-11
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 16:14	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 16:14	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 16:14	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 16:14	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 16:14	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 16:14	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 16:14	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 16:14	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/21/22 16:14	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 16:14	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 16:14	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 16:14	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 16:14	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 16:14	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124					04/21/22 16:14	1
Dibromofluoromethane (Surr)	110		75 - 120					04/21/22 16:14	1
1,2-Dichloroethane-d4 (Surr)	114		75 - 126					04/21/22 16:14	1
Toluene-d8 (Surr)	96		75 - 120					04/21/22 16:14	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: Albright

Lab Sample ID: 500-215109-12

Date Collected: 04/11/22 14:30

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 16:37	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 16:37	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 16:37	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 16:37	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 16:37	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 16:37	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 16:37	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 16:37	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 16:37	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 16:37	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 16:37	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 16:37	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 16:37	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 16:37	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 16:37	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 16:37	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 16:37	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 16:37	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 16:37	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 16:37	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 16:37	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 16:37	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 16:37	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 16:37	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 16:37	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 16:37	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 16:37	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 16:37	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 16:37	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 16:37	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 16:37	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 16:37	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 16:37	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 16:37	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 16:37	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 16:37	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 16:37	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 16:37	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 16:37	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 16:37	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 16:37	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 16:37	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 16:37	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 16:37	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 16:37	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 16:37	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 16:37	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 16:37	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 16:37	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: Albright

Lab Sample ID: 500-215109-12

Date Collected: 04/11/22 14:30

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 16:37	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 16:37	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 16:37	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 16:37	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 16:37	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 16:37	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 16:37	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 16:37	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/21/22 16:37	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 16:37	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 16:37	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 16:37	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 16:37	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 16:37	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124		04/21/22 16:37	1
Dibromofluoromethane (Surr)	109		75 - 120		04/21/22 16:37	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		04/21/22 16:37	1
Toluene-d8 (Surr)	99		75 - 120		04/21/22 16:37	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-31

Lab Sample ID: 500-215109-13

Date Collected: 04/11/22 14:40

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 17:00	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 17:00	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 17:00	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 17:00	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 17:00	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 17:00	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 17:00	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 17:00	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 17:00	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 17:00	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 17:00	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 17:00	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 17:00	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 17:00	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 17:00	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 17:00	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 17:00	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 17:00	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 17:00	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 17:00	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 17:00	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 17:00	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 17:00	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 17:00	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 17:00	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 17:00	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 17:00	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 17:00	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 17:00	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 17:00	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 17:00	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 17:00	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 17:00	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 17:00	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 17:00	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 17:00	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 17:00	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 17:00	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 17:00	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 17:00	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 17:00	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 17:00	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 17:00	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 17:00	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 17:00	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 17:00	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 17:00	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 17:00	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 17:00	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-31

Lab Sample ID: 500-215109-13

Date Collected: 04/11/22 14:40

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 17:00	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 17:00	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 17:00	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 17:00	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 17:00	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 17:00	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 17:00	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 17:00	1
Trichloroethene	28		0.50	0.16	ug/L			04/21/22 17:00	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 17:00	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 17:00	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 17:00	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 17:00	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 17:00	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 17:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		04/21/22 17:00	1
Dibromofluoromethane (Surr)	109		75 - 120		04/21/22 17:00	1
1,2-Dichloroethane-d4 (Surr)	114		75 - 126		04/21/22 17:00	1
Toluene-d8 (Surr)	99		75 - 120		04/21/22 17:00	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-30

Lab Sample ID: 500-215109-14

Date Collected: 04/11/22 14:40

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 17:23	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 17:23	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 17:23	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 17:23	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 17:23	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 17:23	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 17:23	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 17:23	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 17:23	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 17:23	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 17:23	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 17:23	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 17:23	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 17:23	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 17:23	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 17:23	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 17:23	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 17:23	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 17:23	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 17:23	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 17:23	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 17:23	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 17:23	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 17:23	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 17:23	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 17:23	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 17:23	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 17:23	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 17:23	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 17:23	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 17:23	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 17:23	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 17:23	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 17:23	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 17:23	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 17:23	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 17:23	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 17:23	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 17:23	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 17:23	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 17:23	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 17:23	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 17:23	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 17:23	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 17:23	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 17:23	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 17:23	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 17:23	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 17:23	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-30

Lab Sample ID: 500-215109-14

Date Collected: 04/11/22 14:40

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 17:23	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 17:23	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 17:23	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 17:23	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 17:23	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 17:23	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 17:23	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 17:23	1
Trichloroethene	7.4		0.50	0.16	ug/L			04/21/22 17:23	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 17:23	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 17:23	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 17:23	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 17:23	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 17:23	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		04/21/22 17:23	1
Dibromofluoromethane (Surr)	107		75 - 120		04/21/22 17:23	1
1,2-Dichloroethane-d4 (Surr)	114		75 - 126		04/21/22 17:23	1
Toluene-d8 (Surr)	99		75 - 120		04/21/22 17:23	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-9

Lab Sample ID: 500-215109-15

Date Collected: 04/11/22 15:45

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 17:47	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 17:47	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 17:47	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 17:47	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 17:47	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 17:47	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 17:47	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 17:47	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 17:47	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 17:47	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 17:47	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 17:47	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 17:47	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 17:47	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 17:47	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 17:47	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 17:47	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 17:47	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 17:47	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 17:47	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 17:47	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 17:47	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 17:47	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 17:47	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 17:47	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 17:47	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 17:47	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 17:47	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 17:47	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 17:47	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 17:47	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 17:47	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 17:47	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 17:47	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 17:47	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 17:47	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 17:47	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 17:47	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 17:47	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 17:47	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 17:47	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 17:47	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 17:47	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 17:47	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 17:47	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 17:47	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 17:47	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 17:47	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 17:47	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-9

Lab Sample ID: 500-215109-15

Date Collected: 04/11/22 15:45

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 17:47	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 17:47	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 17:47	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 17:47	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 17:47	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 17:47	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 17:47	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 17:47	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/21/22 17:47	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 17:47	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 17:47	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 17:47	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 17:47	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 17:47	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 17:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124					04/21/22 17:47	1
Dibromofluoromethane (Surr)	110		75 - 120					04/21/22 17:47	1
1,2-Dichloroethane-d4 (Surr)	117		75 - 126					04/21/22 17:47	1
Toluene-d8 (Surr)	98		75 - 120					04/21/22 17:47	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-10

Lab Sample ID: 500-215109-16

Date Collected: 04/11/22 15:30

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 18:09	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 18:09	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 18:09	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 18:09	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 18:09	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 18:09	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 18:09	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 18:09	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 18:09	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 18:09	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 18:09	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 18:09	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 18:09	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 18:09	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 18:09	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 18:09	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 18:09	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 18:09	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 18:09	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 18:09	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 18:09	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 18:09	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 18:09	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 18:09	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 18:09	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 18:09	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 18:09	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 18:09	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 18:09	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 18:09	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 18:09	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 18:09	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 18:09	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 18:09	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 18:09	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 18:09	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 18:09	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 18:09	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 18:09	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 18:09	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 18:09	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 18:09	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 18:09	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 18:09	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 18:09	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 18:09	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 18:09	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 18:09	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 18:09	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-10

Lab Sample ID: 500-215109-16

Date Collected: 04/11/22 15:30

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 18:09	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 18:09	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 18:09	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 18:09	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 18:09	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 18:09	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 18:09	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 18:09	1
Trichloroethene	28		0.50	0.16	ug/L			04/21/22 18:09	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 18:09	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 18:09	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 18:09	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 18:09	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 18:09	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		04/21/22 18:09	1
Dibromofluoromethane (Surr)	110		75 - 120		04/21/22 18:09	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		04/21/22 18:09	1
Toluene-d8 (Surr)	97		75 - 120		04/21/22 18:09	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-28

Lab Sample ID: 500-215109-17

Date Collected: 04/12/22 09:15

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 18:32	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 18:32	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 18:32	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 18:32	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 18:32	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 18:32	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 18:32	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 18:32	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 18:32	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 18:32	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 18:32	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 18:32	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 18:32	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 18:32	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 18:32	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 18:32	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 18:32	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 18:32	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 18:32	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 18:32	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 18:32	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 18:32	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 18:32	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 18:32	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 18:32	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 18:32	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 18:32	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 18:32	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 18:32	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 18:32	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 18:32	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 18:32	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 18:32	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 18:32	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 18:32	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 18:32	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 18:32	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 18:32	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 18:32	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 18:32	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 18:32	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 18:32	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 18:32	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 18:32	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 18:32	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 18:32	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 18:32	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 18:32	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 18:32	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-28

Lab Sample ID: 500-215109-17

Date Collected: 04/12/22 09:15

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 18:32	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 18:32	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 18:32	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 18:32	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 18:32	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 18:32	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 18:32	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 18:32	1
Trichloroethene	7.7		0.50	0.16	ug/L			04/21/22 18:32	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 18:32	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 18:32	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 18:32	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 18:32	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 18:32	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		72 - 124		04/21/22 18:32	1
Dibromofluoromethane (Surr)	114		75 - 120		04/21/22 18:32	1
1,2-Dichloroethane-d4 (Surr)	114		75 - 126		04/21/22 18:32	1
Toluene-d8 (Surr)	99		75 - 120		04/21/22 18:32	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-21

Lab Sample ID: 500-215109-18

Date Collected: 04/12/22 08:45

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 18:55	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 18:55	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 18:55	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 18:55	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 18:55	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 18:55	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 18:55	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 18:55	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 18:55	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 18:55	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 18:55	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 18:55	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 18:55	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 18:55	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 18:55	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 18:55	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 18:55	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 18:55	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 18:55	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 18:55	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 18:55	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 18:55	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 18:55	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 18:55	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 18:55	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 18:55	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 18:55	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 18:55	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 18:55	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 18:55	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 18:55	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 18:55	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 18:55	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 18:55	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 18:55	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 18:55	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 18:55	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 18:55	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 18:55	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 18:55	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 18:55	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 18:55	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 18:55	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 18:55	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 18:55	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 18:55	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 18:55	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 18:55	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 18:55	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-21
Date Collected: 04/12/22 08:45
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-18
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 18:55	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 18:55	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 18:55	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 18:55	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 18:55	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 18:55	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 18:55	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 18:55	1
Trichloroethene	100		0.50	0.16	ug/L			04/21/22 18:55	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 18:55	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 18:55	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 18:55	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 18:55	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 18:55	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 18:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		04/21/22 18:55	1
Dibromofluoromethane (Surr)	112		75 - 120		04/21/22 18:55	1
1,2-Dichloroethane-d4 (Surr)	117		75 - 126		04/21/22 18:55	1
Toluene-d8 (Surr)	97		75 - 120		04/21/22 18:55	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: Hicks
Date Collected: 04/12/22 10:30
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-19
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/21/22 19:18	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 19:18	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 19:18	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 19:18	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 19:18	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 19:18	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 19:18	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 19:18	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 19:18	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 19:18	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 19:18	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 19:18	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 19:18	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 19:18	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 19:18	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 19:18	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 19:18	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 19:18	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 19:18	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 19:18	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 19:18	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 19:18	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 19:18	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 19:18	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 19:18	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 19:18	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 19:18	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 19:18	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 19:18	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 19:18	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 19:18	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 19:18	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 19:18	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 19:18	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 19:18	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 19:18	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 19:18	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 19:18	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 19:18	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 19:18	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 19:18	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 19:18	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 19:18	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 19:18	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 19:18	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 19:18	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 19:18	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 19:18	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 19:18	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: Hicks
Date Collected: 04/12/22 10:30
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-19
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 19:18	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 19:18	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 19:18	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 19:18	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 19:18	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 19:18	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 19:18	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 19:18	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/21/22 19:18	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 19:18	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 19:18	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 19:18	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 19:18	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 19:18	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 19:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124					04/21/22 19:18	1
Dibromofluoromethane (Surr)	109		75 - 120					04/21/22 19:18	1
1,2-Dichloroethane-d4 (Surr)	115		75 - 126					04/21/22 19:18	1
Toluene-d8 (Surr)	98		75 - 120					04/21/22 19:18	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-11

Lab Sample ID: 500-215109-20

Date Collected: 04/12/22 11:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.9	J	10	1.7	ug/L			04/21/22 19:42	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 19:42	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 19:42	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 19:42	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 19:42	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 19:42	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 19:42	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 19:42	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 19:42	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 19:42	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 19:42	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 19:42	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 19:42	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 19:42	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 19:42	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 19:42	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 19:42	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 19:42	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 19:42	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 19:42	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 19:42	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 19:42	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 19:42	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 19:42	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 19:42	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 19:42	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 19:42	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 19:42	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 19:42	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 19:42	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 19:42	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 19:42	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 19:42	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 19:42	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 19:42	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 19:42	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 19:42	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/21/22 19:42	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 19:42	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 19:42	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 19:42	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 19:42	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 19:42	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 19:42	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 19:42	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 19:42	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 19:42	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 19:42	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 19:42	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-11

Lab Sample ID: 500-215109-20

Date Collected: 04/12/22 11:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 19:42	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 19:42	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 19:42	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 19:42	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 19:42	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 19:42	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 19:42	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 19:42	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/21/22 19:42	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 19:42	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 19:42	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 19:42	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 19:42	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 19:42	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 19:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124					04/21/22 19:42	1
Dibromofluoromethane (Surr)	111		75 - 120					04/21/22 19:42	1
1,2-Dichloroethane-d4 (Surr)	117		75 - 126					04/21/22 19:42	1
Toluene-d8 (Surr)	99		75 - 120					04/21/22 19:42	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-2

Lab Sample ID: 500-215109-21

Date Collected: 04/12/22 10:15

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.0	J	10	1.7	ug/L			04/22/22 11:17	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 11:17	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 11:17	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 11:17	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 11:17	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 11:17	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 11:17	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 11:17	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 11:17	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 11:17	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 11:17	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 11:17	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 11:17	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 11:17	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 11:17	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 11:17	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 11:17	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 11:17	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 11:17	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 11:17	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 11:17	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 11:17	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 11:17	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 11:17	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 11:17	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 11:17	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 11:17	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 11:17	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 11:17	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 11:17	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 11:17	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 11:17	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 11:17	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 11:17	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 11:17	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 11:17	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 11:17	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 11:17	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 11:17	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 11:17	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 11:17	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 11:17	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 11:17	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 11:17	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 11:17	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 11:17	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 11:17	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 11:17	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 11:17	1

Euofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-2
Date Collected: 04/12/22 10:15
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-21
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 11:17	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 11:17	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 11:17	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 11:17	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 11:17	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 11:17	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 11:17	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 11:17	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 11:17	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 11:17	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 11:17	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 11:17	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 11:17	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 11:17	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 11:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124					04/22/22 11:17	1
Dibromofluoromethane (Surr)	107		75 - 120					04/22/22 11:17	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126					04/22/22 11:17	1
Toluene-d8 (Surr)	100		75 - 120					04/22/22 11:17	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: 843 Polen

Lab Sample ID: 500-215109-22

Date Collected: 04/12/22 11:30

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 11:40	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 11:40	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 11:40	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 11:40	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 11:40	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 11:40	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 11:40	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 11:40	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 11:40	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 11:40	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 11:40	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 11:40	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 11:40	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 11:40	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 11:40	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 11:40	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 11:40	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 11:40	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 11:40	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 11:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 11:40	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 11:40	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 11:40	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 11:40	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 11:40	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 11:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 11:40	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 11:40	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 11:40	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 11:40	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 11:40	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 11:40	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 11:40	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 11:40	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 11:40	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 11:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 11:40	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 11:40	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 11:40	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 11:40	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 11:40	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 11:40	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 11:40	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 11:40	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 11:40	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 11:40	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 11:40	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 11:40	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 11:40	1

Euofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: 843 Polen

Lab Sample ID: 500-215109-22

Date Collected: 04/12/22 11:30

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 11:40	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 11:40	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 11:40	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 11:40	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 11:40	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 11:40	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 11:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 11:40	1
Trichloroethene	1.4		0.50	0.16	ug/L			04/22/22 11:40	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 11:40	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 11:40	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 11:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 11:40	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 11:40	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 11:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124		04/22/22 11:40	1
Dibromofluoromethane (Surr)	100		75 - 120		04/22/22 11:40	1
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		04/22/22 11:40	1
Toluene-d8 (Surr)	100		75 - 120		04/22/22 11:40	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-16

Lab Sample ID: 500-215109-23

Date Collected: 04/12/22 10:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 12:03	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 12:03	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 12:03	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 12:03	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 12:03	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 12:03	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 12:03	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 12:03	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 12:03	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 12:03	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 12:03	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 12:03	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 12:03	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 12:03	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 12:03	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 12:03	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 12:03	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 12:03	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 12:03	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 12:03	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 12:03	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 12:03	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 12:03	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 12:03	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 12:03	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 12:03	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 12:03	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 12:03	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 12:03	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 12:03	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 12:03	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 12:03	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 12:03	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 12:03	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 12:03	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 12:03	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 12:03	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 12:03	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 12:03	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 12:03	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 12:03	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 12:03	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 12:03	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 12:03	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 12:03	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 12:03	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 12:03	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 12:03	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 12:03	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-16
Date Collected: 04/12/22 10:00
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-23
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 12:03	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 12:03	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 12:03	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 12:03	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 12:03	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 12:03	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 12:03	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 12:03	1
Trichloroethene	72		0.50	0.16	ug/L			04/22/22 12:03	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 12:03	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 12:03	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 12:03	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 12:03	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 12:03	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 12:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124		04/22/22 12:03	1
Dibromofluoromethane (Surr)	105		75 - 120		04/22/22 12:03	1
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		04/22/22 12:03	1
Toluene-d8 (Surr)	100		75 - 120		04/22/22 12:03	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: Willbur

Lab Sample ID: 500-215109-24

Date Collected: 04/12/22 11:40

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 12:25	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 12:25	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 12:25	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 12:25	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 12:25	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 12:25	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 12:25	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 12:25	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 12:25	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 12:25	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 12:25	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 12:25	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 12:25	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 12:25	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 12:25	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 12:25	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 12:25	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 12:25	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 12:25	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 12:25	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 12:25	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 12:25	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 12:25	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 12:25	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 12:25	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 12:25	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 12:25	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 12:25	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 12:25	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 12:25	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 12:25	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 12:25	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 12:25	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 12:25	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 12:25	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 12:25	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 12:25	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 12:25	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 12:25	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 12:25	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 12:25	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 12:25	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 12:25	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 12:25	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 12:25	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 12:25	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 12:25	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 12:25	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 12:25	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: Willbur

Lab Sample ID: 500-215109-24

Date Collected: 04/12/22 11:40

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 12:25	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 12:25	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 12:25	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 12:25	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 12:25	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 12:25	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 12:25	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 12:25	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 12:25	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 12:25	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 12:25	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 12:25	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 12:25	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 12:25	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 12:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124					04/22/22 12:25	1
Dibromofluoromethane (Surr)	106		75 - 120					04/22/22 12:25	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126					04/22/22 12:25	1
Toluene-d8 (Surr)	100		75 - 120					04/22/22 12:25	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-6

Lab Sample ID: 500-215109-25

Date Collected: 04/11/22 10:30

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	11		10	1.7	ug/L			04/22/22 12:48	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 12:48	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 12:48	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 12:48	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 12:48	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 12:48	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 12:48	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 12:48	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 12:48	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 12:48	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 12:48	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 12:48	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 12:48	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 12:48	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 12:48	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 12:48	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 12:48	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 12:48	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 12:48	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 12:48	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 12:48	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 12:48	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 12:48	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 12:48	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 12:48	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 12:48	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 12:48	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 12:48	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 12:48	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 12:48	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 12:48	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 12:48	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 12:48	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 12:48	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 12:48	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 12:48	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 12:48	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 12:48	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 12:48	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 12:48	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 12:48	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 12:48	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 12:48	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 12:48	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 12:48	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 12:48	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 12:48	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 12:48	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 12:48	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-6

Lab Sample ID: 500-215109-25

Date Collected: 04/11/22 10:30

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 12:48	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 12:48	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 12:48	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 12:48	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 12:48	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 12:48	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 12:48	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 12:48	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 12:48	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 12:48	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 12:48	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 12:48	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 12:48	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 12:48	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124		04/22/22 12:48	1
Dibromofluoromethane (Surr)	107		75 - 120		04/22/22 12:48	1
1,2-Dichloroethane-d4 (Surr)	112		75 - 126		04/22/22 12:48	1
Toluene-d8 (Surr)	99		75 - 120		04/22/22 12:48	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-20

Lab Sample ID: 500-215109-26

Date Collected: 04/11/22 11:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 13:11	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 13:11	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 13:11	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 13:11	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 13:11	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 13:11	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 13:11	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 13:11	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 13:11	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 13:11	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 13:11	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 13:11	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 13:11	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 13:11	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 13:11	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 13:11	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 13:11	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 13:11	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 13:11	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 13:11	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 13:11	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 13:11	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 13:11	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 13:11	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 13:11	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 13:11	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 13:11	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 13:11	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 13:11	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 13:11	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 13:11	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 13:11	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 13:11	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 13:11	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 13:11	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 13:11	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 13:11	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 13:11	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 13:11	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 13:11	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 13:11	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 13:11	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 13:11	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 13:11	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 13:11	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 13:11	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 13:11	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 13:11	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 13:11	1

Euofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-20

Lab Sample ID: 500-215109-26

Date Collected: 04/11/22 11:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 13:11	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 13:11	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 13:11	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 13:11	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 13:11	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 13:11	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 13:11	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 13:11	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 13:11	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 13:11	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 13:11	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 13:11	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 13:11	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 13:11	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 13:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124					04/22/22 13:11	1
Dibromofluoromethane (Surr)	109		75 - 120					04/22/22 13:11	1
1,2-Dichloroethane-d4 (Surr)	111		75 - 126					04/22/22 13:11	1
Toluene-d8 (Surr)	98		75 - 120					04/22/22 13:11	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-19

Lab Sample ID: 500-215109-27

Date Collected: 04/11/22 11:30

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	8.0	J	10	1.7	ug/L			04/22/22 13:34	1
Benzene	0.50		0.50	0.15	ug/L			04/22/22 13:34	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 13:34	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 13:34	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 13:34	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 13:34	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 13:34	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 13:34	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 13:34	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 13:34	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 13:34	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 13:34	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 13:34	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 13:34	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 13:34	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 13:34	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 13:34	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 13:34	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 13:34	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 13:34	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 13:34	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 13:34	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 13:34	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 13:34	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 13:34	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 13:34	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 13:34	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 13:34	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 13:34	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 13:34	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 13:34	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 13:34	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 13:34	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 13:34	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 13:34	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 13:34	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 13:34	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 13:34	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 13:34	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 13:34	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 13:34	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 13:34	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 13:34	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 13:34	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 13:34	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 13:34	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 13:34	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 13:34	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 13:34	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-19

Lab Sample ID: 500-215109-27

Date Collected: 04/11/22 11:30

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	2.0	J	10	1.9	ug/L			04/22/22 13:34	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 13:34	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 13:34	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 13:34	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 13:34	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 13:34	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 13:34	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 13:34	1
Trichloroethene	4.2		0.50	0.16	ug/L			04/22/22 13:34	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 13:34	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 13:34	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 13:34	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 13:34	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 13:34	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124					04/22/22 13:34	1
Dibromofluoromethane (Surr)	108		75 - 120					04/22/22 13:34	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126					04/22/22 13:34	1
Toluene-d8 (Surr)	99		75 - 120					04/22/22 13:34	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-23

Lab Sample ID: 500-215109-28

Date Collected: 04/11/22 11:45

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	26		10	1.7	ug/L			04/22/22 13:57	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 13:57	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 13:57	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 13:57	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 13:57	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 13:57	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 13:57	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 13:57	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 13:57	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 13:57	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 13:57	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 13:57	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 13:57	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 13:57	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 13:57	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 13:57	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 13:57	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 13:57	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 13:57	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 13:57	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 13:57	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 13:57	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 13:57	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 13:57	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 13:57	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 13:57	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 13:57	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 13:57	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 13:57	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 13:57	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 13:57	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 13:57	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 13:57	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 13:57	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 13:57	1
2-Butanone (MEK)	2.6 J		5.0	2.1	ug/L			04/22/22 13:57	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 13:57	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 13:57	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 13:57	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 13:57	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 13:57	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 13:57	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 13:57	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 13:57	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 13:57	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 13:57	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 13:57	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 13:57	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 13:57	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-23

Lab Sample ID: 500-215109-28

Date Collected: 04/11/22 11:45

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 13:57	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 13:57	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 13:57	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 13:57	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 13:57	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 13:57	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 13:57	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 13:57	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 13:57	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 13:57	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 13:57	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 13:57	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 13:57	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 13:57	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 13:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124					04/22/22 13:57	1
Dibromofluoromethane (Surr)	105		75 - 120					04/22/22 13:57	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126					04/22/22 13:57	1
Toluene-d8 (Surr)	99		75 - 120					04/22/22 13:57	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-17

Lab Sample ID: 500-215109-29

Date Collected: 04/11/22 12:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 14:20	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 14:20	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 14:20	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 14:20	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 14:20	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 14:20	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 14:20	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 14:20	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 14:20	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 14:20	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 14:20	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 14:20	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 14:20	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 14:20	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 14:20	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 14:20	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 14:20	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 14:20	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 14:20	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 14:20	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 14:20	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 14:20	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 14:20	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 14:20	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 14:20	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 14:20	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 14:20	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 14:20	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 14:20	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 14:20	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 14:20	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 14:20	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 14:20	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 14:20	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 14:20	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 14:20	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 14:20	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 14:20	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 14:20	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 14:20	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 14:20	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 14:20	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 14:20	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 14:20	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 14:20	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 14:20	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 14:20	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 14:20	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 14:20	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-17

Lab Sample ID: 500-215109-29

Date Collected: 04/11/22 12:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 14:20	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 14:20	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 14:20	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 14:20	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 14:20	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 14:20	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 14:20	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 14:20	1
Trichloroethene	130		0.50	0.16	ug/L			04/22/22 14:20	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 14:20	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 14:20	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 14:20	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 14:20	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 14:20	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 14:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		04/22/22 14:20	1
Dibromofluoromethane (Surr)	108		75 - 120		04/22/22 14:20	1
1,2-Dichloroethane-d4 (Surr)	112		75 - 126		04/22/22 14:20	1
Toluene-d8 (Surr)	98		75 - 120		04/22/22 14:20	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-29

Lab Sample ID: 500-215109-30

Date Collected: 04/11/22 15:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 15:05	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 15:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 15:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 15:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 15:05	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 15:05	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 15:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 15:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 15:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 15:05	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 15:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 15:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 15:05	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 15:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 15:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 15:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 15:05	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 15:05	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 15:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 15:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 15:05	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 15:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 15:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 15:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 15:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 15:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 15:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 15:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 15:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 15:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 15:05	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 15:05	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 15:05	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 15:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 15:05	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 15:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 15:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 15:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 15:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 15:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 15:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 15:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 15:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 15:05	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 15:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 15:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 15:05	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 15:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 15:05	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-29

Lab Sample ID: 500-215109-30

Date Collected: 04/11/22 15:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 15:05	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 15:05	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 15:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 15:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 15:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 15:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 15:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 15:05	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 15:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 15:05	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 15:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 15:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 15:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 15:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		72 - 124		04/22/22 15:05	1
Dibromofluoromethane (Surr)	109		75 - 120		04/22/22 15:05	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		04/22/22 15:05	1
Toluene-d8 (Surr)	96		75 - 120		04/22/22 15:05	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-1

Lab Sample ID: 500-215109-31

Date Collected: 04/11/22 08:30

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	J	10	1.7	ug/L			04/22/22 15:28	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 15:28	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 15:28	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 15:28	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 15:28	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 15:28	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 15:28	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 15:28	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 15:28	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 15:28	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 15:28	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 15:28	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 15:28	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 15:28	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 15:28	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 15:28	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 15:28	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 15:28	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 15:28	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 15:28	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 15:28	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 15:28	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 15:28	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 15:28	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 15:28	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 15:28	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 15:28	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 15:28	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 15:28	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 15:28	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 15:28	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 15:28	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 15:28	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 15:28	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 15:28	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 15:28	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 15:28	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 15:28	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 15:28	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 15:28	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 15:28	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 15:28	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 15:28	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 15:28	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 15:28	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 15:28	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 15:28	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 15:28	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 15:28	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-1

Lab Sample ID: 500-215109-31

Date Collected: 04/11/22 08:30

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 15:28	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 15:28	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 15:28	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 15:28	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 15:28	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 15:28	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 15:28	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 15:28	1
Trichloroethene	33		0.50	0.16	ug/L			04/22/22 15:28	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 15:28	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 15:28	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 15:28	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 15:28	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 15:28	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124		04/22/22 15:28	1
Dibromofluoromethane (Surr)	110		75 - 120		04/22/22 15:28	1
1,2-Dichloroethane-d4 (Surr)	114		75 - 126		04/22/22 15:28	1
Toluene-d8 (Surr)	95		75 - 120		04/22/22 15:28	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-26

Lab Sample ID: 500-215109-32

Date Collected: 04/12/22 09:45

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 15:51	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 15:51	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 15:51	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 15:51	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 15:51	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 15:51	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 15:51	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 15:51	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 15:51	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 15:51	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 15:51	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 15:51	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 15:51	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 15:51	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 15:51	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 15:51	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 15:51	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 15:51	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 15:51	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 15:51	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 15:51	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 15:51	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 15:51	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 15:51	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 15:51	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 15:51	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 15:51	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 15:51	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 15:51	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 15:51	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 15:51	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 15:51	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 15:51	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 15:51	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 15:51	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 15:51	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 15:51	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 15:51	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 15:51	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 15:51	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 15:51	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 15:51	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 15:51	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 15:51	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 15:51	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 15:51	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 15:51	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 15:51	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 15:51	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-26

Lab Sample ID: 500-215109-32

Date Collected: 04/12/22 09:45

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 15:51	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 15:51	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 15:51	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 15:51	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 15:51	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 15:51	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 15:51	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 15:51	1
Trichloroethene	98		0.50	0.16	ug/L			04/22/22 15:51	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 15:51	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 15:51	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 15:51	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 15:51	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 15:51	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 15:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124					04/22/22 15:51	1
Dibromofluoromethane (Surr)	109		75 - 120					04/22/22 15:51	1
1,2-Dichloroethane-d4 (Surr)	114		75 - 126					04/22/22 15:51	1
Toluene-d8 (Surr)	98		75 - 120					04/22/22 15:51	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-27

Lab Sample ID: 500-215109-33

Date Collected: 04/12/22 09:40

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	12		10	1.7	ug/L			04/22/22 16:14	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 16:14	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 16:14	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 16:14	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 16:14	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 16:14	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 16:14	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 16:14	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 16:14	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 16:14	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 16:14	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 16:14	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 16:14	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 16:14	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 16:14	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 16:14	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 16:14	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 16:14	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 16:14	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 16:14	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 16:14	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 16:14	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 16:14	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 16:14	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 16:14	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 16:14	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 16:14	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 16:14	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 16:14	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 16:14	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 16:14	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 16:14	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 16:14	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 16:14	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 16:14	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 16:14	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 16:14	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 16:14	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 16:14	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 16:14	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 16:14	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 16:14	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 16:14	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 16:14	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 16:14	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 16:14	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 16:14	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 16:14	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 16:14	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-27

Lab Sample ID: 500-215109-33

Date Collected: 04/12/22 09:40

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 16:14	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 16:14	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 16:14	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 16:14	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 16:14	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 16:14	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 16:14	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 16:14	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 16:14	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 16:14	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 16:14	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 16:14	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 16:14	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 16:14	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		72 - 124					04/22/22 16:14	1
Dibromofluoromethane (Surr)	110		75 - 120					04/22/22 16:14	1
1,2-Dichloroethane-d4 (Surr)	115		75 - 126					04/22/22 16:14	1
Toluene-d8 (Surr)	97		75 - 120					04/22/22 16:14	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-33

Lab Sample ID: 500-215109-34

Date Collected: 04/12/22 16:15

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 16:37	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 16:37	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 16:37	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 16:37	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 16:37	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 16:37	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 16:37	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 16:37	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 16:37	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 16:37	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 16:37	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 16:37	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 16:37	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 16:37	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 16:37	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 16:37	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 16:37	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 16:37	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 16:37	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 16:37	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 16:37	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 16:37	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 16:37	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 16:37	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 16:37	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 16:37	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 16:37	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 16:37	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 16:37	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 16:37	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 16:37	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 16:37	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 16:37	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 16:37	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 16:37	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 16:37	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 16:37	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 16:37	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 16:37	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 16:37	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 16:37	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 16:37	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 16:37	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 16:37	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 16:37	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 16:37	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 16:37	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 16:37	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 16:37	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-33
Date Collected: 04/12/22 16:15
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-34
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 16:37	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 16:37	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 16:37	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 16:37	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 16:37	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 16:37	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 16:37	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 16:37	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 16:37	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 16:37	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 16:37	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 16:37	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 16:37	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 16:37	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		72 - 124		04/22/22 16:37	1
Dibromofluoromethane (Surr)	108		75 - 120		04/22/22 16:37	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		04/22/22 16:37	1
Toluene-d8 (Surr)	100		75 - 120		04/22/22 16:37	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-32

Lab Sample ID: 500-215109-35

Date Collected: 04/12/22 16:25

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 17:00	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 17:00	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 17:00	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 17:00	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 17:00	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 17:00	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 17:00	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 17:00	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 17:00	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 17:00	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 17:00	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 17:00	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 17:00	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 17:00	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 17:00	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 17:00	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 17:00	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 17:00	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 17:00	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 17:00	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 17:00	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 17:00	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 17:00	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 17:00	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 17:00	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 17:00	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 17:00	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 17:00	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 17:00	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 17:00	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 17:00	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 17:00	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 17:00	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 17:00	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 17:00	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 17:00	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 17:00	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 17:00	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 17:00	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 17:00	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 17:00	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 17:00	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 17:00	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 17:00	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 17:00	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 17:00	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 17:00	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 17:00	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 17:00	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-32

Lab Sample ID: 500-215109-35

Date Collected: 04/12/22 16:25

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 17:00	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 17:00	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 17:00	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 17:00	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 17:00	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 17:00	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 17:00	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 17:00	1
Trichloroethene	1.1		0.50	0.16	ug/L			04/22/22 17:00	1
Trichlorofluoromethane	3.9		1.0	0.43	ug/L			04/22/22 17:00	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 17:00	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 17:00	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 17:00	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 17:00	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 17:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		04/22/22 17:00	1
Dibromofluoromethane (Surr)	106		75 - 120		04/22/22 17:00	1
1,2-Dichloroethane-d4 (Surr)	112		75 - 126		04/22/22 17:00	1
Toluene-d8 (Surr)	100		75 - 120		04/22/22 17:00	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-18B

Lab Sample ID: 500-215109-36

Date Collected: 04/12/22 16:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 17:23	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 17:23	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 17:23	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 17:23	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 17:23	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 17:23	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 17:23	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 17:23	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 17:23	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 17:23	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 17:23	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 17:23	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 17:23	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 17:23	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 17:23	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 17:23	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 17:23	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 17:23	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 17:23	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 17:23	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 17:23	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 17:23	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 17:23	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 17:23	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 17:23	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 17:23	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 17:23	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 17:23	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 17:23	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 17:23	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 17:23	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 17:23	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 17:23	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 17:23	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 17:23	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 17:23	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 17:23	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 17:23	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 17:23	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 17:23	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 17:23	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 17:23	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 17:23	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 17:23	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 17:23	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 17:23	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 17:23	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 17:23	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 17:23	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-18B

Lab Sample ID: 500-215109-36

Date Collected: 04/12/22 16:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 17:23	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 17:23	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 17:23	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 17:23	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 17:23	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 17:23	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 17:23	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 17:23	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 17:23	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 17:23	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 17:23	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 17:23	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 17:23	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 17:23	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		04/22/22 17:23	1
Dibromofluoromethane (Surr)	111		75 - 120		04/22/22 17:23	1
1,2-Dichloroethane-d4 (Surr)	116		75 - 126		04/22/22 17:23	1
Toluene-d8 (Surr)	100		75 - 120		04/22/22 17:23	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-16

Lab Sample ID: 500-215109-37

Date Collected: 04/12/22 10:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 17:46	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 17:46	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 17:46	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 17:46	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 17:46	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 17:46	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 17:46	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 17:46	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 17:46	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 17:46	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 17:46	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 17:46	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 17:46	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 17:46	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 17:46	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 17:46	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 17:46	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 17:46	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 17:46	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 17:46	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 17:46	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 17:46	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 17:46	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 17:46	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 17:46	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 17:46	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 17:46	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 17:46	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 17:46	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 17:46	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 17:46	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 17:46	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 17:46	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 17:46	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 17:46	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 17:46	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 17:46	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 17:46	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 17:46	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 17:46	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 17:46	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 17:46	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 17:46	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 17:46	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 17:46	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 17:46	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 17:46	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 17:46	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 17:46	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-16

Lab Sample ID: 500-215109-37

Date Collected: 04/12/22 10:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 17:46	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 17:46	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 17:46	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 17:46	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 17:46	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 17:46	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 17:46	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 17:46	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 17:46	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 17:46	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 17:46	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 17:46	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 17:46	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 17:46	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124		04/22/22 17:46	1
Dibromofluoromethane (Surr)	112		75 - 120		04/22/22 17:46	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		04/22/22 17:46	1
Toluene-d8 (Surr)	100		75 - 120		04/22/22 17:46	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-18A

Lab Sample ID: 500-215109-38

Date Collected: 04/12/22 15:30

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 18:09	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 18:09	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 18:09	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 18:09	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 18:09	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 18:09	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 18:09	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 18:09	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 18:09	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 18:09	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 18:09	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 18:09	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 18:09	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 18:09	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 18:09	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 18:09	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 18:09	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 18:09	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 18:09	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 18:09	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 18:09	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 18:09	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 18:09	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 18:09	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 18:09	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 18:09	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 18:09	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 18:09	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 18:09	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 18:09	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 18:09	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 18:09	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 18:09	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 18:09	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 18:09	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 18:09	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 18:09	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 18:09	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 18:09	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 18:09	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 18:09	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 18:09	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 18:09	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 18:09	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 18:09	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 18:09	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 18:09	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 18:09	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 18:09	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-18A

Lab Sample ID: 500-215109-38

Date Collected: 04/12/22 15:30

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 18:09	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 18:09	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 18:09	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 18:09	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 18:09	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 18:09	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 18:09	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 18:09	1
Trichloroethene	1.3		0.50	0.16	ug/L			04/22/22 18:09	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 18:09	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 18:09	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 18:09	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 18:09	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 18:09	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124		04/22/22 18:09	1
Dibromofluoromethane (Surr)	110		75 - 120		04/22/22 18:09	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		04/22/22 18:09	1
Toluene-d8 (Surr)	98		75 - 120		04/22/22 18:09	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-15C

Lab Sample ID: 500-215109-39

Date Collected: 04/12/22 15:10

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/22/22 18:31	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 18:31	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 18:31	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 18:31	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 18:31	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 18:31	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 18:31	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 18:31	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 18:31	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 18:31	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 18:31	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 18:31	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 18:31	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 18:31	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 18:31	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 18:31	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 18:31	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 18:31	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 18:31	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 18:31	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 18:31	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 18:31	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 18:31	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 18:31	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 18:31	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 18:31	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 18:31	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 18:31	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 18:31	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 18:31	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 18:31	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 18:31	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 18:31	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 18:31	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 18:31	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 18:31	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 18:31	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/22/22 18:31	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 18:31	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 18:31	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 18:31	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 18:31	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 18:31	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 18:31	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 18:31	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 18:31	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 18:31	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 18:31	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 18:31	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-15C

Lab Sample ID: 500-215109-39

Date Collected: 04/12/22 15:10

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 18:31	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 18:31	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 18:31	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 18:31	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/22/22 18:31	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 18:31	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 18:31	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 18:31	1
Trichloroethene	1.1		0.50	0.16	ug/L			04/22/22 18:31	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 18:31	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 18:31	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 18:31	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 18:31	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 18:31	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		72 - 124		04/22/22 18:31	1
Dibromofluoromethane (Surr)	110		75 - 120		04/22/22 18:31	1
1,2-Dichloroethane-d4 (Surr)	119		75 - 126		04/22/22 18:31	1
Toluene-d8 (Surr)	97		75 - 120		04/22/22 18:31	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-15B

Lab Sample ID: 500-215109-40

Date Collected: 04/12/22 15:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.7	J	10	1.7	ug/L			04/24/22 16:30	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 16:30	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 16:30	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 16:30	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 16:30	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 16:30	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 16:30	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 16:30	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 16:30	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 16:30	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 16:30	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 16:30	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 16:30	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 16:30	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 16:30	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 16:30	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 16:30	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 16:30	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 16:30	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 16:30	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 16:30	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 16:30	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 16:30	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 16:30	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 16:30	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 16:30	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 16:30	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 16:30	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 16:30	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 16:30	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 16:30	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 16:30	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 16:30	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 16:30	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 16:30	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 16:30	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 16:30	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 16:30	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 16:30	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 16:30	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 16:30	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 16:30	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 16:30	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 16:30	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 16:30	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 16:30	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 16:30	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 16:30	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 16:30	1

Euofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-15B

Lab Sample ID: 500-215109-40

Date Collected: 04/12/22 15:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 16:30	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 16:30	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 16:30	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 16:30	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 16:30	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 16:30	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 16:30	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 16:30	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/24/22 16:30	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 16:30	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 16:30	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 16:30	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 16:30	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 16:30	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		04/24/22 16:30	1
Dibromofluoromethane (Surr)	109		75 - 120		04/24/22 16:30	1
1,2-Dichloroethane-d4 (Surr)	117		75 - 126		04/24/22 16:30	1
Toluene-d8 (Surr)	102		75 - 120		04/24/22 16:30	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-15A

Lab Sample ID: 500-215109-41

Date Collected: 04/12/22 14:50

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.4	J	10	1.7	ug/L			04/24/22 16:53	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 16:53	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 16:53	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 16:53	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 16:53	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 16:53	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 16:53	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 16:53	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 16:53	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 16:53	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 16:53	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 16:53	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 16:53	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 16:53	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 16:53	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 16:53	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 16:53	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 16:53	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 16:53	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 16:53	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 16:53	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 16:53	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 16:53	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 16:53	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 16:53	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 16:53	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 16:53	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 16:53	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 16:53	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 16:53	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 16:53	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 16:53	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 16:53	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 16:53	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 16:53	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 16:53	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 16:53	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 16:53	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 16:53	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 16:53	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 16:53	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 16:53	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 16:53	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 16:53	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 16:53	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 16:53	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 16:53	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 16:53	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 16:53	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-15A

Lab Sample ID: 500-215109-41

Date Collected: 04/12/22 14:50

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 16:53	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 16:53	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 16:53	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 16:53	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 16:53	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 16:53	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 16:53	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 16:53	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/24/22 16:53	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 16:53	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 16:53	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 16:53	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 16:53	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 16:53	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 16:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		04/24/22 16:53	1
Dibromofluoromethane (Surr)	108		75 - 120		04/24/22 16:53	1
1,2-Dichloroethane-d4 (Surr)	116		75 - 126		04/24/22 16:53	1
Toluene-d8 (Surr)	103		75 - 120		04/24/22 16:53	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-14

Lab Sample ID: 500-215109-42

Date Collected: 04/12/22 14:30

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/24/22 17:16	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 17:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 17:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 17:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 17:16	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 17:16	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 17:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 17:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 17:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 17:16	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 17:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 17:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 17:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 17:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 17:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 17:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 17:16	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 17:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 17:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 17:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 17:16	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 17:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 17:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 17:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 17:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 17:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 17:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 17:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 17:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 17:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 17:16	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 17:16	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 17:16	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 17:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 17:16	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 17:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 17:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 17:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 17:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 17:16	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 17:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 17:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 17:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 17:16	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 17:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 17:16	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 17:16	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 17:16	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 17:16	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-14

Lab Sample ID: 500-215109-42

Date Collected: 04/12/22 14:30

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 17:16	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 17:16	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 17:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 17:16	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 17:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 17:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 17:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 17:16	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/24/22 17:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 17:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 17:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 17:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 17:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 17:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 17:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		72 - 124					04/24/22 17:16	1
Dibromofluoromethane (Surr)	109		75 - 120					04/24/22 17:16	1
1,2-Dichloroethane-d4 (Surr)	115		75 - 126					04/24/22 17:16	1
Toluene-d8 (Surr)	102		75 - 120					04/24/22 17:16	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-17A

Lab Sample ID: 500-215109-43

Date Collected: 04/12/22 14:45

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/24/22 17:39	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 17:39	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 17:39	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 17:39	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 17:39	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 17:39	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 17:39	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 17:39	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 17:39	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 17:39	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 17:39	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 17:39	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 17:39	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 17:39	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 17:39	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 17:39	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 17:39	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 17:39	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 17:39	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 17:39	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 17:39	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 17:39	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 17:39	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 17:39	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 17:39	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 17:39	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 17:39	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 17:39	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 17:39	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 17:39	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 17:39	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 17:39	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 17:39	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 17:39	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 17:39	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 17:39	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 17:39	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 17:39	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 17:39	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 17:39	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 17:39	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 17:39	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 17:39	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 17:39	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 17:39	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 17:39	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 17:39	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 17:39	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 17:39	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-17A

Lab Sample ID: 500-215109-43

Date Collected: 04/12/22 14:45

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 17:39	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 17:39	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 17:39	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 17:39	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 17:39	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 17:39	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 17:39	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 17:39	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/24/22 17:39	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 17:39	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 17:39	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 17:39	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 17:39	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 17:39	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 17:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124					04/24/22 17:39	1
Dibromofluoromethane (Surr)	111		75 - 120					04/24/22 17:39	1
1,2-Dichloroethane-d4 (Surr)	118		75 - 126					04/24/22 17:39	1
Toluene-d8 (Surr)	103		75 - 120					04/24/22 17:39	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-17B

Lab Sample ID: 500-215109-44

Date Collected: 04/12/22 14:40

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/24/22 18:02	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 18:02	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 18:02	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 18:02	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 18:02	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 18:02	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 18:02	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 18:02	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 18:02	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 18:02	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 18:02	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 18:02	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 18:02	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 18:02	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 18:02	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 18:02	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 18:02	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 18:02	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 18:02	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 18:02	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 18:02	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 18:02	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 18:02	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 18:02	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 18:02	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 18:02	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 18:02	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 18:02	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 18:02	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 18:02	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 18:02	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 18:02	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 18:02	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 18:02	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 18:02	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 18:02	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 18:02	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 18:02	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 18:02	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 18:02	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 18:02	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 18:02	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 18:02	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 18:02	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 18:02	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 18:02	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 18:02	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 18:02	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 18:02	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-17B

Lab Sample ID: 500-215109-44

Date Collected: 04/12/22 14:40

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 18:02	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 18:02	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 18:02	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 18:02	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 18:02	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 18:02	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 18:02	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 18:02	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/24/22 18:02	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 18:02	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 18:02	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 18:02	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 18:02	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 18:02	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 18:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124					04/24/22 18:02	1
Dibromofluoromethane (Surr)	111		75 - 120					04/24/22 18:02	1
1,2-Dichloroethane-d4 (Surr)	119		75 - 126					04/24/22 18:02	1
Toluene-d8 (Surr)	101		75 - 120					04/24/22 18:02	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-13

Lab Sample ID: 500-215109-45

Date Collected: 04/12/22 14:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/24/22 18:24	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 18:24	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 18:24	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 18:24	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 18:24	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 18:24	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 18:24	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 18:24	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 18:24	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 18:24	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 18:24	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 18:24	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 18:24	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 18:24	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 18:24	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 18:24	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 18:24	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 18:24	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 18:24	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 18:24	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 18:24	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 18:24	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 18:24	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 18:24	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 18:24	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 18:24	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 18:24	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 18:24	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 18:24	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 18:24	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 18:24	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 18:24	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 18:24	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 18:24	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 18:24	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 18:24	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 18:24	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 18:24	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 18:24	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 18:24	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 18:24	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 18:24	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 18:24	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 18:24	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 18:24	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 18:24	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 18:24	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 18:24	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 18:24	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-13

Lab Sample ID: 500-215109-45

Date Collected: 04/12/22 14:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 18:24	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 18:24	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 18:24	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 18:24	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 18:24	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 18:24	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 18:24	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 18:24	1
Trichloroethene	7.3		0.50	0.16	ug/L			04/24/22 18:24	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 18:24	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 18:24	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 18:24	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 18:24	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 18:24	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		04/24/22 18:24	1
Dibromofluoromethane (Surr)	110		75 - 120		04/24/22 18:24	1
1,2-Dichloroethane-d4 (Surr)	116		75 - 126		04/24/22 18:24	1
Toluene-d8 (Surr)	103		75 - 120		04/24/22 18:24	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-15

Lab Sample ID: 500-215109-46

Date Collected: 04/12/22 13:00

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/24/22 18:47	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 18:47	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 18:47	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 18:47	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 18:47	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 18:47	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 18:47	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 18:47	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 18:47	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 18:47	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 18:47	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 18:47	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 18:47	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 18:47	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 18:47	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 18:47	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 18:47	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 18:47	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 18:47	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 18:47	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 18:47	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 18:47	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 18:47	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 18:47	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 18:47	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 18:47	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 18:47	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 18:47	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 18:47	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 18:47	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 18:47	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 18:47	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 18:47	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 18:47	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 18:47	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 18:47	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 18:47	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 18:47	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 18:47	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 18:47	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 18:47	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 18:47	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 18:47	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 18:47	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 18:47	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 18:47	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 18:47	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 18:47	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 18:47	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-15

Lab Sample ID: 500-215109-46

Date Collected: 04/12/22 13:00

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 18:47	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 18:47	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 18:47	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 18:47	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 18:47	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 18:47	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 18:47	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 18:47	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/24/22 18:47	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 18:47	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 18:47	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 18:47	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 18:47	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 18:47	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124		04/24/22 18:47	1
Dibromofluoromethane (Surr)	110		75 - 120		04/24/22 18:47	1
1,2-Dichloroethane-d4 (Surr)	120		75 - 126		04/24/22 18:47	1
Toluene-d8 (Surr)	98		75 - 120		04/24/22 18:47	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: 903-Raw 87th Ave

Lab Sample ID: 500-215109-47

Date Collected: 04/12/22 12:10

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/24/22 19:10	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 19:10	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 19:10	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 19:10	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 19:10	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 19:10	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 19:10	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 19:10	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 19:10	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 19:10	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 19:10	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 19:10	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 19:10	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 19:10	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 19:10	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 19:10	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 19:10	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 19:10	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 19:10	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 19:10	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 19:10	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 19:10	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 19:10	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 19:10	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 19:10	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 19:10	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 19:10	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 19:10	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 19:10	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 19:10	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 19:10	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 19:10	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 19:10	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 19:10	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 19:10	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 19:10	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 19:10	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 19:10	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 19:10	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 19:10	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 19:10	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 19:10	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 19:10	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 19:10	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 19:10	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 19:10	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 19:10	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 19:10	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 19:10	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: 903-Raw 87th Ave

Lab Sample ID: 500-215109-47

Date Collected: 04/12/22 12:10

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 19:10	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 19:10	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 19:10	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 19:10	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 19:10	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 19:10	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 19:10	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 19:10	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/24/22 19:10	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 19:10	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 19:10	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 19:10	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 19:10	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 19:10	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 19:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124					04/24/22 19:10	1
Dibromofluoromethane (Surr)	111		75 - 120					04/24/22 19:10	1
1,2-Dichloroethane-d4 (Surr)	119		75 - 126					04/24/22 19:10	1
Toluene-d8 (Surr)	100		75 - 120					04/24/22 19:10	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: 904-Raw 87th Ave

Lab Sample ID: 500-215109-48

Date Collected: 04/12/22 12:20

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	12		10	1.7	ug/L			04/24/22 19:33	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 19:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 19:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 19:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 19:33	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 19:33	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 19:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 19:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 19:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 19:33	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 19:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 19:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 19:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 19:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 19:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 19:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 19:33	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 19:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 19:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 19:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 19:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 19:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 19:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 19:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 19:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 19:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 19:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 19:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 19:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 19:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 19:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 19:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 19:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 19:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 19:33	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 19:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 19:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 19:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 19:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 19:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 19:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 19:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 19:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 19:33	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 19:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 19:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 19:33	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 19:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 19:33	1

Euofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: 904-Raw 87th Ave

Lab Sample ID: 500-215109-48

Date Collected: 04/12/22 12:20

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 19:33	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 19:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 19:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 19:33	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 19:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 19:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 19:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 19:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/24/22 19:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 19:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 19:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 19:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 19:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 19:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124					04/24/22 19:33	1
Dibromofluoromethane (Surr)	112		75 - 120					04/24/22 19:33	1
1,2-Dichloroethane-d4 (Surr)	121		75 - 126					04/24/22 19:33	1
Toluene-d8 (Surr)	102		75 - 120					04/24/22 19:33	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-11
Date Collected: 04/12/22 13:30
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-49
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/24/22 19:56	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 19:56	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 19:56	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 19:56	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 19:56	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 19:56	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 19:56	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 19:56	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 19:56	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 19:56	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 19:56	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 19:56	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 19:56	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 19:56	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 19:56	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 19:56	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 19:56	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 19:56	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 19:56	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 19:56	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 19:56	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 19:56	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 19:56	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 19:56	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 19:56	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 19:56	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 19:56	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 19:56	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 19:56	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 19:56	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 19:56	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 19:56	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 19:56	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 19:56	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 19:56	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 19:56	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 19:56	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 19:56	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 19:56	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 19:56	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 19:56	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 19:56	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 19:56	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 19:56	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 19:56	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 19:56	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 19:56	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 19:56	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 19:56	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-11
Date Collected: 04/12/22 13:30
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-49
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 19:56	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 19:56	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 19:56	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 19:56	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 19:56	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 19:56	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 19:56	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 19:56	1
Trichloroethene	0.92		0.50	0.16	ug/L			04/24/22 19:56	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 19:56	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 19:56	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 19:56	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 19:56	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 19:56	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 19:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124					04/24/22 19:56	1
Dibromofluoromethane (Surr)	108		75 - 120					04/24/22 19:56	1
1,2-Dichloroethane-d4 (Surr)	116		75 - 126					04/24/22 19:56	1
Toluene-d8 (Surr)	103		75 - 120					04/24/22 19:56	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-14

Lab Sample ID: 500-215109-50

Date Collected: 04/12/22 11:50

Matrix: Water

Date Received: 04/14/22 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/24/22 20:19	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 20:19	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 20:19	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 20:19	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 20:19	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 20:19	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 20:19	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 20:19	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 20:19	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 20:19	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 20:19	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 20:19	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 20:19	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 20:19	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 20:19	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 20:19	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 20:19	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 20:19	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 20:19	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 20:19	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 20:19	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 20:19	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 20:19	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 20:19	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 20:19	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 20:19	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 20:19	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 20:19	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 20:19	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 20:19	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 20:19	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 20:19	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 20:19	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 20:19	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 20:19	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 20:19	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 20:19	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 20:19	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 20:19	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 20:19	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 20:19	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 20:19	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 20:19	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 20:19	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 20:19	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 20:19	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 20:19	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 20:19	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 20:19	1

Eurofins Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-14

Lab Sample ID: 500-215109-50

Date Collected: 04/12/22 11:50

Matrix: Water

Date Received: 04/14/22 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 20:19	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 20:19	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 20:19	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 20:19	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 20:19	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 20:19	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 20:19	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 20:19	1
Trichloroethene	3.6		0.50	0.16	ug/L			04/24/22 20:19	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 20:19	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 20:19	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 20:19	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 20:19	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 20:19	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 20:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124					04/24/22 20:19	1
Dibromofluoromethane (Surr)	111		75 - 120					04/24/22 20:19	1
1,2-Dichloroethane-d4 (Surr)	121		75 - 126					04/24/22 20:19	1
Toluene-d8 (Surr)	103		75 - 120					04/24/22 20:19	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

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

QC Association Summary

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

GC/MS VOA

Analysis Batch: 652684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-215109-1	P-25D	Total/NA	Water	8260B	
500-215109-2	P-25S	Total/NA	Water	8260B	
500-215109-3	MW-22	Total/NA	Water	8260B	
500-215109-4	P-18	Total/NA	Water	8260B	
500-215109-5	MW-24	Total/NA	Water	8260B	
500-215109-6	Ogburn Wellhouse	Total/NA	Water	8260B	
500-215109-7	MW-8	Total/NA	Water	8260B	
500-215109-8	MW-7	Total/NA	Water	8260B	
500-215109-9	MW-13	Total/NA	Water	8260B	
500-215109-10	P-4	Total/NA	Water	8260B	
500-215109-11	MW-3	Total/NA	Water	8260B	
500-215109-12	Albright	Total/NA	Water	8260B	
500-215109-13	MW-31	Total/NA	Water	8260B	
500-215109-14	P-30	Total/NA	Water	8260B	
500-215109-15	MW-9	Total/NA	Water	8260B	
500-215109-16	P-10	Total/NA	Water	8260B	
500-215109-17	MW-28	Total/NA	Water	8260B	
500-215109-18	MW-21	Total/NA	Water	8260B	
500-215109-19	Hicks	Total/NA	Water	8260B	
500-215109-20	MW-11	Total/NA	Water	8260B	
MB 500-652684/6	Method Blank	Total/NA	Water	8260B	
LCS 500-652684/4	Lab Control Sample	Total/NA	Water	8260B	
500-215109-20 MS	MW-11	Total/NA	Water	8260B	
500-215109-20 MSD	MW-11	Total/NA	Water	8260B	

Analysis Batch: 652933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-215109-21	MW-2	Total/NA	Water	8260B	
500-215109-22	843 Polen	Total/NA	Water	8260B	
500-215109-23	MW-16	Total/NA	Water	8260B	
500-215109-24	Willbur	Total/NA	Water	8260B	
500-215109-25	P-6	Total/NA	Water	8260B	
500-215109-26	P-20	Total/NA	Water	8260B	
500-215109-27	P-19	Total/NA	Water	8260B	
500-215109-28	P-23	Total/NA	Water	8260B	
500-215109-29	MW-17	Total/NA	Water	8260B	
500-215109-30	MW-29	Total/NA	Water	8260B	
500-215109-31	MW-1	Total/NA	Water	8260B	
500-215109-32	MW-26	Total/NA	Water	8260B	
500-215109-33	P-27	Total/NA	Water	8260B	
500-215109-34	MW-33	Total/NA	Water	8260B	
500-215109-35	P-32	Total/NA	Water	8260B	
500-215109-36	JW-18B	Total/NA	Water	8260B	
500-215109-37	JW-16	Total/NA	Water	8260B	
500-215109-38	JW-18A	Total/NA	Water	8260B	
500-215109-39	JW-15C	Total/NA	Water	8260B	
MB 500-652933/6	Method Blank	Total/NA	Water	8260B	
LCS 500-652933/4	Lab Control Sample	Total/NA	Water	8260B	
500-215109-21 MS	MW-2	Total/NA	Water	8260B	
500-215109-21 MSD	MW-2	Total/NA	Water	8260B	

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

GC/MS VOA

Analysis Batch: 653128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-215109-40	JW-15B	Total/NA	Water	8260B	
500-215109-41	JW-15A	Total/NA	Water	8260B	
500-215109-42	JW-14	Total/NA	Water	8260B	
500-215109-43	JW-17A	Total/NA	Water	8260B	
500-215109-44	JW-17B	Total/NA	Water	8260B	
500-215109-45	JW-13	Total/NA	Water	8260B	
500-215109-46	P-15	Total/NA	Water	8260B	
500-215109-47	903-Raw 87th Ave	Total/NA	Water	8260B	
500-215109-48	904-Raw 87th Ave	Total/NA	Water	8260B	
500-215109-49	JW-11	Total/NA	Water	8260B	
500-215109-50	P-14	Total/NA	Water	8260B	
MB 500-653128/6	Method Blank	Total/NA	Water	8260B	
LCS 500-653128/4	Lab Control Sample	Total/NA	Water	8260B	
500-215109-40 MS	JW-15B	Total/NA	Water	8260B	
500-215109-40 MSD	JW-15B	Total/NA	Water	8260B	

Surrogate Summary

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (72-124)	DBFM (75-120)	DCA (75-126)	TOL (75-120)
500-215109-1	P-25D	91	99	101	99
500-215109-2	P-25S	90	103	103	100
500-215109-3	MW-22	92	105	106	103
500-215109-4	P-18	90	106	111	101
500-215109-5	MW-24	89	109	111	98
500-215109-6	Ogburn Wellhouse	94	111	114	97
500-215109-7	MW-8	91	108	107	101
500-215109-8	MW-7	91	108	111	100
500-215109-9	MW-13	89	104	107	99
500-215109-10	P-4	87	113	111	99
500-215109-11	MW-3	90	110	114	96
500-215109-12	Albright	90	109	108	99
500-215109-13	MW-31	91	109	114	99
500-215109-14	P-30	91	107	114	99
500-215109-15	MW-9	89	110	117	98
500-215109-16	P-10	91	110	113	97
500-215109-17	MW-28	87	114	114	99
500-215109-18	MW-21	92	112	117	97
500-215109-19	Hicks	91	109	115	98
500-215109-20	MW-11	92	111	117	99
500-215109-20 MS	MW-11	92	105	114	100
500-215109-20 MSD	MW-11	96	108	108	101
500-215109-21	MW-2	91	107	109	100
500-215109-21 MS	MW-2	94	107	113	100
500-215109-21 MSD	MW-2	93	104	113	99
500-215109-22	843 Polen	90	100	107	100
500-215109-23	MW-16	90	105	111	100
500-215109-24	Willbur	91	106	113	100
500-215109-25	P-6	90	107	112	99
500-215109-26	P-20	91	109	111	98
500-215109-27	P-19	89	108	113	99
500-215109-28	P-23	91	105	113	99
500-215109-29	MW-17	92	108	112	98
500-215109-30	MW-29	88	109	113	96
500-215109-31	MW-1	89	110	114	95
500-215109-32	MW-26	92	109	114	98
500-215109-33	P-27	86	110	115	97
500-215109-34	MW-33	88	108	113	100
500-215109-35	P-32	93	106	112	100
500-215109-36	JW-18B	91	111	116	100
500-215109-37	JW-16	90	112	110	100
500-215109-38	JW-18A	94	110	113	98
500-215109-39	JW-15C	88	110	119	97
500-215109-40	JW-15B	91	109	117	102
500-215109-40 MS	JW-15B	93	112	116	99
500-215109-40 MSD	JW-15B	91	109	116	99
500-215109-41	JW-15A	92	108	116	103
500-215109-42	JW-14	88	109	115	102
500-215109-43	JW-17A	93	111	118	103

Surrogate Summary

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-215109-44	JW-17B	91	111	119	101
500-215109-45	JW-13	93	110	116	103
500-215109-46	P-15	91	110	120	98
500-215109-47	903-Raw 87th Ave	92	111	119	100
500-215109-48	904-Raw 87th Ave	89	112	121	102
500-215109-49	JW-11	95	108	116	103
500-215109-50	P-14	93	111	121	103
LCS 500-652684/4	Lab Control Sample	93	100	99	101
LCS 500-652933/4	Lab Control Sample	93	105	106	100
LCS 500-653128/4	Lab Control Sample	92	106	109	103
MB 500-652684/6	Method Blank	89	106	108	97
MB 500-652933/6	Method Blank	90	105	109	100
MB 500-653128/6	Method Blank	92	109	119	102

Surrogate Legend

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



QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-652684/6
Matrix: Water
Analysis Batch: 652684

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<1.7		10	1.7	ug/L			04/21/22 11:12	1
Benzene	<0.15		0.50	0.15	ug/L			04/21/22 11:12	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/21/22 11:12	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/21/22 11:12	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/21/22 11:12	1
Bromoform	<0.48		1.0	0.48	ug/L			04/21/22 11:12	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/21/22 11:12	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/21/22 11:12	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/21/22 11:12	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/21/22 11:12	1
Chloroform	<0.37		2.0	0.37	ug/L			04/21/22 11:12	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/21/22 11:12	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/21/22 11:12	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/21/22 11:12	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/21/22 11:12	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/21/22 11:12	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/21/22 11:12	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/21/22 11:12	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/21/22 11:12	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/21/22 11:12	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/21/22 11:12	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/21/22 11:12	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/21/22 11:12	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/21/22 11:12	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/21/22 11:12	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/21/22 11:12	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/21/22 11:12	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/21/22 11:12	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 11:12	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/21/22 11:12	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/21/22 11:12	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/21/22 11:12	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/21/22 11:12	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/21/22 11:12	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/21/22 11:12	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/21/22 11:12	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/21/22 11:12	1
Naphthalene	0.476	J	1.0	0.34	ug/L			04/21/22 11:12	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/21/22 11:12	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/21/22 11:12	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/21/22 11:12	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/21/22 11:12	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/21/22 11:12	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 11:12	1
Styrene	<0.39		1.0	0.39	ug/L			04/21/22 11:12	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/21/22 11:12	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/21/22 11:12	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/21/22 11:12	1

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: MB 500-652684/6
Matrix: Water
Analysis Batch: 652684

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/21/22 11:12	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/21/22 11:12	1
Toluene	<0.15		0.50	0.15	ug/L			04/21/22 11:12	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/21/22 11:12	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/21/22 11:12	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/21/22 11:12	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/21/22 11:12	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/21/22 11:12	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/21/22 11:12	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/21/22 11:12	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/21/22 11:12	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/21/22 11:12	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/21/22 11:12	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/21/22 11:12	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/21/22 11:12	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/21/22 11:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124		04/21/22 11:12	1
Dibromofluoromethane (Surr)	106		75 - 120		04/21/22 11:12	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		04/21/22 11:12	1
Toluene-d8 (Surr)	97		75 - 120		04/21/22 11:12	1

Lab Sample ID: LCS 500-652684/4
Matrix: Water
Analysis Batch: 652684

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	50.0	59.9		ug/L		120	40 - 143
Benzene	50.0	48.3		ug/L		97	70 - 120
Bromobenzene	50.0	47.7		ug/L		95	70 - 122
Bromochloromethane	50.0	44.7		ug/L		89	65 - 122
Bromodichloromethane	50.0	46.9		ug/L		94	69 - 120
Bromoform	50.0	47.0		ug/L		94	56 - 132
Carbon disulfide	50.0	52.8		ug/L		106	66 - 120
Carbon tetrachloride	50.0	59.2		ug/L		118	59 - 133
Chlorobenzene	50.0	45.9		ug/L		92	70 - 120
Chloroethane	50.0	57.6		ug/L		115	48 - 136
Chloroform	50.0	46.7		ug/L		93	70 - 120
2-Chlorotoluene	50.0	50.1		ug/L		100	70 - 125
4-Chlorotoluene	50.0	49.8		ug/L		100	68 - 124
cis-1,2-Dichloroethene	50.0	44.7		ug/L		89	70 - 125
cis-1,3-Dichloropropene	50.0	43.3		ug/L		87	64 - 127
Dibromochloromethane	50.0	43.7		ug/L		87	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	41.7		ug/L		83	56 - 123
1,2-Dibromoethane (EDB)	50.0	38.9		ug/L		78	70 - 125
Dichlorodifluoromethane	50.0	56.1		ug/L		112	40 - 159
1,1-Dichloroethane	50.0	45.6		ug/L		91	70 - 125

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: LCS 500-652684/4
Matrix: Water
Analysis Batch: 652684

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	50.0	47.0		ug/L		94	68 - 127
1,1-Dichloroethene	50.0	51.2		ug/L		102	67 - 122
1,2-Dichloropropane	50.0	43.1		ug/L		86	67 - 130
1,3-Dichloropropane	50.0	41.4		ug/L		83	62 - 136
2,2-Dichloropropane	50.0	50.7		ug/L		101	58 - 139
1,1-Dichloropropene	50.0	51.3		ug/L		103	70 - 121
Ethylbenzene	50.0	43.5		ug/L		87	70 - 123
Hexachlorobutadiene	50.0	61.4		ug/L		123	51 - 150
Isopropylbenzene	50.0	50.8		ug/L		102	70 - 126
1,3-Dichlorobenzene	50.0	46.6		ug/L		93	70 - 125
Bromomethane	50.0	53.5		ug/L		107	40 - 152
Chloromethane	50.0	46.0		ug/L		92	56 - 152
Dibromomethane	50.0	43.2		ug/L		86	70 - 120
Methylene Chloride	50.0	44.9		ug/L		90	69 - 125
2-Butanone (MEK)	50.0	45.0		ug/L		90	46 - 144
Methyl tert-butyl ether	50.0	41.9		ug/L		84	55 - 123
Naphthalene	50.0	38.8		ug/L		78	53 - 144
n-Butylbenzene	50.0	52.8		ug/L		106	68 - 125
N-Propylbenzene	50.0	52.6		ug/L		105	69 - 127
1,2-Dichlorobenzene	50.0	44.9		ug/L		90	70 - 125
1,4-Dichlorobenzene	50.0	46.1		ug/L		92	70 - 120
p-Isopropyltoluene	50.0	49.6		ug/L		99	70 - 125
sec-Butylbenzene	50.0	52.0		ug/L		104	70 - 123
Styrene	50.0	45.1		ug/L		90	70 - 120
tert-Butylbenzene	50.0	49.1		ug/L		98	70 - 121
1,1,1,2-Tetrachloroethane	50.0	45.0		ug/L		90	70 - 125
1,1,2,2-Tetrachloroethane	50.0	39.7		ug/L		79	62 - 140
Tetrachloroethene	50.0	56.1		ug/L		112	70 - 128
Tetrahydrofuran	100	72.7		ug/L		73	59 - 139
Toluene	50.0	47.6		ug/L		95	70 - 125
trans-1,2-Dichloroethene	50.0	49.4		ug/L		99	70 - 125
trans-1,3-Dichloropropene	50.0	43.1		ug/L		86	62 - 128
1,2,3-Trichlorobenzene	50.0	47.8		ug/L		96	51 - 145
1,2,4-Trichlorobenzene	50.0	49.8		ug/L		100	57 - 137
1,1,1-Trichloroethane	50.0	56.0		ug/L		112	70 - 125
1,1,2-Trichloroethane	50.0	43.6		ug/L		87	71 - 130
Trichloroethene	50.0	46.8		ug/L		94	70 - 125
Trichlorofluoromethane	50.0	62.2		ug/L		124	55 - 128
1,2,3-Trichloropropane	50.0	41.7		ug/L		83	50 - 133
1,2,4-Trimethylbenzene	50.0	48.3		ug/L		97	70 - 123
1,3,5-Trimethylbenzene	50.0	49.6		ug/L		99	70 - 123
Vinyl chloride	50.0	51.7		ug/L		103	64 - 126
Xylenes, Total	100	96.5		ug/L		97	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane (Surr)	100		75 - 120
1,2-Dichloroethane-d4 (Surr)	99		75 - 126

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: LCS 500-652684/4
Matrix: Water
Analysis Batch: 652684

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

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	101		75 - 120

Lab Sample ID: 500-215109-20 MS
Matrix: Water
Analysis Batch: 652684

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Acetone	2.9	J	50.0	47.0		ug/L		88		40 - 143
Benzene	<0.15		50.0	50.8		ug/L		102		70 - 120
Bromobenzene	<0.36		50.0	50.3		ug/L		101		70 - 122
Bromochloromethane	<0.43		50.0	54.2		ug/L		108		65 - 122
Bromodichloromethane	<0.37		50.0	51.9		ug/L		104		69 - 120
Bromoform	<0.48		50.0	54.5		ug/L		109		56 - 132
Carbon disulfide	<0.45		50.0	53.4		ug/L		107		66 - 120
Carbon tetrachloride	<0.38		50.0	60.3		ug/L		121		59 - 133
Chlorobenzene	<0.39		50.0	50.5		ug/L		101		70 - 120
Chloroethane	<0.51		50.0	56.0		ug/L		112		48 - 136
Chloroform	<0.37		50.0	50.2		ug/L		100		70 - 120
2-Chlorotoluene	<0.31		50.0	50.0		ug/L		100		70 - 125
4-Chlorotoluene	<0.35		50.0	49.6		ug/L		99		68 - 124
cis-1,2-Dichloroethene	<0.41		50.0	50.2		ug/L		100		70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	45.2		ug/L		90		64 - 127
Dibromochloromethane	<0.49		50.0	50.9		ug/L		102		68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	46.8		ug/L		94		56 - 123
1,2-Dibromoethane (EDB)	<0.39		50.0	46.0		ug/L		92		70 - 125
Dichlorodifluoromethane	<0.67		50.0	48.6		ug/L		97		40 - 159
1,1-Dichloroethane	<0.41		50.0	47.7		ug/L		95		70 - 125
1,2-Dichloroethane	<0.39		50.0	54.6		ug/L		109		68 - 127
1,1-Dichloroethene	<0.39		50.0	51.5		ug/L		103		67 - 122
1,2-Dichloropropane	<0.43		50.0	46.3		ug/L		93		67 - 130
1,3-Dichloropropane	<0.36		50.0	46.9		ug/L		94		62 - 136
2,2-Dichloropropane	<0.44		50.0	49.4		ug/L		99		58 - 139
1,1-Dichloropropene	<0.30		50.0	51.3		ug/L		103		70 - 121
Ethylbenzene	<0.18		50.0	44.9		ug/L		90		70 - 123
Hexachlorobutadiene	<0.45		50.0	59.4		ug/L		119		51 - 150
Isopropylbenzene	<0.39		50.0	48.1		ug/L		96		70 - 126
1,3-Dichlorobenzene	<0.40		50.0	47.3		ug/L		95		70 - 125
Bromomethane	<0.80		50.0	51.3		ug/L		103		40 - 152
Chloromethane	<0.32		50.0	43.0		ug/L		86		56 - 152
Dibromomethane	<0.27		50.0	50.6		ug/L		101		70 - 120
Methylene Chloride	<1.6		50.0	50.2		ug/L		100		69 - 125
2-Butanone (MEK)	<2.1		50.0	42.9		ug/L		86		46 - 144
Methyl tert-butyl ether	<0.39		50.0	48.2		ug/L		96		55 - 123
Naphthalene	<0.34		50.0	42.1		ug/L		84		53 - 144
n-Butylbenzene	<0.39		50.0	50.4		ug/L		101		68 - 125
N-Propylbenzene	<0.41		50.0	50.0		ug/L		100		69 - 127
1,2-Dichlorobenzene	<0.33		50.0	47.9		ug/L		96		70 - 125
1,4-Dichlorobenzene	<0.36		50.0	47.6		ug/L		95		70 - 120

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: 500-215109-20 MS

Matrix: Water

Analysis Batch: 652684

Client Sample ID: MW-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
p-Isopropyltoluene	<0.36		50.0	47.6		ug/L		95	70 - 125
sec-Butylbenzene	<0.40		50.0	49.1		ug/L		98	70 - 123
Styrene	<0.39		50.0	48.8		ug/L		98	70 - 120
tert-Butylbenzene	<0.40		50.0	47.2		ug/L		94	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	51.8		ug/L		104	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	45.7		ug/L		91	62 - 140
Tetrachloroethene	<0.37		50.0	58.1		ug/L		116	70 - 128
Tetrahydrofuran	<1.9		100	90.8		ug/L		91	59 - 139
Toluene	<0.15		50.0	48.1		ug/L		96	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	51.8		ug/L		104	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	45.2		ug/L		90	62 - 128
1,2,3-Trichlorobenzene	<0.46		50.0	50.1		ug/L		100	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	50.4		ug/L		101	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	57.2		ug/L		114	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	48.8		ug/L		98	71 - 130
Trichloroethene	<0.16		50.0	48.5		ug/L		97	70 - 125
Trichlorofluoromethane	<0.43		50.0	62.3		ug/L		125	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	45.3		ug/L		91	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	48.6		ug/L		97	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	48.3		ug/L		97	70 - 123
Vinyl chloride	<0.20		50.0	41.4		ug/L		83	64 - 126
Xylenes, Total	<0.22		100	99.9		ug/L		100	70 - 125

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	92		72 - 124
Dibromofluoromethane (Surr)	105		75 - 120
1,2-Dichloroethane-d4 (Surr)	114		75 - 126
Toluene-d8 (Surr)	100		75 - 120

Lab Sample ID: 500-215109-20 MSD

Matrix: Water

Analysis Batch: 652684

Client Sample ID: MW-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	2.9	J	50.0	41.2		ug/L		77	40 - 143	13	20
Benzene	<0.15		50.0	49.1		ug/L		98	70 - 120	3	20
Bromobenzene	<0.36		50.0	50.2		ug/L		100	70 - 122	0	20
Bromochloromethane	<0.43		50.0	49.2		ug/L		98	65 - 122	10	20
Bromodichloromethane	<0.37		50.0	49.6		ug/L		99	69 - 120	5	20
Bromoform	<0.48		50.0	53.0		ug/L		106	56 - 132	3	20
Carbon disulfide	<0.45		50.0	49.8		ug/L		100	66 - 120	7	20
Carbon tetrachloride	<0.38		50.0	56.9		ug/L		114	59 - 133	6	20
Chlorobenzene	<0.39		50.0	46.7		ug/L		93	70 - 120	8	20
Chloroethane	<0.51		50.0	49.8		ug/L		100	48 - 136	12	20
Chloroform	<0.37		50.0	50.0		ug/L		100	70 - 120	0	20
2-Chlorotoluene	<0.31		50.0	49.7		ug/L		99	70 - 125	1	20
4-Chlorotoluene	<0.35		50.0	49.3		ug/L		99	68 - 124	1	20
cis-1,2-Dichloroethene	<0.41		50.0	48.0		ug/L		96	70 - 125	5	20

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: 500-215109-20 MSD
Matrix: Water
Analysis Batch: 652684

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	<0.42		50.0	44.4		ug/L		89	64 - 127	2	20
Dibromochloromethane	<0.49		50.0	49.4		ug/L		99	68 - 125	3	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	50.3		ug/L		101	56 - 123	7	20
1,2-Dibromoethane (EDB)	<0.39		50.0	44.1		ug/L		88	70 - 125	4	20
Dichlorodifluoromethane	<0.67		50.0	44.1		ug/L		88	40 - 159	10	20
1,1-Dichloroethane	<0.41		50.0	47.1		ug/L		94	70 - 125	1	20
1,2-Dichloroethane	<0.39		50.0	53.1		ug/L		106	68 - 127	3	20
1,1-Dichloroethene	<0.39		50.0	49.1		ug/L		98	67 - 122	5	20
1,2-Dichloropropane	<0.43		50.0	43.6		ug/L		87	67 - 130	6	20
1,3-Dichloropropane	<0.36		50.0	46.1		ug/L		92	62 - 136	2	20
2,2-Dichloropropane	<0.44		50.0	46.5		ug/L		93	58 - 139	6	20
1,1-Dichloropropene	<0.30		50.0	49.7		ug/L		99	70 - 121	3	20
Ethylbenzene	<0.18		50.0	41.8		ug/L		84	70 - 123	7	20
Hexachlorobutadiene	<0.45		50.0	59.9		ug/L		120	51 - 150	1	20
Isopropylbenzene	<0.39		50.0	48.7		ug/L		97	70 - 126	1	20
1,3-Dichlorobenzene	<0.40		50.0	46.7		ug/L		93	70 - 125	1	20
Bromomethane	<0.80		50.0	47.5		ug/L		95	40 - 152	8	20
Chloromethane	<0.32		50.0	40.2		ug/L		80	56 - 152	7	20
Dibromomethane	<0.27		50.0	51.5		ug/L		103	70 - 120	2	20
Methylene Chloride	<1.6		50.0	48.7		ug/L		97	69 - 125	3	20
2-Butanone (MEK)	<2.1		50.0	44.5		ug/L		89	46 - 144	4	20
Methyl tert-butyl ether	<0.39		50.0	46.4		ug/L		93	55 - 123	4	20
Naphthalene	<0.34		50.0	43.3		ug/L		87	53 - 144	3	20
n-Butylbenzene	<0.39		50.0	48.3		ug/L		97	68 - 125	4	20
N-Propylbenzene	<0.41		50.0	49.8		ug/L		100	69 - 127	0	20
1,2-Dichlorobenzene	<0.33		50.0	47.1		ug/L		94	70 - 125	2	20
1,4-Dichlorobenzene	<0.36		50.0	47.0		ug/L		94	70 - 120	1	20
p-Isopropyltoluene	<0.36		50.0	46.7		ug/L		93	70 - 125	2	20
sec-Butylbenzene	<0.40		50.0	48.7		ug/L		97	70 - 123	1	20
Styrene	<0.39		50.0	45.8		ug/L		92	70 - 120	6	20
tert-Butylbenzene	<0.40		50.0	47.9		ug/L		96	70 - 121	1	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	47.0		ug/L		94	70 - 125	10	20
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	45.2		ug/L		90	62 - 140	1	20
Tetrachloroethene	<0.37		50.0	53.3		ug/L		107	70 - 128	9	20
Tetrahydrofuran	<1.9		100	88.3		ug/L		88	59 - 139	3	20
Toluene	<0.15		50.0	47.5		ug/L		95	70 - 125	1	20
trans-1,2-Dichloroethene	<0.35		50.0	48.9		ug/L		98	70 - 125	6	20
trans-1,3-Dichloropropene	<0.36		50.0	44.8		ug/L		90	62 - 128	1	20
1,2,3-Trichlorobenzene	<0.46		50.0	50.2		ug/L		100	51 - 145	0	20
1,2,4-Trichlorobenzene	<0.34		50.0	48.2		ug/L		96	57 - 137	4	20
1,1,1-Trichloroethane	<0.38		50.0	52.4		ug/L		105	70 - 125	9	20
1,1,2-Trichloroethane	<0.35		50.0	47.5		ug/L		95	71 - 130	3	20
Trichloroethene	<0.16		50.0	46.5		ug/L		93	70 - 125	4	20
Trichlorofluoromethane	<0.43		50.0	55.5		ug/L		111	55 - 128	12	20
1,2,3-Trichloropropane	<0.41		50.0	49.6		ug/L		99	50 - 133	9	20
1,2,4-Trimethylbenzene	<0.36		50.0	47.2		ug/L		94	70 - 123	3	20
1,3,5-Trimethylbenzene	<0.25		50.0	47.2		ug/L		94	70 - 123	2	20
Vinyl chloride	<0.20		50.0	41.2		ug/L		82	64 - 126	0	20
Xylenes, Total	<0.22		100	93.9		ug/L		94	70 - 125	6	20

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

<i>Surrogate</i>	<i>MSD</i>	<i>MSD</i>	<i>Limits</i>
<i>%Recovery</i>	<i>Qualifier</i>		
4-Bromofluorobenzene (Surr)	96		72 - 124
Dibromofluoromethane (Surr)	108		75 - 120
1,2-Dichloroethane-d4 (Surr)	108		75 - 126
Toluene-d8 (Surr)	101		75 - 120

Lab Sample ID: MB 500-652933/6
Matrix: Water
Analysis Batch: 652933

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<1.7		10	1.7	ug/L			04/22/22 10:53	1
Benzene	<0.15		0.50	0.15	ug/L			04/22/22 10:53	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/22/22 10:53	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/22/22 10:53	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/22/22 10:53	1
Bromoform	<0.48		1.0	0.48	ug/L			04/22/22 10:53	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/22/22 10:53	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/22/22 10:53	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/22/22 10:53	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/22/22 10:53	1
Chloroform	<0.37		2.0	0.37	ug/L			04/22/22 10:53	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/22/22 10:53	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/22/22 10:53	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/22/22 10:53	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/22/22 10:53	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/22/22 10:53	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/22/22 10:53	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/22/22 10:53	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/22/22 10:53	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/22/22 10:53	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/22/22 10:53	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/22/22 10:53	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/22/22 10:53	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/22/22 10:53	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/22/22 10:53	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/22/22 10:53	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/22/22 10:53	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/22/22 10:53	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 10:53	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/22/22 10:53	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/22/22 10:53	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/22/22 10:53	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/22/22 10:53	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/22/22 10:53	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/22/22 10:53	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/22/22 10:53	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/22/22 10:53	1
Naphthalene	0.458 J		1.0	0.34	ug/L			04/22/22 10:53	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/22/22 10:53	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/22/22 10:53	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/22/22 10:53	1

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: MB 500-652933/6
Matrix: Water
Analysis Batch: 652933

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/22/22 10:53	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/22/22 10:53	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 10:53	1
Styrene	<0.39		1.0	0.39	ug/L			04/22/22 10:53	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/22/22 10:53	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/22/22 10:53	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/22/22 10:53	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/22/22 10:53	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/22/22 10:53	1
Toluene	<0.15		0.50	0.15	ug/L			04/22/22 10:53	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/22/22 10:53	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/22/22 10:53	1
1,2,3-Trichlorobenzene	0.639	J	1.0	0.46	ug/L			04/22/22 10:53	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/22/22 10:53	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/22/22 10:53	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/22/22 10:53	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/22/22 10:53	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/22/22 10:53	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/22/22 10:53	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/22/22 10:53	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/22/22 10:53	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/22/22 10:53	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/22/22 10:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124		04/22/22 10:53	1
Dibromofluoromethane (Surr)	105		75 - 120		04/22/22 10:53	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126		04/22/22 10:53	1
Toluene-d8 (Surr)	100		75 - 120		04/22/22 10:53	1

Lab Sample ID: LCS 500-652933/4
Matrix: Water
Analysis Batch: 652933

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	50.0	48.5		ug/L		97	40 - 143
Benzene	50.0	48.9		ug/L		98	70 - 120
Bromobenzene	50.0	48.4		ug/L		97	70 - 122
Bromochloromethane	50.0	47.3		ug/L		95	65 - 122
Bromodichloromethane	50.0	48.9		ug/L		98	69 - 120
Bromoform	50.0	49.2		ug/L		98	56 - 132
Carbon disulfide	50.0	53.8		ug/L		108	66 - 120
Carbon tetrachloride	50.0	58.6		ug/L		117	59 - 133
Chlorobenzene	50.0	47.8		ug/L		96	70 - 120
Chloroethane	50.0	45.3		ug/L		91	48 - 136
Chloroform	50.0	48.8		ug/L		98	70 - 120
2-Chlorotoluene	50.0	49.3		ug/L		99	70 - 125
4-Chlorotoluene	50.0	49.3		ug/L		99	68 - 124

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: LCS 500-652933/4
Matrix: Water
Analysis Batch: 652933

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	50.0	47.9		ug/L		96	70 - 125
cis-1,3-Dichloropropene	50.0	44.6		ug/L		89	64 - 127
Dibromochloromethane	50.0	45.6		ug/L		91	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	40.4		ug/L		81	56 - 123
1,2-Dibromoethane (EDB)	50.0	41.5		ug/L		83	70 - 125
Dichlorodifluoromethane	50.0	49.6		ug/L		99	40 - 159
1,1-Dichloroethane	50.0	47.4		ug/L		95	70 - 125
1,2-Dichloroethane	50.0	52.3		ug/L		105	68 - 127
1,1-Dichloroethene	50.0	53.0		ug/L		106	67 - 122
1,2-Dichloropropane	50.0	43.5		ug/L		87	67 - 130
1,3-Dichloropropane	50.0	44.4		ug/L		89	62 - 136
2,2-Dichloropropane	50.0	50.5		ug/L		101	58 - 139
1,1-Dichloropropene	50.0	52.8		ug/L		106	70 - 121
Ethylbenzene	50.0	44.1		ug/L		88	70 - 123
Hexachlorobutadiene	50.0	59.1		ug/L		118	51 - 150
Isopropylbenzene	50.0	48.3		ug/L		97	70 - 126
1,3-Dichlorobenzene	50.0	47.1		ug/L		94	70 - 125
Bromomethane	50.0	40.0		ug/L		80	40 - 152
Chloromethane	50.0	43.8		ug/L		88	56 - 152
Dibromomethane	50.0	46.7		ug/L		93	70 - 120
Methylene Chloride	50.0	47.2		ug/L		94	69 - 125
2-Butanone (MEK)	50.0	46.3		ug/L		93	46 - 144
Methyl tert-butyl ether	50.0	44.8		ug/L		90	55 - 123
Naphthalene	50.0	39.0		ug/L		78	53 - 144
n-Butylbenzene	50.0	50.3		ug/L		101	68 - 125
N-Propylbenzene	50.0	50.7		ug/L		101	69 - 127
1,2-Dichlorobenzene	50.0	45.9		ug/L		92	70 - 125
1,4-Dichlorobenzene	50.0	46.5		ug/L		93	70 - 120
p-Isopropyltoluene	50.0	48.3		ug/L		97	70 - 125
sec-Butylbenzene	50.0	49.8		ug/L		100	70 - 123
Styrene	50.0	46.3		ug/L		93	70 - 120
tert-Butylbenzene	50.0	48.0		ug/L		96	70 - 121
1,1,1,2-Tetrachloroethane	50.0	48.1		ug/L		96	70 - 125
1,1,1,2,2-Tetrachloroethane	50.0	39.6		ug/L		79	62 - 140
Tetrachloroethene	50.0	55.8		ug/L		112	70 - 128
Tetrahydrofuran	100	81.4		ug/L		81	59 - 139
Toluene	50.0	48.0		ug/L		96	70 - 125
trans-1,2-Dichloroethene	50.0	50.0		ug/L		100	70 - 125
trans-1,3-Dichloropropene	50.0	43.9		ug/L		88	62 - 128
1,2,3-Trichlorobenzene	50.0	47.2		ug/L		94	51 - 145
1,2,4-Trichlorobenzene	50.0	49.5		ug/L		99	57 - 137
1,1,1-Trichloroethane	50.0	55.7		ug/L		111	70 - 125
1,1,2-Trichloroethane	50.0	45.5		ug/L		91	71 - 130
Trichloroethene	50.0	48.6		ug/L		97	70 - 125
Trichlorofluoromethane	50.0	63.2		ug/L		126	55 - 128
1,2,3-Trichloropropane	50.0	41.5		ug/L		83	50 - 133
1,2,4-Trimethylbenzene	50.0	48.0		ug/L		96	70 - 123
1,3,5-Trimethylbenzene	50.0	48.4		ug/L		97	70 - 123
Vinyl chloride	50.0	46.4		ug/L		93	64 - 126

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: LCS 500-652933/4

Matrix: Water

Analysis Batch: 652933

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Xylenes, Total	100	98.9		ug/L		99	70 - 125
Surrogate							
	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	93		72 - 124				
Dibromofluoromethane (Surr)	105		75 - 120				
1,2-Dichloroethane-d4 (Surr)	106		75 - 126				
Toluene-d8 (Surr)	100		75 - 120				

Lab Sample ID: 500-215109-21 MS

Matrix: Water

Analysis Batch: 652933

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	2.0	J	50.0	44.5		ug/L		85	40 - 143
Benzene	<0.15		50.0	49.0		ug/L		98	70 - 120
Bromobenzene	<0.36		50.0	50.6		ug/L		101	70 - 122
Bromochloromethane	<0.43		50.0	49.4		ug/L		99	65 - 122
Bromodichloromethane	<0.37		50.0	50.4		ug/L		101	69 - 120
Bromoform	<0.48		50.0	52.2		ug/L		104	56 - 132
Carbon disulfide	<0.45		50.0	52.8		ug/L		106	66 - 120
Carbon tetrachloride	<0.38		50.0	56.7		ug/L		113	59 - 133
Chlorobenzene	<0.39		50.0	49.0		ug/L		98	70 - 120
Chloroethane	<0.51		50.0	45.1		ug/L		90	48 - 136
Chloroform	<0.37		50.0	51.0		ug/L		102	70 - 120
2-Chlorotoluene	<0.31		50.0	49.6		ug/L		99	70 - 125
4-Chlorotoluene	<0.35		50.0	49.5		ug/L		99	68 - 124
cis-1,2-Dichloroethene	<0.41		50.0	50.7		ug/L		101	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	45.2		ug/L		90	64 - 127
Dibromochloromethane	<0.49		50.0	50.7		ug/L		101	68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	47.5		ug/L		95	56 - 123
1,2-Dibromoethane (EDB)	<0.39		50.0	44.2		ug/L		88	70 - 125
Dichlorodifluoromethane	<0.67		50.0	51.2		ug/L		102	40 - 159
1,1-Dichloroethane	<0.41		50.0	48.7		ug/L		97	70 - 125
1,2-Dichloroethane	<0.39		50.0	55.8		ug/L		112	68 - 127
1,1-Dichloroethene	<0.39		50.0	49.2		ug/L		98	67 - 122
1,2-Dichloropropane	<0.43		50.0	44.5		ug/L		89	67 - 130
1,3-Dichloropropane	<0.36		50.0	47.1		ug/L		94	62 - 136
2,2-Dichloropropane	<0.44		50.0	48.7		ug/L		97	58 - 139
1,1-Dichloropropene	<0.30		50.0	50.7		ug/L		101	70 - 121
Ethylbenzene	<0.18		50.0	43.6		ug/L		87	70 - 123
Hexachlorobutadiene	<0.45		50.0	56.8		ug/L		114	51 - 150
Isopropylbenzene	<0.39		50.0	47.0		ug/L		94	70 - 126
1,3-Dichlorobenzene	<0.40		50.0	46.1		ug/L		92	70 - 125
Bromomethane	<0.80		50.0	48.2		ug/L		96	40 - 152
Chloromethane	<0.32		50.0	46.3		ug/L		93	56 - 152
Dibromomethane	<0.27		50.0	51.3		ug/L		103	70 - 120
Methylene Chloride	<1.6		50.0	50.4		ug/L		101	69 - 125
2-Butanone (MEK)	<2.1		50.0	36.6		ug/L		73	46 - 144

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: 500-215109-21 MS
Matrix: Water
Analysis Batch: 652933

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl tert-butyl ether	<0.39		50.0	46.6		ug/L		93	55 - 123
Naphthalene	<0.34		50.0	40.3		ug/L		81	53 - 144
n-Butylbenzene	<0.39		50.0	46.9		ug/L		94	68 - 125
N-Propylbenzene	<0.41		50.0	48.2		ug/L		96	69 - 127
1,2-Dichlorobenzene	<0.33		50.0	47.9		ug/L		96	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	47.0		ug/L		94	70 - 120
p-Isopropyltoluene	<0.36		50.0	46.2		ug/L		92	70 - 125
sec-Butylbenzene	<0.40		50.0	47.6		ug/L		95	70 - 123
Styrene	<0.39		50.0	47.5		ug/L		95	70 - 120
tert-Butylbenzene	<0.40		50.0	47.4		ug/L		95	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	50.8		ug/L		102	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	43.3		ug/L		87	62 - 140
Tetrachloroethene	<0.37		50.0	54.3		ug/L		109	70 - 128
Tetrahydrofuran	<1.9		100	83.3		ug/L		83	59 - 139
Toluene	<0.15		50.0	47.8		ug/L		96	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	49.1		ug/L		98	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	44.4		ug/L		89	62 - 128
1,2,3-Trichlorobenzene	<0.46		50.0	49.8		ug/L		100	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	47.4		ug/L		95	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	54.1		ug/L		108	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	48.3		ug/L		97	71 - 130
Trichloroethene	<0.16		50.0	47.8		ug/L		96	70 - 125
Trichlorofluoromethane	<0.43		50.0	64.0		ug/L		128	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	46.5		ug/L		93	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	48.0		ug/L		96	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	47.3		ug/L		95	70 - 123
Vinyl chloride	<0.20		50.0	47.6		ug/L		95	64 - 126
Xylenes, Total	<0.22		100	99.7		ug/L		100	70 - 125

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	94		72 - 124
Dibromofluoromethane (Surr)	107		75 - 120
1,2-Dichloroethane-d4 (Surr)	113		75 - 126
Toluene-d8 (Surr)	100		75 - 120

Lab Sample ID: 500-215109-21 MSD
Matrix: Water
Analysis Batch: 652933

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	2.0	J	50.0	43.5		ug/L		83	40 - 143	2	20
Benzene	<0.15		50.0	50.3		ug/L		101	70 - 120	3	20
Bromobenzene	<0.36		50.0	52.0		ug/L		104	70 - 122	3	20
Bromochloromethane	<0.43		50.0	50.7		ug/L		101	65 - 122	3	20
Bromodichloromethane	<0.37		50.0	52.3		ug/L		105	69 - 120	4	20
Bromoform	<0.48		50.0	51.5		ug/L		103	56 - 132	1	20
Carbon disulfide	<0.45		50.0	53.0		ug/L		106	66 - 120	0	20
Carbon tetrachloride	<0.38		50.0	57.1		ug/L		114	59 - 133	1	20

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: 500-215109-21 MSD
Matrix: Water
Analysis Batch: 652933

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	<0.39		50.0	49.6		ug/L		99	70 - 120	1	20
Chloroethane	<0.51		50.0	45.3		ug/L		91	48 - 136	0	20
Chloroform	<0.37		50.0	50.8		ug/L		102	70 - 120	0	20
2-Chlorotoluene	<0.31		50.0	51.6		ug/L		103	70 - 125	4	20
4-Chlorotoluene	<0.35		50.0	52.0		ug/L		104	68 - 124	5	20
cis-1,2-Dichloroethene	<0.41		50.0	49.6		ug/L		99	70 - 125	2	20
cis-1,3-Dichloropropene	<0.42		50.0	46.4		ug/L		93	64 - 127	3	20
Dibromochloromethane	<0.49		50.0	51.7		ug/L		103	68 - 125	2	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	50.0		ug/L		100	56 - 123	5	20
1,2-Dibromoethane (EDB)	<0.39		50.0	44.1		ug/L		88	70 - 125	0	20
Dichlorodifluoromethane	<0.67		50.0	48.2		ug/L		96	40 - 159	6	20
1,1-Dichloroethane	<0.41		50.0	49.7		ug/L		99	70 - 125	2	20
1,2-Dichloroethane	<0.39		50.0	56.0		ug/L		112	68 - 127	0	20
1,1-Dichloroethene	<0.39		50.0	53.8		ug/L		108	67 - 122	9	20
1,2-Dichloropropane	<0.43		50.0	43.9		ug/L		88	67 - 130	1	20
1,3-Dichloropropane	<0.36		50.0	46.2		ug/L		92	62 - 136	2	20
2,2-Dichloropropane	<0.44		50.0	48.6		ug/L		97	58 - 139	0	20
1,1-Dichloropropene	<0.30		50.0	51.3		ug/L		103	70 - 121	1	20
Ethylbenzene	<0.18		50.0	44.0		ug/L		88	70 - 123	1	20
Hexachlorobutadiene	<0.45		50.0	60.6		ug/L		121	51 - 150	6	20
Isopropylbenzene	<0.39		50.0	50.2		ug/L		100	70 - 126	7	20
1,3-Dichlorobenzene	<0.40		50.0	49.2		ug/L		98	70 - 125	7	20
Bromomethane	<0.80		50.0	45.3		ug/L		91	40 - 152	6	20
Chloromethane	<0.32		50.0	44.5		ug/L		89	56 - 152	4	20
Dibromomethane	<0.27		50.0	50.2		ug/L		100	70 - 120	2	20
Methylene Chloride	<1.6		50.0	50.6		ug/L		101	69 - 125	0	20
2-Butanone (MEK)	<2.1		50.0	43.6		ug/L		87	46 - 144	18	20
Methyl tert-butyl ether	<0.39		50.0	47.4		ug/L		95	55 - 123	2	20
Naphthalene	<0.34		50.0	44.9		ug/L		90	53 - 144	11	20
n-Butylbenzene	<0.39		50.0	49.7		ug/L		99	68 - 125	6	20
N-Propylbenzene	<0.41		50.0	50.6		ug/L		101	69 - 127	5	20
1,2-Dichlorobenzene	<0.33		50.0	49.9		ug/L		100	70 - 125	4	20
1,4-Dichlorobenzene	<0.36		50.0	49.8		ug/L		100	70 - 120	6	20
p-Isopropyltoluene	<0.36		50.0	48.2		ug/L		96	70 - 125	4	20
sec-Butylbenzene	<0.40		50.0	49.7		ug/L		99	70 - 123	4	20
Styrene	<0.39		50.0	48.6		ug/L		97	70 - 120	2	20
tert-Butylbenzene	<0.40		50.0	47.9		ug/L		96	70 - 121	1	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	50.1		ug/L		100	70 - 125	1	20
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	44.1		ug/L		88	62 - 140	2	20
Tetrachloroethene	<0.37		50.0	53.5		ug/L		107	70 - 128	2	20
Tetrahydrofuran	<1.9		100	92.7		ug/L		93	59 - 139	11	20
Toluene	<0.15		50.0	48.8		ug/L		98	70 - 125	2	20
trans-1,2-Dichloroethene	<0.35		50.0	52.9		ug/L		106	70 - 125	7	20
trans-1,3-Dichloropropene	<0.36		50.0	45.5		ug/L		91	62 - 128	2	20
1,2,3-Trichlorobenzene	<0.46		50.0	55.9		ug/L		112	51 - 145	12	20
1,2,4-Trichlorobenzene	<0.34		50.0	53.9		ug/L		108	57 - 137	13	20
1,1,1-Trichloroethane	<0.38		50.0	55.6		ug/L		111	70 - 125	3	20
1,1,2-Trichloroethane	<0.35		50.0	49.3		ug/L		99	71 - 130	2	20
Trichloroethene	<0.16		50.0	48.3		ug/L		97	70 - 125	1	20

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: 500-215109-21 MSD
Matrix: Water
Analysis Batch: 652933

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane	<0.43		50.0	60.7		ug/L		121	55 - 128	5	20
1,2,3-Trichloropropane	<0.41		50.0	47.3		ug/L		95	50 - 133	2	20
1,2,4-Trimethylbenzene	<0.36		50.0	49.7		ug/L		99	70 - 123	3	20
1,3,5-Trimethylbenzene	<0.25		50.0	49.3		ug/L		99	70 - 123	4	20
Vinyl chloride	<0.20		50.0	46.8		ug/L		94	64 - 126	2	20
Xylenes, Total	<0.22		100	101		ug/L		101	70 - 125	1	20
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	93		72 - 124								
Dibromofluoromethane (Surr)	104		75 - 120								
1,2-Dichloroethane-d4 (Surr)	113		75 - 126								
Toluene-d8 (Surr)	99		75 - 120								

Lab Sample ID: MB 500-653128/6
Matrix: Water
Analysis Batch: 653128

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			04/24/22 14:35	1
Benzene	<0.15		0.50	0.15	ug/L			04/24/22 14:35	1
Bromobenzene	<0.36		1.0	0.36	ug/L			04/24/22 14:35	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			04/24/22 14:35	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			04/24/22 14:35	1
Bromoform	<0.48		1.0	0.48	ug/L			04/24/22 14:35	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			04/24/22 14:35	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/24/22 14:35	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			04/24/22 14:35	1
Chloroethane	<0.51		1.0	0.51	ug/L			04/24/22 14:35	1
Chloroform	<0.37		2.0	0.37	ug/L			04/24/22 14:35	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			04/24/22 14:35	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			04/24/22 14:35	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/24/22 14:35	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			04/24/22 14:35	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			04/24/22 14:35	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			04/24/22 14:35	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			04/24/22 14:35	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			04/24/22 14:35	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			04/24/22 14:35	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/24/22 14:35	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/24/22 14:35	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			04/24/22 14:35	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			04/24/22 14:35	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			04/24/22 14:35	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			04/24/22 14:35	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/24/22 14:35	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			04/24/22 14:35	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 14:35	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			04/24/22 14:35	1

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: MB 500-653128/6
Matrix: Water
Analysis Batch: 653128

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			04/24/22 14:35	1
Bromomethane	<0.80		3.0	0.80	ug/L			04/24/22 14:35	1
Chloromethane	<0.32		1.0	0.32	ug/L			04/24/22 14:35	1
Dibromomethane	<0.27		1.0	0.27	ug/L			04/24/22 14:35	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			04/24/22 14:35	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			04/24/22 14:35	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/24/22 14:35	1
Naphthalene	<0.34		1.0	0.34	ug/L			04/24/22 14:35	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			04/24/22 14:35	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			04/24/22 14:35	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			04/24/22 14:35	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			04/24/22 14:35	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			04/24/22 14:35	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 14:35	1
Styrene	<0.39		1.0	0.39	ug/L			04/24/22 14:35	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			04/24/22 14:35	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			04/24/22 14:35	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/24/22 14:35	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/24/22 14:35	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			04/24/22 14:35	1
Toluene	<0.15		0.50	0.15	ug/L			04/24/22 14:35	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/24/22 14:35	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			04/24/22 14:35	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			04/24/22 14:35	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			04/24/22 14:35	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/24/22 14:35	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/24/22 14:35	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/24/22 14:35	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			04/24/22 14:35	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			04/24/22 14:35	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			04/24/22 14:35	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			04/24/22 14:35	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/24/22 14:35	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			04/24/22 14:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		04/24/22 14:35	1
Dibromofluoromethane (Surr)	109		75 - 120		04/24/22 14:35	1
1,2-Dichloroethane-d4 (Surr)	119		75 - 126		04/24/22 14:35	1
Toluene-d8 (Surr)	102		75 - 120		04/24/22 14:35	1

Lab Sample ID: LCS 500-653128/4
Matrix: Water
Analysis Batch: 653128

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	50.0	49.8		ug/L		100	40 - 143
Benzene	50.0	52.0		ug/L		104	70 - 120

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: LCS 500-653128/4
Matrix: Water
Analysis Batch: 653128

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromobenzene	50.0	49.5		ug/L		99	70 - 122
Bromochloromethane	50.0	51.4		ug/L		103	65 - 122
Bromodichloromethane	50.0	53.1		ug/L		106	69 - 120
Bromoform	50.0	53.6		ug/L		107	56 - 132
Carbon disulfide	50.0	56.6		ug/L		113	66 - 120
Carbon tetrachloride	50.0	65.7		ug/L		131	59 - 133
Chlorobenzene	50.0	52.7		ug/L		105	70 - 120
Chloroethane	50.0	58.4		ug/L		117	48 - 136
Chloroform	50.0	51.7		ug/L		103	70 - 120
2-Chlorotoluene	50.0	52.9		ug/L		106	70 - 125
4-Chlorotoluene	50.0	53.0		ug/L		106	68 - 124
cis-1,2-Dichloroethene	50.0	50.8		ug/L		102	70 - 125
cis-1,3-Dichloropropene	50.0	49.4		ug/L		99	64 - 127
Dibromochloromethane	50.0	51.6		ug/L		103	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	49.5		ug/L		99	56 - 123
1,2-Dibromoethane (EDB)	50.0	44.7		ug/L		89	70 - 125
Dichlorodifluoromethane	50.0	54.7		ug/L		109	40 - 159
1,1-Dichloroethane	50.0	51.8		ug/L		104	70 - 125
1,2-Dichloroethane	50.0	58.1		ug/L		116	68 - 127
1,1-Dichloroethene	50.0	58.8		ug/L		118	67 - 122
1,2-Dichloropropane	50.0	48.1		ug/L		96	67 - 130
1,3-Dichloropropane	50.0	48.3		ug/L		97	62 - 136
2,2-Dichloropropane	50.0	56.7		ug/L		113	58 - 139
1,1-Dichloropropene	50.0	56.0		ug/L		112	70 - 121
Ethylbenzene	50.0	47.8		ug/L		96	70 - 123
Hexachlorobutadiene	50.0	61.7		ug/L		123	51 - 150
Isopropylbenzene	50.0	53.1		ug/L		106	70 - 126
1,3-Dichlorobenzene	50.0	49.1		ug/L		98	70 - 125
Bromomethane	50.0	52.0		ug/L		104	40 - 152
Chloromethane	50.0	42.2		ug/L		84	56 - 152
Dibromomethane	50.0	51.0		ug/L		102	70 - 120
Methylene Chloride	50.0	48.9		ug/L		98	69 - 125
2-Butanone (MEK)	50.0	45.0		ug/L		90	46 - 144
Methyl tert-butyl ether	50.0	48.7		ug/L		97	55 - 123
Naphthalene	50.0	42.1		ug/L		84	53 - 144
n-Butylbenzene	50.0	56.2		ug/L		112	68 - 125
N-Propylbenzene	50.0	54.4		ug/L		109	69 - 127
1,2-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 125
1,4-Dichlorobenzene	50.0	48.1		ug/L		96	70 - 120
p-Isopropyltoluene	50.0	51.9		ug/L		104	70 - 125
sec-Butylbenzene	50.0	54.5		ug/L		109	70 - 123
Styrene	50.0	50.7		ug/L		101	70 - 120
tert-Butylbenzene	50.0	52.2		ug/L		104	70 - 121
1,1,1,2-Tetrachloroethane	50.0	52.9		ug/L		106	70 - 125
1,1,2,2-Tetrachloroethane	50.0	43.0		ug/L		86	62 - 140
Tetrachloroethene	50.0	59.2		ug/L		118	70 - 128
Tetrahydrofuran	100	90.5		ug/L		91	59 - 139
Toluene	50.0	52.0		ug/L		104	70 - 125
trans-1,2-Dichloroethene	50.0	54.4		ug/L		109	70 - 125

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: LCS 500-653128/4
Matrix: Water
Analysis Batch: 653128

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,3-Dichloropropene	50.0	49.6		ug/L		99	62 - 128
1,2,3-Trichlorobenzene	50.0	51.0		ug/L		102	51 - 145
1,2,4-Trichlorobenzene	50.0	53.7		ug/L		107	57 - 137
1,1,1-Trichloroethane	50.0	60.8		ug/L		122	70 - 125
1,1,2-Trichloroethane	50.0	48.5		ug/L		97	71 - 130
Trichloroethene	50.0	52.4		ug/L		105	70 - 125
Trichlorofluoromethane	50.0	59.7		ug/L		119	55 - 128
1,2,3-Trichloropropane	50.0	44.6		ug/L		89	50 - 133
1,2,4-Trimethylbenzene	50.0	51.7		ug/L		103	70 - 123
1,3,5-Trimethylbenzene	50.0	51.7		ug/L		103	70 - 123
Vinyl chloride	50.0	45.2		ug/L		90	64 - 126
Xylenes, Total	100	107		ug/L		107	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		72 - 124
Dibromofluoromethane (Surr)	106		75 - 120
1,2-Dichloroethane-d4 (Surr)	109		75 - 126
Toluene-d8 (Surr)	103		75 - 120

Lab Sample ID: 500-215109-40 MS
Matrix: Water
Analysis Batch: 653128

Client Sample ID: JW-15B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	5.7	J	50.0	44.0		ug/L		77	40 - 143
Benzene	<0.15		50.0	53.7		ug/L		107	70 - 120
Bromobenzene	<0.36		50.0	53.8		ug/L		108	70 - 122
Bromochloromethane	<0.43		50.0	52.9		ug/L		106	65 - 122
Bromodichloromethane	<0.37		50.0	57.4		ug/L		115	69 - 120
Bromoform	<0.48		50.0	54.0		ug/L		108	56 - 132
Carbon disulfide	<0.45		50.0	55.9		ug/L		112	66 - 120
Carbon tetrachloride	<0.38		50.0	59.1		ug/L		118	59 - 133
Chlorobenzene	<0.39		50.0	51.9		ug/L		104	70 - 120
Chloroethane	<0.51		50.0	55.3		ug/L		111	48 - 136
Chloroform	<0.37		50.0	53.7		ug/L		107	70 - 120
2-Chlorotoluene	<0.31		50.0	53.7		ug/L		107	70 - 125
4-Chlorotoluene	<0.35		50.0	53.0		ug/L		106	68 - 124
cis-1,2-Dichloroethene	<0.41		50.0	53.0		ug/L		106	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	49.5		ug/L		99	64 - 127
Dibromochloromethane	<0.49		50.0	53.3		ug/L		107	68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	52.0		ug/L		104	56 - 123
1,2-Dibromoethane (EDB)	<0.39		50.0	45.2		ug/L		90	70 - 125
Dichlorodifluoromethane	<0.67		50.0	54.6		ug/L		109	40 - 159
1,1-Dichloroethane	<0.41		50.0	53.4		ug/L		107	70 - 125
1,2-Dichloroethane	<0.39		50.0	61.0		ug/L		122	68 - 127
1,1-Dichloroethene	<0.39		50.0	53.9		ug/L		108	67 - 122
1,2-Dichloropropane	<0.43		50.0	50.7		ug/L		101	67 - 130
1,3-Dichloropropane	<0.36		50.0	50.4		ug/L		101	62 - 136

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: 500-215109-40 MS

Matrix: Water

Analysis Batch: 653128

Client Sample ID: JW-15B

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
2,2-Dichloropropane	<0.44		50.0	51.9		ug/L		104	58 - 139
1,1-Dichloropropene	<0.30		50.0	53.8		ug/L		108	70 - 121
Ethylbenzene	<0.18		50.0	44.9		ug/L		90	70 - 123
Hexachlorobutadiene	<0.45		50.0	56.5		ug/L		113	51 - 150
Isopropylbenzene	<0.39		50.0	52.7		ug/L		105	70 - 126
1,3-Dichlorobenzene	<0.40		50.0	49.9		ug/L		100	70 - 125
Bromomethane	<0.80		50.0	54.4		ug/L		109	40 - 152
Chloromethane	<0.32		50.0	48.5		ug/L		97	56 - 152
Dibromomethane	<0.27		50.0	54.8		ug/L		110	70 - 120
Methylene Chloride	<1.6		50.0	52.3		ug/L		105	69 - 125
2-Butanone (MEK)	<2.1		50.0	47.3		ug/L		95	46 - 144
Methyl tert-butyl ether	<0.39		50.0	51.7		ug/L		103	55 - 123
Naphthalene	<0.34		50.0	46.6		ug/L		93	53 - 144
n-Butylbenzene	<0.39		50.0	51.5		ug/L		103	68 - 125
N-Propylbenzene	<0.41		50.0	53.0		ug/L		106	69 - 127
1,2-Dichlorobenzene	<0.33		50.0	51.0		ug/L		102	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	49.9		ug/L		100	70 - 120
p-Isopropyltoluene	<0.36		50.0	49.5		ug/L		99	70 - 125
sec-Butylbenzene	<0.40		50.0	51.8		ug/L		104	70 - 123
Styrene	<0.39		50.0	50.9		ug/L		102	70 - 120
tert-Butylbenzene	<0.40		50.0	50.8		ug/L		102	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	53.9		ug/L		108	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	47.8		ug/L		96	62 - 140
Tetrachloroethene	<0.37		50.0	54.0		ug/L		108	70 - 128
Tetrahydrofuran	<1.9		100	91.9		ug/L		92	59 - 139
Toluene	<0.15		50.0	50.4		ug/L		101	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	52.8		ug/L		106	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	50.2		ug/L		100	62 - 128
1,2,3-Trichlorobenzene	<0.46		50.0	54.5		ug/L		109	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	53.3		ug/L		107	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	58.1		ug/L		116	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	51.2		ug/L		102	71 - 130
Trichloroethene	<0.16		50.0	51.0		ug/L		102	70 - 125
Trichlorofluoromethane	<0.43		50.0	61.3		ug/L		123	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	51.0		ug/L		102	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	51.7		ug/L		103	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	52.2		ug/L		104	70 - 123
Vinyl chloride	<0.20		50.0	49.3		ug/L		99	64 - 126
Xylenes, Total	<0.22		100	104		ug/L		104	70 - 125

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane (Surr)	112		75 - 120
1,2-Dichloroethane-d4 (Surr)	116		75 - 126
Toluene-d8 (Surr)	99		75 - 120

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: 500-215109-40 MSD
Matrix: Water
Analysis Batch: 653128

Client Sample ID: JW-15B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	5.7	J	50.0	42.4		ug/L		73	40 - 143	4	20
Benzene	<0.15		50.0	50.1		ug/L		100	70 - 120	7	20
Bromobenzene	<0.36		50.0	48.1		ug/L		96	70 - 122	11	20
Bromochloromethane	<0.43		50.0	51.4		ug/L		103	65 - 122	3	20
Bromodichloromethane	<0.37		50.0	53.6		ug/L		107	69 - 120	7	20
Bromoform	<0.48		50.0	52.1		ug/L		104	56 - 132	4	20
Carbon disulfide	<0.45		50.0	53.0		ug/L		106	66 - 120	6	20
Carbon tetrachloride	<0.38		50.0	57.6		ug/L		115	59 - 133	3	20
Chlorobenzene	<0.39		50.0	49.3		ug/L		99	70 - 120	5	20
Chloroethane	<0.51		50.0	54.8		ug/L		110	48 - 136	1	20
Chloroform	<0.37		50.0	50.9		ug/L		102	70 - 120	5	20
2-Chlorotoluene	<0.31		50.0	49.2		ug/L		98	70 - 125	9	20
4-Chlorotoluene	<0.35		50.0	48.4		ug/L		97	68 - 124	9	20
cis-1,2-Dichloroethene	<0.41		50.0	49.6		ug/L		99	70 - 125	6	20
cis-1,3-Dichloropropene	<0.42		50.0	47.2		ug/L		94	64 - 127	5	20
Dibromochloromethane	<0.49		50.0	50.7		ug/L		101	68 - 125	5	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	48.7		ug/L		97	56 - 123	7	20
1,2-Dibromoethane (EDB)	<0.39		50.0	42.6		ug/L		85	70 - 125	6	20
Dichlorodifluoromethane	<0.67		50.0	45.4		ug/L		91	40 - 159	18	20
1,1-Dichloroethane	<0.41		50.0	50.4		ug/L		101	70 - 125	6	20
1,2-Dichloroethane	<0.39		50.0	56.2		ug/L		112	68 - 127	8	20
1,1-Dichloroethene	<0.39		50.0	50.6		ug/L		101	67 - 122	6	20
1,2-Dichloropropane	<0.43		50.0	46.9		ug/L		94	67 - 130	8	20
1,3-Dichloropropane	<0.36		50.0	47.4		ug/L		95	62 - 136	6	20
2,2-Dichloropropane	<0.44		50.0	50.4		ug/L		101	58 - 139	3	20
1,1-Dichloropropene	<0.30		50.0	50.0		ug/L		100	70 - 121	7	20
Ethylbenzene	<0.18		50.0	43.1		ug/L		86	70 - 123	4	20
Hexachlorobutadiene	<0.45		50.0	56.2		ug/L		112	51 - 150	1	20
Isopropylbenzene	<0.39		50.0	46.0		ug/L		92	70 - 126	14	20
1,3-Dichlorobenzene	<0.40		50.0	46.8		ug/L		94	70 - 125	7	20
Bromomethane	<0.80		50.0	54.7		ug/L		109	40 - 152	1	20
Chloromethane	<0.32		50.0	44.3		ug/L		89	56 - 152	9	20
Dibromomethane	<0.27		50.0	51.0		ug/L		102	70 - 120	7	20
Methylene Chloride	<1.6		50.0	49.1		ug/L		98	69 - 125	6	20
2-Butanone (MEK)	<2.1		50.0	41.7		ug/L		83	46 - 144	13	20
Methyl tert-butyl ether	<0.39		50.0	49.5		ug/L		99	55 - 123	4	20
Naphthalene	<0.34		50.0	45.4		ug/L		91	53 - 144	3	20
n-Butylbenzene	<0.39		50.0	47.9		ug/L		96	68 - 125	7	20
N-Propylbenzene	<0.41		50.0	47.5		ug/L		95	69 - 127	11	20
1,2-Dichlorobenzene	<0.33		50.0	47.3		ug/L		95	70 - 125	7	20
1,4-Dichlorobenzene	<0.36		50.0	46.6		ug/L		93	70 - 120	7	20
p-Isopropyltoluene	<0.36		50.0	45.7		ug/L		91	70 - 125	8	20
sec-Butylbenzene	<0.40		50.0	47.6		ug/L		95	70 - 123	8	20
Styrene	<0.39		50.0	49.0		ug/L		98	70 - 120	4	20
tert-Butylbenzene	<0.40		50.0	46.0		ug/L		92	70 - 121	10	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	51.4		ug/L		103	70 - 125	5	20
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	42.0		ug/L		84	62 - 140	13	20
Tetrachloroethene	<0.37		50.0	50.7		ug/L		101	70 - 128	6	20

Eurofins Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

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

Lab Sample ID: 500-215109-40 MSD

Matrix: Water

Analysis Batch: 653128

Client Sample ID: JW-15B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Tetrahydrofuran	<1.9		100	86.9		ug/L		87	59 - 139	6	20
Toluene	<0.15		50.0	47.3		ug/L		95	70 - 125	6	20
trans-1,2-Dichloroethene	<0.35		50.0	48.8		ug/L		98	70 - 125	8	20
trans-1,3-Dichloropropene	<0.36		50.0	46.8		ug/L		94	62 - 128	7	20
1,2,3-Trichlorobenzene	<0.46		50.0	53.7		ug/L		107	51 - 145	2	20
1,2,4-Trichlorobenzene	<0.34		50.0	52.2		ug/L		104	57 - 137	2	20
1,1,1-Trichloroethane	<0.38		50.0	55.7		ug/L		111	70 - 125	4	20
1,1,2-Trichloroethane	<0.35		50.0	47.1		ug/L		94	71 - 130	8	20
Trichloroethene	<0.16		50.0	47.7		ug/L		95	70 - 125	7	20
Trichlorofluoromethane	<0.43		50.0	54.5		ug/L		109	55 - 128	12	20
1,2,3-Trichloropropane	<0.41		50.0	42.0		ug/L		84	50 - 133	19	20
1,2,4-Trimethylbenzene	<0.36		50.0	47.7		ug/L		95	70 - 123	8	20
1,3,5-Trimethylbenzene	<0.25		50.0	47.1		ug/L		94	70 - 123	10	20
Vinyl chloride	<0.20		50.0	43.7		ug/L		87	64 - 126	12	20
Xylenes, Total	<0.22		100	99.1		ug/L		99	70 - 125	5	20
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
<i>4-Bromofluorobenzene (Surr)</i>	91		72 - 124								
<i>Dibromofluoromethane (Surr)</i>	109		75 - 120								
<i>1,2-Dichloroethane-d4 (Surr)</i>	116		75 - 126								
<i>Toluene-d8 (Surr)</i>	99		75 - 120								

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-25D
Date Collected: 04/11/22 09:00
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 11:38	JDD	TAL CHI

Client Sample ID: P-25S
Date Collected: 04/11/22 09:15
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 12:24	JDD	TAL CHI

Client Sample ID: MW-22
Date Collected: 04/11/22 10:00
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 12:47	JDD	TAL CHI

Client Sample ID: P-18
Date Collected: 04/11/22 12:00
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 13:33	JDD	TAL CHI

Client Sample ID: MW-24
Date Collected: 04/11/22 12:20
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 13:56	JDD	TAL CHI

Client Sample ID: Ogburn Wellhouse
Date Collected: 04/11/22 13:00
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 14:19	JDD	TAL CHI

Client Sample ID: MW-8
Date Collected: 04/11/22 12:45
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 14:42	JDD	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-7
Date Collected: 04/11/22 13:10
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 15:05	JDD	TAL CHI

Client Sample ID: MW-13
Date Collected: 04/11/22 12:00
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 15:28	JDD	TAL CHI

Client Sample ID: P-4
Date Collected: 04/11/22 13:40
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 15:51	JDD	TAL CHI

Client Sample ID: MW-3
Date Collected: 04/11/22 13:45
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 16:14	JDD	TAL CHI

Client Sample ID: Albright
Date Collected: 04/11/22 14:30
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 16:37	JDD	TAL CHI

Client Sample ID: MW-31
Date Collected: 04/11/22 14:40
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 17:00	JDD	TAL CHI

Client Sample ID: P-30
Date Collected: 04/11/22 14:40
Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 17:23	JDD	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-9

Date Collected: 04/11/22 15:45

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 17:47	JDD	TAL CHI

Client Sample ID: P-10

Date Collected: 04/11/22 15:30

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 18:09	JDD	TAL CHI

Client Sample ID: MW-28

Date Collected: 04/12/22 09:15

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 18:32	JDD	TAL CHI

Client Sample ID: MW-21

Date Collected: 04/12/22 08:45

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 18:55	JDD	TAL CHI

Client Sample ID: Hicks

Date Collected: 04/12/22 10:30

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 19:18	JDD	TAL CHI

Client Sample ID: MW-11

Date Collected: 04/12/22 11:00

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652684	04/21/22 19:42	JDD	TAL CHI

Client Sample ID: MW-2

Date Collected: 04/12/22 10:15

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 11:17	PSP	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: 843 Polen

Date Collected: 04/12/22 11:30

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 11:40	PSP	TAL CHI

Client Sample ID: MW-16

Date Collected: 04/12/22 10:00

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-23

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 12:03	PSP	TAL CHI

Client Sample ID: Willbur

Date Collected: 04/12/22 11:40

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 12:25	PSP	TAL CHI

Client Sample ID: P-6

Date Collected: 04/11/22 10:30

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 12:48	PSP	TAL CHI

Client Sample ID: P-20

Date Collected: 04/11/22 11:00

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 13:11	PSP	TAL CHI

Client Sample ID: P-19

Date Collected: 04/11/22 11:30

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 13:34	PSP	TAL CHI

Client Sample ID: P-23

Date Collected: 04/11/22 11:45

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-28

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 13:57	PSP	TAL CHI

Eurofins Chicago

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: MW-17

Date Collected: 04/11/22 12:00

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-29

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 14:20	PSP	TAL CHI

Client Sample ID: MW-29

Date Collected: 04/11/22 15:00

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 15:05	PSP	TAL CHI

Client Sample ID: MW-1

Date Collected: 04/11/22 08:30

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-31

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 15:28	PSP	TAL CHI

Client Sample ID: MW-26

Date Collected: 04/12/22 09:45

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-32

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 15:51	PSP	TAL CHI

Client Sample ID: P-27

Date Collected: 04/12/22 09:40

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-33

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 16:14	PSP	TAL CHI

Client Sample ID: MW-33

Date Collected: 04/12/22 16:15

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-34

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 16:37	PSP	TAL CHI

Client Sample ID: P-32

Date Collected: 04/12/22 16:25

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-35

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 17:00	PSP	TAL CHI

Eurofins Chicago

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-18B

Date Collected: 04/12/22 16:00

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-36

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 17:23	PSP	TAL CHI

Client Sample ID: JW-16

Date Collected: 04/12/22 10:00

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-37

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 17:46	PSP	TAL CHI

Client Sample ID: JW-18A

Date Collected: 04/12/22 15:30

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-38

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 18:09	PSP	TAL CHI

Client Sample ID: JW-15C

Date Collected: 04/12/22 15:10

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-39

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	652933	04/22/22 18:31	PSP	TAL CHI

Client Sample ID: JW-15B

Date Collected: 04/12/22 15:00

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	653128	04/24/22 16:30	PMF	TAL CHI

Client Sample ID: JW-15A

Date Collected: 04/12/22 14:50

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-41

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	653128	04/24/22 16:53	PMF	TAL CHI

Client Sample ID: JW-14

Date Collected: 04/12/22 14:30

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-42

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	653128	04/24/22 17:16	PMF	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: JW-17A

Date Collected: 04/12/22 14:45

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-43

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	653128	04/24/22 17:39	PMF	TAL CHI

Client Sample ID: JW-17B

Date Collected: 04/12/22 14:40

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-44

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	653128	04/24/22 18:02	PMF	TAL CHI

Client Sample ID: JW-13

Date Collected: 04/12/22 14:00

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	653128	04/24/22 18:24	PMF	TAL CHI

Client Sample ID: P-15

Date Collected: 04/12/22 13:00

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-46

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	653128	04/24/22 18:47	PMF	TAL CHI

Client Sample ID: 903-Raw 87th Ave

Date Collected: 04/12/22 12:10

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-47

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	653128	04/24/22 19:10	PMF	TAL CHI

Client Sample ID: 904-Raw 87th Ave

Date Collected: 04/12/22 12:20

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-48

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	653128	04/24/22 19:33	PMF	TAL CHI

Client Sample ID: JW-11

Date Collected: 04/12/22 13:30

Date Received: 04/14/22 10:20

Lab Sample ID: 500-215109-49

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	653128	04/24/22 19:56	PMF	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Client Sample ID: P-14

Lab Sample ID: 500-215109-50

Date Collected: 04/12/22 11:50

Matrix: Water

Date Received: 04/14/22 10:20

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	653128	04/24/22 20:19	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren TCE Investigation

Job ID: 500-215109-1

Laboratory: Eurofins Chicago

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


Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-22

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

Address _____

Regulatory Program: DW NPDES RCRA Other

TAL-8210

Client Contact		Project Manager <u>Mitch Evenson</u>		Site Contact		Date		COC No	
Company Name <u>Cedar Corp</u>		Tel/Email <u>Anna Beckman</u>		Lab Contact		Carrier		_____ of _____ COCs	
Address <u>604 Wilson Ave</u>		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS/MSD (Y/N) <u>8000 VOCs</u>		 500-215109 COC		Sampler _____	
City/State/Zip <u>Menomonee, WI 54751</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only Walk-in Client <input type="checkbox"/> Lab Sampling <input type="checkbox"/>	
Phone <u>715-235-9081</u>		TAT if different from Below _____							
Fax _____		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day							
Project Name <u>TOWN OF WAHREN TCE INVEST</u>		Site		Job / SDG No		500-215109		Sample Specific Notes	
P O # _____		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		# of Cont.	
Sample Identification						Matrix			
1	<u>P-25D</u>	<u>4/11/22</u>	<u>0900</u>	<u>GT</u>	<u>W</u>	<u>3</u>		<u>X</u>	
2	<u>P-25S</u>		<u>0915</u>						
3	<u>MW-22</u>		<u>1000</u>						
4	<u>P-18</u>		<u>1200</u>						
5	<u>MW-24</u>		<u>1220</u>						
6	<u>Ogburn Wellhouse</u>		<u>1300</u>						
7	<u>MW-8</u>		<u>1245</u>						
8	<u>MW-7</u>		<u>1310</u>						
9	<u>MW-13</u>		<u>1200</u>						
10	<u>P-4</u>		<u>1340</u>						
11	<u>MW-3</u>		<u>1345</u>						
12	<u>Allright</u>		<u>1430</u>						
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____									
Possible Hazard Identification Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments.									
<u>56→46, 5.3→43</u>									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____			
Relinquished by <u>Joelle Pitter</u>		Company <u>cedarcorp</u>		Date/Time <u>4/13/22</u>		Received by _____		Company _____ Date/Time _____	
Relinquished by _____		Company _____		Date/Time _____		Received by _____		Company _____ Date/Time _____	
Relinquished by _____		Company _____		Date/Time _____		Received in Laboratory by <u>Stephanie Hamander</u>		Company <u>EETA</u> Date/Time <u>4/11/22 1020</u>	

Address _____

Regulatory Program: DW NPDES RCRA Other

Client Contact		Project Manager <u>Mitch Evenson</u>		Site Contact		Date		COC No				
Company Name <u>Cedar Corp</u>		Tel/Email <u>& Anna Beckman</u>		Lab Contact		Carrier		_____ of _____ COCs				
Address <u>1004 Wilson Ave</u>		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day								Sampler		
City/State/Zip <u>Menomonee, WI 54751</u>										Sample Specific Notes		
Phone <u>715-236-9081</u>		Filtered Sample (Y/N) _____ Perform MS/MSD (Y/N) <u>8240 VOLS</u>								For Lab Use Only		
Fax _____										Walk-in Client		
Project Name <u>Town of Warren ICE Invest.</u>										Lab Sampling		
Site _____										Job / SDG No		
P O # _____										500-215109		
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.					Sample Specific Notes	
13	MW-31	4/11/22	1440	G	W	3	X					
14	P-30		1440									
15	MW-9		1545									
16	P-10		1530									
17	MW-28	4/12/22	0915									
18	MW-21	4/12/22	0845									
19	Hicks		1030									
20	MW-11		1100									
21	MW-2		1015									
22	843 Polen		1130									
23	MW-10		1000									
24	Wilbur		1140									
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other												
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample						<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown												
Special Instructions/QC Requirements & Comments												
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No			Cooler Temp (°C) Obs'd _____, Corr'd _____			Therm ID No _____			
Relinquished by <u>[Signature]</u>		Company <u>Cedar Corp</u>		Date/Time <u>4/13/22</u>		Received by		Company		Date/Time		
Relinquished by		Company		Date/Time		Received by		Company		Date/Time		
Relinquished by		Company		Date/Time		Received in Laboratory by <u>Stephanie Hemondus</u>		Company <u>EETA</u>		Date/Time <u>4/14/22 1020</u>		

Chain of Custody Record

555580



Environment Testing
TestAmerica

Address _____

Regulatory Program: DW NPDES RCRA Other

TAL-8210

Client Contact			Project Manager <i>Mitch Evenson & Anna Beckman</i>			Site Contact			Date			COC No					
Company Name <i>Cedar Corp</i>			Tel/Email <i>Anna Beckman</i>			Lab Contact			Carrier			_____ of _____ COCs					
Address <i>1204 Wilson Ave</i>			Analysis Turnaround Time									Sampler For Lab Use Only. Walk-in Client <input type="checkbox"/> Lab Sampling <input type="checkbox"/> Job / SDG No <i>500-215109</i>					
City/State/Zip <i>Menomonie, WI 54751</i>			<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____														
Phone <i>715-235-9081</i>			<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day														
Fax _____																	
Project Name <i>Town of Warren TCE Invest.</i>			Sample Type (C=Comp, G=Grab)			Matrix			# of Cont.			Filtered Sample (Y/N) Perform MS / MSD (Y/N) <i>82100 VOCs</i>			Sample Specific Notes		
Site _____																	
P O # _____																	
Sample Identification			Sample Date	Sample Time													
<i>25</i>	<i>P-1e</i>		<i>4/11/22</i>	<i>1030</i>	<i>G</i>	<i>W</i>	<i>3</i>										
<i>26</i>	<i>P-20</i>			<i>1100</i>													
<i>27</i>	<i>P-19</i>			<i>1130</i>													
<i>28</i>	<i>P-23</i>			<i>1145</i>													
<i>29</i>	<i>MW-17</i>			<i>1200</i>													
<i>30</i>	<i>MW-29</i>			<i>1500</i>													
<i>31</i>	<i>MW-1</i>			<i>0830</i>													
<i>32</i>	<i>MW-21e</i>		<i>4/12/22</i>	<i>0945</i>													
<i>33</i>	<i>P-27</i>			<i>0940</i>													
<i>34</i>	<i>MW-33</i>			<i>1015</i>													
<i>35</i>	<i>P-32</i>			<i>1025</i>													
<i>36</i>	<i>JW-10B</i>			<i>1000</i>													
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other																	
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample <input type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months							
Special Instructions/QC Requirements & Comments:																	
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No			Cooler Temp (°C) Obs'd _____ Corr'd _____			Therm ID No _____								
Relinquished by <i>Stephanie Hemondy</i>			Company <i>Cedar Corp</i>			Date/Time <i>4/13/22</i>			Received by _____			Company _____					
Relinquished by _____			Company _____			Date/Time _____			Received by _____			Company _____					
Relinquished by _____			Company _____			Date/Time _____			Received in Laboratory by <i>Stephanie Hemondy</i>			Company <i>EE7A</i>					
												Date/Time <i>4/19/22 1020</i>					

Chain of Custody Record

555577



Environment Testing
TestAmerica

Address _____

Regulatory Program: DW NPDES RCRA Other

TAL-8210

Client Contact		Project Manager <u>Mitch Evenson & Anna Beckerman</u>		Site Contact		Date		COC No		
Company Name <u>Cedar Corp</u>		Tel/Email <u>Anna Beckerman</u>		Lab Contact		Carrier		_____ of _____ COCs		
Address <u>604 Wilson Ave</u>		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS / MSD (Y/N) <u>BALOO VOCs</u>				Sampler For Lab Use Only Walk-in Client Lab Sampling Job / SDG No <u>500-915109</u>		
City/State/Zip <u>Menomonee WI 54751</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS								
Phone <u>715-235-9081</u>		TAT if different from Below _____								
Fax		<input type="checkbox"/> 2 weeks								
Project Name		<input type="checkbox"/> 1 week								
Site		<input type="checkbox"/> 2 days								
P O #		<input type="checkbox"/> 1 day								
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp G=Grab)	Matrix	# of Cont.	Sample Specific Notes			
37	JW-10	4/12/22	1000	G	W	3	X			
38	JW-18A		1530							
39	JW-15C		1510							
40	JW-15B		1500							
41	JW-15A		1450							
42	JW-1A		1430							
43	JW-17A		1445							
44	JW-17B		1440							
45	JW-13		1400							
46	P-15		1300							
47	903 903 RD - Raw-87th Ave		1210							
48	904 904 RD - Raw-87th Ave		1220							
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other										
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
Special Instructions/QC Requirements & Comments:										
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____				
Relinquished by <u>[Signature]</u>		Company <u>Cedar Corp</u>		Date/Time <u>4/13/22</u>		Received by		Company		
Relinquished by		Company		Date/Time		Received by		Company		
Relinquished by		Company		Date/Time		Received in Laboratory by <u>Stephanie Hernandez</u>		Company <u>EETA</u> Date/Time <u>4/14/22 1020</u>		

Chain of Custody Record

555578



Environment Testing
TestAmerica

Address _____

Regulatory Program: DW NPDES RCRA Other

TAL-8210

Client Contact		Project Manager Mitch Evenson		Site Contact		Date		COC No							
Company Name Cedar Corp		Tel/Email Anna Beduman		Lab Contact		Carrier		_____ of _____ COCs							
Address 1004 Wilson Ave		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day								Sampler					
City/State/Zip Menomonie, WI 54751										For Lab Use Only:					
Phone 715-235-9081										Walk-in Client					
Fax										Lab Sampling					
Project Name Town of Warren ICE Invest.										Job / SDG No					
Site		500-215109		Sample Specific Notes											
P O #															
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)							Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)		
49 JW-11	4/12/22	1330	G							W	3	X			
50 P-14	4/12/22	1150	G							W	3				
51 Tmp Blank											1				
4/14/22															
JH															
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample						<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months									
<input type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown															
Special Instructions/QC Requirements & Comments:															
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____									
Relinquished by <i>[Signature]</i>		Company Cedar Corp		Date/Time 4/13/22		Received by		Company							
Relinquished by		Company		Date/Time		Received by		Company							
Relinquished by		Company		Date/Time		Received in Laboratory by Stephanie Hernandez		Company 4/14/22 1020 EETA							



Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-215109-1

Login Number: 215109

List Source: Eurofins Chicago

List Number: 1

Creator: Hernandez, Stephanie

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.6,4.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	NO TB RECEIVED
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-187022-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
9/1/2020 11:47:45 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	21
QC Association	22
Surrogate Summary	23
QC Sample Results	24
Chronicle	40
Certification Summary	41
Chain of Custody	42
Receipt Checklists	44

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Job ID: 500-187022-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

**Job Narrative
500-187022-1**

Comments

No additional comments.

Receipt

The samples were received on 8/28/2020 10:10 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.9° C.

Receipt Exceptions

Received 1 VOA vial for sample 6 with headspace.

GC/MS VOA

Method 8260B: The matrix spike duplicate (MSD) for the following samples was analyzed outside the 12 hour tune window. No further action was taken, 873 Jane Cir. (500-187022-3)

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



Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 874 Wyldwood Ln.

Lab Sample ID: 500-187022-1

No Detections.

Client Sample ID: 860 Young Rd.

Lab Sample ID: 500-187022-2

No Detections.

Client Sample ID: 873 Jane Cir.

Lab Sample ID: 500-187022-3

No Detections.

Client Sample ID: 851 Polen Dr.

Lab Sample ID: 500-187022-4

No Detections.

Client Sample ID: 882 McDiarmid Dr.

Lab Sample ID: 500-187022-5

No Detections.

Client Sample ID: 877 Badlands Rd.

Lab Sample ID: 500-187022-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.86	J	1.0	0.34	ug/L	1		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 500-187022-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-187022-1	874 Wylidwood Ln.	Water	08/26/20 10:45	08/28/20 10:10	
500-187022-2	860 Young Rd.	Water	08/26/20 11:00	08/28/20 10:10	
500-187022-3	873 Jane Cir.	Water	08/26/20 11:15	08/28/20 10:10	
500-187022-4	851 Polen Dr.	Water	08/26/20 11:30	08/28/20 10:10	
500-187022-5	882 McDiarmid Dr.	Water	08/26/20 13:00	08/28/20 10:10	
500-187022-6	877 Badlands Rd.	Water	08/26/20 13:15	08/28/20 10:10	
500-187022-7	Trip Blank	Water	08/26/20 00:00	08/28/20 10:10	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 874 Wyldwood Ln.

Lab Sample ID: 500-187022-1

Date Collected: 08/26/20 10:45

Matrix: Water

Date Received: 08/28/20 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			08/30/20 20:07	1
Benzene	<0.15		0.50	0.15	ug/L			08/30/20 20:07	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/30/20 20:07	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/30/20 20:07	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/30/20 20:07	1
Bromoform	<0.48		1.0	0.48	ug/L			08/30/20 20:07	1
Bromomethane	<0.80		3.0	0.80	ug/L			08/30/20 20:07	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/30/20 20:07	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/30/20 20:07	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/30/20 20:07	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/30/20 20:07	1
Chloroform	<0.37		2.0	0.37	ug/L			08/30/20 20:07	1
Chloromethane	<0.32		1.0	0.32	ug/L			08/30/20 20:07	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/30/20 20:07	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/30/20 20:07	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			08/30/20 20:07	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/30/20 20:07	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/30/20 20:07	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/30/20 20:07	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/30/20 20:07	1
Dibromomethane	<0.27		1.0	0.27	ug/L			08/30/20 20:07	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/30/20 20:07	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/30/20 20:07	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/30/20 20:07	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/30/20 20:07	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/30/20 20:07	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/30/20 20:07	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			08/30/20 20:07	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/30/20 20:07	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/30/20 20:07	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/30/20 20:07	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/30/20 20:07	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/30/20 20:07	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/30/20 20:07	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 20:07	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/30/20 20:07	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/30/20 20:07	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/30/20 20:07	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/30/20 20:07	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/30/20 20:07	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 20:07	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/30/20 20:07	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/30/20 20:07	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 20:07	1
Styrene	<0.39		1.0	0.39	ug/L			08/30/20 20:07	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 20:07	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/30/20 20:07	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/30/20 20:07	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/30/20 20:07	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 874 Wyldwood Ln.

Lab Sample ID: 500-187022-1

Date Collected: 08/26/20 10:45

Matrix: Water

Date Received: 08/28/20 10:10

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/30/20 20:07	1
Toluene	<0.15		0.50	0.15	ug/L			08/30/20 20:07	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			08/30/20 20:07	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/30/20 20:07	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/30/20 20:07	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/30/20 20:07	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/30/20 20:07	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/30/20 20:07	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/30/20 20:07	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/30/20 20:07	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/30/20 20:07	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/30/20 20:07	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/30/20 20:07	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/30/20 20:07	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/30/20 20:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		72 - 124					08/30/20 20:07	1
Dibromofluoromethane (Surr)	100		75 - 120					08/30/20 20:07	1
1,2-Dichloroethane-d4 (Surr)	112		75 - 126					08/30/20 20:07	1
Toluene-d8 (Surr)	102		75 - 120					08/30/20 20:07	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 860 Young Rd.

Lab Sample ID: 500-187022-2

Date Collected: 08/26/20 11:00

Matrix: Water

Date Received: 08/28/20 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			08/30/20 20:33	1
Benzene	<0.15		0.50	0.15	ug/L			08/30/20 20:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/30/20 20:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/30/20 20:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/30/20 20:33	1
Bromoform	<0.48		1.0	0.48	ug/L			08/30/20 20:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			08/30/20 20:33	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/30/20 20:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/30/20 20:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/30/20 20:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/30/20 20:33	1
Chloroform	<0.37		2.0	0.37	ug/L			08/30/20 20:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			08/30/20 20:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/30/20 20:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/30/20 20:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			08/30/20 20:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/30/20 20:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/30/20 20:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/30/20 20:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/30/20 20:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			08/30/20 20:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/30/20 20:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/30/20 20:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/30/20 20:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/30/20 20:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/30/20 20:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/30/20 20:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			08/30/20 20:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/30/20 20:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/30/20 20:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/30/20 20:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/30/20 20:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/30/20 20:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/30/20 20:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 20:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/30/20 20:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/30/20 20:33	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/30/20 20:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/30/20 20:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/30/20 20:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 20:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/30/20 20:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/30/20 20:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 20:33	1
Styrene	<0.39		1.0	0.39	ug/L			08/30/20 20:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 20:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/30/20 20:33	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/30/20 20:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/30/20 20:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 860 Young Rd.

Lab Sample ID: 500-187022-2

Date Collected: 08/26/20 11:00

Matrix: Water

Date Received: 08/28/20 10:10

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/30/20 20:33	1
Toluene	<0.15		0.50	0.15	ug/L			08/30/20 20:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			08/30/20 20:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/30/20 20:33	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/30/20 20:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/30/20 20:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/30/20 20:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/30/20 20:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/30/20 20:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/30/20 20:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/30/20 20:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/30/20 20:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/30/20 20:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/30/20 20:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/30/20 20:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		72 - 124		08/30/20 20:33	1
Dibromofluoromethane (Surr)	98		75 - 120		08/30/20 20:33	1
1,2-Dichloroethane-d4 (Surr)	105		75 - 126		08/30/20 20:33	1
Toluene-d8 (Surr)	104		75 - 120		08/30/20 20:33	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 873 Jane Cir.

Lab Sample ID: 500-187022-3

Date Collected: 08/26/20 11:15

Matrix: Water

Date Received: 08/28/20 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			08/30/20 21:00	1
Benzene	<0.15		0.50	0.15	ug/L			08/30/20 21:00	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/30/20 21:00	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/30/20 21:00	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/30/20 21:00	1
Bromoform	<0.48		1.0	0.48	ug/L			08/30/20 21:00	1
Bromomethane	<0.80		3.0	0.80	ug/L			08/30/20 21:00	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/30/20 21:00	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/30/20 21:00	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/30/20 21:00	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/30/20 21:00	1
Chloroform	<0.37		2.0	0.37	ug/L			08/30/20 21:00	1
Chloromethane	<0.32		1.0	0.32	ug/L			08/30/20 21:00	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/30/20 21:00	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/30/20 21:00	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			08/30/20 21:00	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/30/20 21:00	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/30/20 21:00	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/30/20 21:00	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/30/20 21:00	1
Dibromomethane	<0.27		1.0	0.27	ug/L			08/30/20 21:00	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/30/20 21:00	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/30/20 21:00	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/30/20 21:00	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/30/20 21:00	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/30/20 21:00	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/30/20 21:00	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			08/30/20 21:00	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/30/20 21:00	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/30/20 21:00	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/30/20 21:00	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/30/20 21:00	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/30/20 21:00	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/30/20 21:00	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 21:00	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/30/20 21:00	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/30/20 21:00	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/30/20 21:00	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/30/20 21:00	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/30/20 21:00	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 21:00	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/30/20 21:00	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/30/20 21:00	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 21:00	1
Styrene	<0.39		1.0	0.39	ug/L			08/30/20 21:00	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 21:00	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/30/20 21:00	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/30/20 21:00	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/30/20 21:00	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 873 Jane Cir.

Lab Sample ID: 500-187022-3

Date Collected: 08/26/20 11:15

Matrix: Water

Date Received: 08/28/20 10:10

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/30/20 21:00	1
Toluene	<0.15		0.50	0.15	ug/L			08/30/20 21:00	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			08/30/20 21:00	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/30/20 21:00	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/30/20 21:00	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/30/20 21:00	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/30/20 21:00	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/30/20 21:00	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/30/20 21:00	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/30/20 21:00	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/30/20 21:00	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/30/20 21:00	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/30/20 21:00	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/30/20 21:00	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/30/20 21:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		72 - 124		08/30/20 21:00	1
Dibromofluoromethane (Surr)	101		75 - 120		08/30/20 21:00	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		08/30/20 21:00	1
Toluene-d8 (Surr)	103		75 - 120		08/30/20 21:00	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 851 Polen Dr.

Lab Sample ID: 500-187022-4

Date Collected: 08/26/20 11:30

Matrix: Water

Date Received: 08/28/20 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			08/31/20 12:06	1
Benzene	<0.15		0.50	0.15	ug/L			08/31/20 12:06	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/31/20 12:06	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/31/20 12:06	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/31/20 12:06	1
Bromoform	<0.48		1.0	0.48	ug/L			08/31/20 12:06	1
Bromomethane	<0.80		3.0	0.80	ug/L			08/31/20 12:06	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/31/20 12:06	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/31/20 12:06	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/31/20 12:06	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/31/20 12:06	1
Chloroform	<0.37		2.0	0.37	ug/L			08/31/20 12:06	1
Chloromethane	<0.32		1.0	0.32	ug/L			08/31/20 12:06	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/31/20 12:06	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/31/20 12:06	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			08/31/20 12:06	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/31/20 12:06	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/31/20 12:06	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/31/20 12:06	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/31/20 12:06	1
Dibromomethane	<0.27		1.0	0.27	ug/L			08/31/20 12:06	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/31/20 12:06	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/31/20 12:06	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/31/20 12:06	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/31/20 12:06	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/31/20 12:06	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/31/20 12:06	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			08/31/20 12:06	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/31/20 12:06	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/31/20 12:06	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/31/20 12:06	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/31/20 12:06	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/31/20 12:06	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/31/20 12:06	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/31/20 12:06	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/31/20 12:06	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/31/20 12:06	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/31/20 12:06	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/31/20 12:06	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/31/20 12:06	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/31/20 12:06	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/31/20 12:06	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/31/20 12:06	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/31/20 12:06	1
Styrene	<0.39		1.0	0.39	ug/L			08/31/20 12:06	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/31/20 12:06	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/31/20 12:06	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/31/20 12:06	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/31/20 12:06	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 851 Polen Dr.

Lab Sample ID: 500-187022-4

Date Collected: 08/26/20 11:30

Matrix: Water

Date Received: 08/28/20 10:10

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/31/20 12:06	1
Toluene	<0.15		0.50	0.15	ug/L			08/31/20 12:06	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			08/31/20 12:06	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/31/20 12:06	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/31/20 12:06	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/31/20 12:06	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/31/20 12:06	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/31/20 12:06	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/31/20 12:06	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/31/20 12:06	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/31/20 12:06	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/31/20 12:06	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/31/20 12:06	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/31/20 12:06	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/31/20 12:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		08/31/20 12:06	1
Dibromofluoromethane (Surr)	92		75 - 120		08/31/20 12:06	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		08/31/20 12:06	1
Toluene-d8 (Surr)	94		75 - 120		08/31/20 12:06	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 882 McDiarmid Dr.

Lab Sample ID: 500-187022-5

Date Collected: 08/26/20 13:00

Matrix: Water

Date Received: 08/28/20 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			08/31/20 12:33	1
Benzene	<0.15		0.50	0.15	ug/L			08/31/20 12:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/31/20 12:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/31/20 12:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/31/20 12:33	1
Bromoform	<0.48		1.0	0.48	ug/L			08/31/20 12:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			08/31/20 12:33	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/31/20 12:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/31/20 12:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/31/20 12:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/31/20 12:33	1
Chloroform	<0.37		2.0	0.37	ug/L			08/31/20 12:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			08/31/20 12:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/31/20 12:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/31/20 12:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			08/31/20 12:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/31/20 12:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/31/20 12:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/31/20 12:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/31/20 12:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			08/31/20 12:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/31/20 12:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/31/20 12:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/31/20 12:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/31/20 12:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/31/20 12:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/31/20 12:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			08/31/20 12:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/31/20 12:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/31/20 12:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/31/20 12:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/31/20 12:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/31/20 12:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/31/20 12:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/31/20 12:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/31/20 12:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/31/20 12:33	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/31/20 12:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/31/20 12:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/31/20 12:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/31/20 12:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/31/20 12:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/31/20 12:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/31/20 12:33	1
Styrene	<0.39		1.0	0.39	ug/L			08/31/20 12:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/31/20 12:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/31/20 12:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/31/20 12:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/31/20 12:33	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 882 McDiarmid Dr.

Lab Sample ID: 500-187022-5

Date Collected: 08/26/20 13:00

Matrix: Water

Date Received: 08/28/20 10:10

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/31/20 12:33	1
Toluene	<0.15		0.50	0.15	ug/L			08/31/20 12:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			08/31/20 12:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/31/20 12:33	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/31/20 12:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/31/20 12:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/31/20 12:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/31/20 12:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/31/20 12:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/31/20 12:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/31/20 12:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/31/20 12:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/31/20 12:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/31/20 12:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/31/20 12:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124					08/31/20 12:33	1
Dibromofluoromethane (Surr)	91		75 - 120					08/31/20 12:33	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 126					08/31/20 12:33	1
Toluene-d8 (Surr)	93		75 - 120					08/31/20 12:33	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 877 Badlands Rd.

Lab Sample ID: 500-187022-6

Date Collected: 08/26/20 13:15

Matrix: Water

Date Received: 08/28/20 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			08/30/20 16:48	1
Benzene	<0.15		0.50	0.15	ug/L			08/30/20 16:48	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/30/20 16:48	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/30/20 16:48	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/30/20 16:48	1
Bromoform	<0.48		1.0	0.48	ug/L			08/30/20 16:48	1
Bromomethane	<0.80		3.0	0.80	ug/L			08/30/20 16:48	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/30/20 16:48	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/30/20 16:48	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/30/20 16:48	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/30/20 16:48	1
Chloroform	<0.37		2.0	0.37	ug/L			08/30/20 16:48	1
Chloromethane	<0.32		1.0	0.32	ug/L			08/30/20 16:48	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/30/20 16:48	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/30/20 16:48	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			08/30/20 16:48	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/30/20 16:48	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/30/20 16:48	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/30/20 16:48	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/30/20 16:48	1
Dibromomethane	<0.27		1.0	0.27	ug/L			08/30/20 16:48	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/30/20 16:48	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/30/20 16:48	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/30/20 16:48	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/30/20 16:48	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/30/20 16:48	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/30/20 16:48	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			08/30/20 16:48	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/30/20 16:48	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/30/20 16:48	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/30/20 16:48	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/30/20 16:48	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/30/20 16:48	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/30/20 16:48	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 16:48	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/30/20 16:48	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/30/20 16:48	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/30/20 16:48	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/30/20 16:48	1
Naphthalene	0.86	J	1.0	0.34	ug/L			08/30/20 16:48	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 16:48	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/30/20 16:48	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/30/20 16:48	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 16:48	1
Styrene	<0.39		1.0	0.39	ug/L			08/30/20 16:48	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 16:48	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/30/20 16:48	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/30/20 16:48	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/30/20 16:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 877 Badlands Rd.

Lab Sample ID: 500-187022-6

Date Collected: 08/26/20 13:15

Matrix: Water

Date Received: 08/28/20 10:10

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/30/20 16:48	1
Toluene	<0.15		0.50	0.15	ug/L			08/30/20 16:48	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			08/30/20 16:48	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/30/20 16:48	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/30/20 16:48	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/30/20 16:48	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/30/20 16:48	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/30/20 16:48	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/30/20 16:48	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/30/20 16:48	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/30/20 16:48	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/30/20 16:48	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/30/20 16:48	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/30/20 16:48	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/30/20 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		08/30/20 16:48	1
Dibromofluoromethane (Surr)	108		75 - 120		08/30/20 16:48	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		08/30/20 16:48	1
Toluene-d8 (Surr)	100		75 - 120		08/30/20 16:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-187022-7

Date Collected: 08/26/20 00:00

Matrix: Water

Date Received: 08/28/20 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			08/30/20 13:53	1
Benzene	<0.15		0.50	0.15	ug/L			08/30/20 13:53	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/30/20 13:53	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/30/20 13:53	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/30/20 13:53	1
Bromoform	<0.48		1.0	0.48	ug/L			08/30/20 13:53	1
Bromomethane	<0.80		3.0	0.80	ug/L			08/30/20 13:53	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/30/20 13:53	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/30/20 13:53	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/30/20 13:53	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/30/20 13:53	1
Chloroform	<0.37		2.0	0.37	ug/L			08/30/20 13:53	1
Chloromethane	<0.32		1.0	0.32	ug/L			08/30/20 13:53	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/30/20 13:53	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/30/20 13:53	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			08/30/20 13:53	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/30/20 13:53	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/30/20 13:53	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/30/20 13:53	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/30/20 13:53	1
Dibromomethane	<0.27		1.0	0.27	ug/L			08/30/20 13:53	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/30/20 13:53	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/30/20 13:53	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/30/20 13:53	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/30/20 13:53	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/30/20 13:53	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/30/20 13:53	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			08/30/20 13:53	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/30/20 13:53	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/30/20 13:53	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/30/20 13:53	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/30/20 13:53	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/30/20 13:53	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/30/20 13:53	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 13:53	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/30/20 13:53	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/30/20 13:53	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/30/20 13:53	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/30/20 13:53	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/30/20 13:53	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 13:53	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/30/20 13:53	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/30/20 13:53	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 13:53	1
Styrene	<0.39		1.0	0.39	ug/L			08/30/20 13:53	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 13:53	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/30/20 13:53	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/30/20 13:53	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/30/20 13:53	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-187022-7

Date Collected: 08/26/20 00:00

Matrix: Water

Date Received: 08/28/20 10:10

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/30/20 13:53	1
Toluene	<0.15		0.50	0.15	ug/L			08/30/20 13:53	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			08/30/20 13:53	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/30/20 13:53	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/30/20 13:53	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/30/20 13:53	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/30/20 13:53	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/30/20 13:53	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/30/20 13:53	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/30/20 13:53	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/30/20 13:53	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/30/20 13:53	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/30/20 13:53	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/30/20 13:53	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/30/20 13:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		72 - 124		08/30/20 13:53	1
Dibromofluoromethane (Surr)	98		75 - 120		08/30/20 13:53	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		08/30/20 13:53	1
Toluene-d8 (Surr)	103		75 - 120		08/30/20 13:53	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

GC/MS VOA

Analysis Batch: 559166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-187022-1	874 Wyldwood Ln.	Total/NA	Water	8260B	
500-187022-2	860 Young Rd.	Total/NA	Water	8260B	
500-187022-3	873 Jane Cir.	Total/NA	Water	8260B	
500-187022-7	Trip Blank	Total/NA	Water	8260B	
MB 500-559166/6	Method Blank	Total/NA	Water	8260B	
LCS 500-559166/4	Lab Control Sample	Total/NA	Water	8260B	
500-187022-3 MS	873 Jane Cir.	Total/NA	Water	8260B	
500-187022-3 MSD	873 Jane Cir.	Total/NA	Water	8260B	

Analysis Batch: 559170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-187022-6	877 Badlands Rd.	Total/NA	Water	8260B	
MB 500-559170/6	Method Blank	Total/NA	Water	8260B	
LCS 500-559170/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 559217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-187022-4	851 Polen Dr.	Total/NA	Water	8260B	
500-187022-5	882 McDiarmid Dr.	Total/NA	Water	8260B	
MB 500-559217/6	Method Blank	Total/NA	Water	8260B	
LCS 500-559217/4	Lab Control Sample	Total/NA	Water	8260B	
500-187022-5 MS	882 McDiarmid Dr.	Total/NA	Water	8260B	
500-187022-5 MSD	882 McDiarmid Dr.	Total/NA	Water	8260B	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-187022-1	874 Wyldwood Ln.	110	100	112	102
500-187022-2	860 Young Rd.	108	98	105	104
500-187022-3	873 Jane Cir.	105	101	110	103
500-187022-3 MS	873 Jane Cir.	112	96	106	103
500-187022-3 MSD	873 Jane Cir.	110	99	102	105
500-187022-4	851 Polen Dr.	93	92	108	94
500-187022-5	882 McDiarmid Dr.	94	91	110	93
500-187022-5 MS	882 McDiarmid Dr.	94	98	113	92
500-187022-5 MSD	882 McDiarmid Dr.	93	98	115	91
500-187022-6	877 Badlands Rd.	93	108	113	100
500-187022-7	Trip Blank	109	98	110	103
LCS 500-559166/4	Lab Control Sample	111	98	108	102
LCS 500-559170/4	Lab Control Sample	96	109	109	103
LCS 500-559217/4	Lab Control Sample	93	97	111	95
MB 500-559166/6	Method Blank	107	100	111	102
MB 500-559170/6	Method Blank	94	117	119	100
MB 500-559217/6	Method Blank	96	91	112	92

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-559166/6
Matrix: Water
Analysis Batch: 559166

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<1.7		10	1.7	ug/L			08/30/20 12:33	1
Benzene	<0.15		0.50	0.15	ug/L			08/30/20 12:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/30/20 12:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/30/20 12:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/30/20 12:33	1
Bromoform	<0.48		1.0	0.48	ug/L			08/30/20 12:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			08/30/20 12:33	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/30/20 12:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/30/20 12:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/30/20 12:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/30/20 12:33	1
Chloroform	<0.37		2.0	0.37	ug/L			08/30/20 12:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			08/30/20 12:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/30/20 12:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/30/20 12:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			08/30/20 12:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/30/20 12:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/30/20 12:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/30/20 12:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/30/20 12:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			08/30/20 12:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/30/20 12:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/30/20 12:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/30/20 12:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/30/20 12:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/30/20 12:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/30/20 12:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			08/30/20 12:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/30/20 12:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/30/20 12:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/30/20 12:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/30/20 12:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/30/20 12:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/30/20 12:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 12:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/30/20 12:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/30/20 12:33	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/30/20 12:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/30/20 12:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/30/20 12:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 12:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/30/20 12:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/30/20 12:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 12:33	1
Styrene	<0.39		1.0	0.39	ug/L			08/30/20 12:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 12:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/30/20 12:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/30/20 12:33	1

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: MB 500-559166/6
Matrix: Water
Analysis Batch: 559166

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/30/20 12:33	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/30/20 12:33	1
Toluene	<0.15		0.50	0.15	ug/L			08/30/20 12:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			08/30/20 12:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/30/20 12:33	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/30/20 12:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/30/20 12:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/30/20 12:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/30/20 12:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/30/20 12:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/30/20 12:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/30/20 12:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/30/20 12:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/30/20 12:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/30/20 12:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/30/20 12:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		72 - 124		08/30/20 12:33	1
Dibromofluoromethane (Surr)	100		75 - 120		08/30/20 12:33	1
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		08/30/20 12:33	1
Toluene-d8 (Surr)	102		75 - 120		08/30/20 12:33	1

Lab Sample ID: LCS 500-559166/4
Matrix: Water
Analysis Batch: 559166

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	46.0		ug/L		92	40 - 143
Benzene	50.0	44.7		ug/L		89	70 - 120
Bromobenzene	50.0	48.8		ug/L		98	70 - 122
Bromochloromethane	50.0	46.4		ug/L		93	65 - 122
Bromodichloromethane	50.0	46.8		ug/L		94	69 - 120
Bromoform	50.0	49.7		ug/L		99	56 - 132
Bromomethane	50.0	32.1		ug/L		64	40 - 152
Carbon disulfide	50.0	39.8		ug/L		80	66 - 120
Carbon tetrachloride	50.0	44.6		ug/L		89	59 - 133
Chlorobenzene	50.0	48.5		ug/L		97	70 - 120
Chloroethane	50.0	34.2		ug/L		68	48 - 136
Chloroform	50.0	43.4		ug/L		87	70 - 120
Chloromethane	50.0	35.4		ug/L		71	56 - 152
2-Chlorotoluene	50.0	47.5		ug/L		95	70 - 125
4-Chlorotoluene	50.0	48.5		ug/L		97	68 - 124
cis-1,2-Dichloroethene	50.0	44.4		ug/L		89	70 - 125
cis-1,3-Dichloropropene	50.0	46.9		ug/L		94	64 - 127
Dibromochloromethane	50.0	47.8		ug/L		96	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	49.7		ug/L		99	56 - 123
1,2-Dibromoethane	50.0	50.1		ug/L		100	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: LCS 500-559166/4

Matrix: Water

Analysis Batch: 559166

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromomethane	50.0	47.1		ug/L		94	70 - 120
1,2-Dichlorobenzene	50.0	46.1		ug/L		92	70 - 125
1,3-Dichlorobenzene	50.0	47.8		ug/L		96	70 - 125
1,4-Dichlorobenzene	50.0	47.4		ug/L		95	70 - 120
Dichlorodifluoromethane	50.0	45.3		ug/L		91	40 - 159
1,1-Dichloroethane	50.0	42.6		ug/L		85	70 - 125
1,2-Dichloroethane	50.0	50.3		ug/L		101	68 - 127
1,1-Dichloroethene	50.0	42.5		ug/L		85	67 - 122
1,2-Dichloropropane	50.0	47.7		ug/L		95	67 - 130
1,3-Dichloropropane	50.0	48.6		ug/L		97	62 - 136
2,2-Dichloropropane	50.0	46.3		ug/L		93	58 - 139
1,1-Dichloropropene	50.0	46.7		ug/L		93	70 - 121
Ethylbenzene	50.0	47.0		ug/L		94	70 - 123
Hexachlorobutadiene	50.0	41.9		ug/L		84	51 - 150
Isopropylbenzene	50.0	48.5		ug/L		97	70 - 126
Methylene Chloride	50.0	43.3		ug/L		87	69 - 125
Methyl ethyl ketone (MEK)	50.0	50.6		ug/L		101	46 - 144
Methyl tert-butyl ether	50.0	42.7		ug/L		85	55 - 123
Naphthalene	50.0	46.1		ug/L		92	53 - 144
n-Butylbenzene	50.0	46.8		ug/L		94	68 - 125
N-Propylbenzene	50.0	48.4		ug/L		97	69 - 127
p-Isopropyltoluene	50.0	48.2		ug/L		96	70 - 125
sec-Butylbenzene	50.0	47.8		ug/L		96	70 - 123
Styrene	50.0	49.6		ug/L		99	70 - 120
tert-Butylbenzene	50.0	49.1		ug/L		98	70 - 121
1,1,1,2-Tetrachloroethane	50.0	43.0		ug/L		86	70 - 125
1,1,2,2-Tetrachloroethane	50.0	46.6		ug/L		93	62 - 140
Tetrachloroethene	50.0	48.9		ug/L		98	70 - 128
Tetrahydrofuran	100	83.5		ug/L		83	59 - 139
Toluene	50.0	47.5		ug/L		95	70 - 125
trans-1,2-Dichloroethene	50.0	43.5		ug/L		87	70 - 125
trans-1,3-Dichloropropene	50.0	49.4		ug/L		99	62 - 128
1,2,3-Trichlorobenzene	50.0	42.7		ug/L		85	51 - 145
1,2,4-Trichlorobenzene	50.0	43.4		ug/L		87	57 - 137
1,1,1-Trichloroethane	50.0	45.4		ug/L		91	70 - 125
1,1,2-Trichloroethane	50.0	49.4		ug/L		99	71 - 130
Trichloroethene	50.0	50.8		ug/L		102	70 - 125
Trichlorofluoromethane	50.0	38.5		ug/L		77	55 - 128
1,2,3-Trichloropropane	50.0	55.8		ug/L		112	50 - 133
1,2,4-Trimethylbenzene	50.0	47.4		ug/L		95	70 - 123
1,3,5-Trimethylbenzene	50.0	48.0		ug/L		96	70 - 123
Vinyl chloride	50.0	41.5		ug/L		83	64 - 126
Xylenes, Total	100	89.8		ug/L		90	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	111		72 - 124
Dibromofluoromethane (Surr)	98		75 - 120
1,2-Dichloroethane-d4 (Surr)	108		75 - 126

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: LCS 500-559166/4
Matrix: Water
Analysis Batch: 559166

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

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	102		75 - 120

Lab Sample ID: 500-187022-3 MS
Matrix: Water
Analysis Batch: 559166

Client Sample ID: 873 Jane Cir.
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Acetone	<1.7		50.0	40.0		ug/L		80	40 - 143
Benzene	<0.15		50.0	41.7		ug/L		83	70 - 120
Bromobenzene	<0.36		50.0	46.1		ug/L		92	70 - 122
Bromochloromethane	<0.43		50.0	41.5		ug/L		83	65 - 122
Bromodichloromethane	<0.37		50.0	43.4		ug/L		87	69 - 120
Bromoform	<0.48		50.0	44.5		ug/L		89	56 - 132
Bromomethane	<0.80		50.0	31.8		ug/L		64	40 - 152
Carbon disulfide	<0.45		50.0	36.0		ug/L		72	66 - 120
Carbon tetrachloride	<0.38		50.0	40.5		ug/L		81	59 - 133
Chlorobenzene	<0.39		50.0	45.1		ug/L		90	70 - 120
Chloroethane	<0.51		50.0	54.5		ug/L		109	48 - 136
Chloroform	<0.37		50.0	39.9		ug/L		80	70 - 120
Chloromethane	<0.32		50.0	33.4		ug/L		67	56 - 152
2-Chlorotoluene	<0.31		50.0	44.8		ug/L		90	70 - 125
4-Chlorotoluene	<0.35		50.0	45.5		ug/L		91	68 - 124
cis-1,2-Dichloroethene	<0.41		50.0	40.5		ug/L		81	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	42.2		ug/L		84	64 - 127
Dibromochloromethane	<0.49		50.0	43.8		ug/L		88	68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	43.8		ug/L		88	56 - 123
1,2-Dibromoethane	<0.39		50.0	45.8		ug/L		92	70 - 125
Dibromomethane	<0.27		50.0	42.7		ug/L		85	70 - 120
1,2-Dichlorobenzene	<0.33		50.0	42.5		ug/L		85	70 - 125
1,3-Dichlorobenzene	<0.40		50.0	44.4		ug/L		89	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	43.6		ug/L		87	70 - 120
Dichlorodifluoromethane	<0.67		50.0	40.8		ug/L		82	40 - 159
1,1-Dichloroethane	<0.41		50.0	39.2		ug/L		78	70 - 125
1,2-Dichloroethane	<0.39		50.0	46.5		ug/L		93	68 - 127
1,1-Dichloroethene	<0.39		50.0	38.1		ug/L		76	67 - 122
1,2-Dichloropropane	<0.43		50.0	44.0		ug/L		88	67 - 130
1,3-Dichloropropane	<0.36		50.0	45.1		ug/L		90	62 - 136
2,2-Dichloropropane	<0.44		50.0	40.8		ug/L		82	58 - 139
1,1-Dichloropropene	<0.30		50.0	42.6		ug/L		85	70 - 121
Ethylbenzene	<0.18		50.0	43.9		ug/L		88	70 - 123
Hexachlorobutadiene	<0.45		50.0	36.9		ug/L		74	51 - 150
Isopropylbenzene	<0.39		50.0	45.5		ug/L		91	70 - 126
Methylene Chloride	<1.6		50.0	38.9		ug/L		78	69 - 125
Methyl ethyl ketone (MEK)	<2.1		50.0	48.5		ug/L		97	46 - 144
Methyl tert-butyl ether	<0.39		50.0	37.6		ug/L		75	55 - 123
Naphthalene	<0.34		50.0	39.0		ug/L		78	53 - 144
n-Butylbenzene	<0.39		50.0	41.5		ug/L		83	68 - 125
N-Propylbenzene	<0.41		50.0	45.7		ug/L		91	69 - 127

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: 500-187022-3 MS

Matrix: Water

Analysis Batch: 559166

Client Sample ID: 873 Jane Cir.

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	<0.36		50.0	44.3		ug/L		89	70 - 125
sec-Butylbenzene	<0.40		50.0	44.7		ug/L		89	70 - 123
Styrene	<0.39		50.0	46.4		ug/L		93	70 - 120
tert-Butylbenzene	<0.40		50.0	45.8		ug/L		92	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	39.4		ug/L		79	70 - 125
1,1,1,2-Tetrachloroethane	<0.40		50.0	43.7		ug/L		87	62 - 140
Tetrachloroethene	<0.37		50.0	44.9		ug/L		90	70 - 128
Tetrahydrofuran	<1.9		100	73.7		ug/L		74	59 - 139
Toluene	<0.15		50.0	44.4		ug/L		89	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	39.6		ug/L		79	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	44.7		ug/L		89	62 - 128
1,2,3-Trichlorobenzene	<0.46		50.0	35.9		ug/L		72	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	36.5		ug/L		73	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	41.3		ug/L		83	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	46.1		ug/L		92	71 - 130
Trichloroethene	<0.16		50.0	46.2		ug/L		92	70 - 125
Trichlorofluoromethane	<0.43		50.0	36.7		ug/L		73	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	51.1		ug/L		102	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	43.9		ug/L		88	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	44.6		ug/L		89	70 - 123
Vinyl chloride	<0.20		50.0	38.9		ug/L		78	64 - 126
Xylenes, Total	<0.22		100	83.6		ug/L		84	70 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		72 - 124
Dibromofluoromethane (Surr)	96		75 - 120
1,2-Dichloroethane-d4 (Surr)	106		75 - 126
Toluene-d8 (Surr)	103		75 - 120

Lab Sample ID: 500-187022-3 MSD

Matrix: Water

Analysis Batch: 559166

Client Sample ID: 873 Jane Cir.

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	<1.7		50.0	36.0		ug/L		72	40 - 143	10	20
Benzene	<0.15		50.0	43.6		ug/L		87	70 - 120	4	20
Bromobenzene	<0.36		50.0	45.9		ug/L		92	70 - 122	0	20
Bromochloromethane	<0.43		50.0	43.5		ug/L		87	65 - 122	5	20
Bromodichloromethane	<0.37		50.0	43.9		ug/L		88	69 - 120	1	20
Bromoform	<0.48		50.0	41.7		ug/L		83	56 - 132	7	20
Bromomethane	<0.80		50.0	33.8		ug/L		68	40 - 152	6	20
Carbon disulfide	<0.45		50.0	39.9		ug/L		80	66 - 120	10	20
Carbon tetrachloride	<0.38		50.0	43.1		ug/L		86	59 - 133	6	20
Chlorobenzene	<0.39		50.0	46.2		ug/L		92	70 - 120	3	20
Chloroethane	<0.51		50.0	59.6		ug/L		119	48 - 136	9	20
Chloroform	<0.37		50.0	42.6		ug/L		85	70 - 120	6	20
Chloromethane	<0.32		50.0	36.0		ug/L		72	56 - 152	7	20
2-Chlorotoluene	<0.31		50.0	46.6		ug/L		93	70 - 125	4	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: 500-187022-3 MSD

Matrix: Water

Analysis Batch: 559166

Client Sample ID: 873 Jane Cir.

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chlorotoluene	<0.35		50.0	46.7		ug/L		93	68 - 124	3	20
cis-1,2-Dichloroethene	<0.41		50.0	43.8		ug/L		88	70 - 125	8	20
cis-1,3-Dichloropropene	<0.42		50.0	42.0		ug/L		84	64 - 127	0	20
Dibromochloromethane	<0.49		50.0	42.8		ug/L		86	68 - 125	2	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	40.8		ug/L		82	56 - 123	7	20
1,2-Dibromoethane	<0.39		50.0	43.2		ug/L		86	70 - 125	6	20
Dibromomethane	<0.27		50.0	41.5		ug/L		83	70 - 120	3	20
1,2-Dichlorobenzene	<0.33		50.0	44.5		ug/L		89	70 - 125	5	20
1,3-Dichlorobenzene	<0.40		50.0	45.4		ug/L		91	70 - 125	2	20
1,4-Dichlorobenzene	<0.36		50.0	45.0		ug/L		90	70 - 120	3	20
Dichlorodifluoromethane	<0.67		50.0	42.0		ug/L		84	40 - 159	3	20
1,1-Dichloroethane	<0.41		50.0	42.5		ug/L		85	70 - 125	8	20
1,2-Dichloroethane	<0.39		50.0	45.6		ug/L		91	68 - 127	2	20
1,1-Dichloroethene	<0.39		50.0	42.1		ug/L		84	67 - 122	10	20
1,2-Dichloropropane	<0.43		50.0	44.8		ug/L		90	67 - 130	2	20
1,3-Dichloropropane	<0.36		50.0	42.4		ug/L		85	62 - 136	6	20
2,2-Dichloropropane	<0.44		50.0	42.8		ug/L		86	58 - 139	5	20
1,1-Dichloropropene	<0.30		50.0	44.2		ug/L		88	70 - 121	4	20
Ethylbenzene	<0.18		50.0	45.2		ug/L		90	70 - 123	3	20
Hexachlorobutadiene	<0.45		50.0	38.7		ug/L		77	51 - 150	5	20
Isopropylbenzene	<0.39		50.0	47.4		ug/L		95	70 - 126	4	20
Methylene Chloride	<1.6		50.0	43.2		ug/L		86	69 - 125	10	20
Methyl ethyl ketone (MEK)	<2.1		50.0	38.5	F2	ug/L		77	46 - 144	23	20
Methyl tert-butyl ether	<0.39		50.0	39.7		ug/L		79	55 - 123	6	20
Naphthalene	<0.34		50.0	39.5		ug/L		79	53 - 144	1	20
n-Butylbenzene	<0.39		50.0	43.6		ug/L		87	68 - 125	5	20
N-Propylbenzene	<0.41		50.0	47.1		ug/L		94	69 - 127	3	20
p-Isopropyltoluene	<0.36		50.0	46.2		ug/L		92	70 - 125	4	20
sec-Butylbenzene	<0.40		50.0	46.7		ug/L		93	70 - 123	4	20
Styrene	<0.39		50.0	47.0		ug/L		94	70 - 120	1	20
tert-Butylbenzene	<0.40		50.0	48.1		ug/L		96	70 - 121	5	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	42.5		ug/L		85	70 - 125	7	20
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	40.7		ug/L		81	62 - 140	7	20
Tetrachloroethene	<0.37		50.0	47.3		ug/L		95	70 - 128	5	20
Tetrahydrofuran	<1.9		100	62.9		ug/L		63	59 - 139	16	20
Toluene	<0.15		50.0	46.3		ug/L		93	70 - 125	4	20
trans-1,2-Dichloroethene	<0.35		50.0	43.4		ug/L		87	70 - 125	9	20
trans-1,3-Dichloropropene	<0.36		50.0	42.8		ug/L		86	62 - 128	4	20
1,2,3-Trichlorobenzene	<0.46		50.0	38.8		ug/L		78	51 - 145	8	20
1,2,4-Trichlorobenzene	<0.34		50.0	39.3		ug/L		79	57 - 137	7	20
1,1,1-Trichloroethane	<0.38		50.0	44.9		ug/L		90	70 - 125	8	20
1,1,2-Trichloroethane	<0.35		50.0	43.8		ug/L		88	71 - 130	5	20
Trichloroethene	<0.16		50.0	48.2		ug/L		96	70 - 125	4	20
Trichlorofluoromethane	<0.43		50.0	38.0		ug/L		76	55 - 128	4	20
1,2,3-Trichloropropane	<0.41		50.0	46.9		ug/L		94	50 - 133	9	20
1,2,4-Trimethylbenzene	<0.36		50.0	46.5		ug/L		93	70 - 123	6	20
1,3,5-Trimethylbenzene	<0.25		50.0	47.3		ug/L		95	70 - 123	6	20
Vinyl chloride	<0.20		50.0	41.4		ug/L		83	64 - 126	6	20
Xylenes, Total	<0.22		100	87.0		ug/L		87	70 - 125	4	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

<i>Surrogate</i>	<i>MSD</i>	<i>MSD</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
4-Bromofluorobenzene (Surr)	110		72 - 124
Dibromofluoromethane (Surr)	99		75 - 120
1,2-Dichloroethane-d4 (Surr)	102		75 - 126
Toluene-d8 (Surr)	105		75 - 120

Lab Sample ID: MB 500-559170/6
Matrix: Water
Analysis Batch: 559170

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

<i>Analyte</i>	<i>MB</i>	<i>MB</i>	<i>LOQ</i>	<i>DL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
	<i>Result</i>	<i>Qualifier</i>							
Acetone	<1.7		10	1.7	ug/L			08/30/20 12:43	1
Benzene	<0.15		0.50	0.15	ug/L			08/30/20 12:43	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/30/20 12:43	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/30/20 12:43	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/30/20 12:43	1
Bromoform	<0.48		1.0	0.48	ug/L			08/30/20 12:43	1
Bromomethane	<0.80		3.0	0.80	ug/L			08/30/20 12:43	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/30/20 12:43	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/30/20 12:43	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/30/20 12:43	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/30/20 12:43	1
Chloroform	<0.37		2.0	0.37	ug/L			08/30/20 12:43	1
Chloromethane	<0.32		1.0	0.32	ug/L			08/30/20 12:43	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/30/20 12:43	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/30/20 12:43	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			08/30/20 12:43	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/30/20 12:43	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/30/20 12:43	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/30/20 12:43	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/30/20 12:43	1
Dibromomethane	<0.27		1.0	0.27	ug/L			08/30/20 12:43	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/30/20 12:43	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/30/20 12:43	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/30/20 12:43	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/30/20 12:43	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/30/20 12:43	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/30/20 12:43	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			08/30/20 12:43	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/30/20 12:43	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/30/20 12:43	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/30/20 12:43	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/30/20 12:43	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/30/20 12:43	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/30/20 12:43	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 12:43	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/30/20 12:43	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/30/20 12:43	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/30/20 12:43	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/30/20 12:43	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/30/20 12:43	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/30/20 12:43	1

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: MB 500-559170/6
Matrix: Water
Analysis Batch: 559170

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/30/20 12:43	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/30/20 12:43	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 12:43	1
Styrene	<0.39		1.0	0.39	ug/L			08/30/20 12:43	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/30/20 12:43	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/30/20 12:43	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/30/20 12:43	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/30/20 12:43	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/30/20 12:43	1
Toluene	<0.15		0.50	0.15	ug/L			08/30/20 12:43	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			08/30/20 12:43	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/30/20 12:43	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/30/20 12:43	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/30/20 12:43	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/30/20 12:43	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/30/20 12:43	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/30/20 12:43	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/30/20 12:43	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/30/20 12:43	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/30/20 12:43	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/30/20 12:43	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/30/20 12:43	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/30/20 12:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124		08/30/20 12:43	1
Dibromofluoromethane (Surr)	117		75 - 120		08/30/20 12:43	1
1,2-Dichloroethane-d4 (Surr)	119		75 - 126		08/30/20 12:43	1
Toluene-d8 (Surr)	100		75 - 120		08/30/20 12:43	1

Lab Sample ID: LCS 500-559170/4
Matrix: Water
Analysis Batch: 559170

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	39.5		ug/L		79	40 - 143
Benzene	50.0	51.5		ug/L		103	70 - 120
Bromobenzene	50.0	46.1		ug/L		92	70 - 122
Bromochloromethane	50.0	49.7		ug/L		99	65 - 122
Bromodichloromethane	50.0	50.9		ug/L		102	69 - 120
Bromoform	50.0	49.3		ug/L		99	56 - 132
Bromomethane	50.0	51.2		ug/L		102	40 - 152
Carbon disulfide	50.0	47.9		ug/L		96	66 - 120
Carbon tetrachloride	50.0	54.8		ug/L		110	59 - 133
Chlorobenzene	50.0	52.0		ug/L		104	70 - 120
Chloroethane	50.0	52.0		ug/L		104	48 - 136
Chloroform	50.0	48.9		ug/L		98	70 - 120
Chloromethane	50.0	37.4		ug/L		75	56 - 152

Euofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: LCS 500-559170/4
Matrix: Water
Analysis Batch: 559170

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	50.0	47.6		ug/L		95	70 - 125
4-Chlorotoluene	50.0	48.4		ug/L		97	68 - 124
cis-1,2-Dichloroethene	50.0	49.6		ug/L		99	70 - 125
cis-1,3-Dichloropropene	50.0	49.5		ug/L		99	64 - 127
Dibromochloromethane	50.0	50.4		ug/L		101	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	46.6		ug/L		93	56 - 123
1,2-Dibromoethane	50.0	51.3		ug/L		103	70 - 125
Dibromomethane	50.0	51.8		ug/L		104	70 - 120
1,2-Dichlorobenzene	50.0	49.0		ug/L		98	70 - 125
1,3-Dichlorobenzene	50.0	48.8		ug/L		98	70 - 125
1,4-Dichlorobenzene	50.0	46.5		ug/L		93	70 - 120
Dichlorodifluoromethane	50.0	46.1		ug/L		92	40 - 159
1,1-Dichloroethane	50.0	49.5		ug/L		99	70 - 125
1,2-Dichloroethane	50.0	55.0		ug/L		110	68 - 127
1,1-Dichloroethene	50.0	50.2		ug/L		100	67 - 122
1,2-Dichloropropane	50.0	47.8		ug/L		96	67 - 130
1,3-Dichloropropane	50.0	50.8		ug/L		102	62 - 136
2,2-Dichloropropane	50.0	49.9		ug/L		100	58 - 139
1,1-Dichloropropene	50.0	52.4		ug/L		105	70 - 121
Ethylbenzene	50.0	52.4		ug/L		105	70 - 123
Hexachlorobutadiene	50.0	46.2		ug/L		92	51 - 150
Isopropylbenzene	50.0	49.9		ug/L		100	70 - 126
Methylene Chloride	50.0	49.5		ug/L		99	69 - 125
Methyl ethyl ketone (MEK)	50.0	42.4		ug/L		85	46 - 144
Methyl tert-butyl ether	50.0	51.9		ug/L		104	55 - 123
Naphthalene	50.0	46.1		ug/L		92	53 - 144
n-Butylbenzene	50.0	51.1		ug/L		102	68 - 125
N-Propylbenzene	50.0	49.1		ug/L		98	69 - 127
p-Isopropyltoluene	50.0	49.7		ug/L		99	70 - 125
sec-Butylbenzene	50.0	51.2		ug/L		102	70 - 123
Styrene	50.0	49.2		ug/L		98	70 - 120
tert-Butylbenzene	50.0	48.7		ug/L		97	70 - 121
1,1,1,2-Tetrachloroethane	50.0	53.2		ug/L		106	70 - 125
1,1,1,2-Tetrachloroethane	50.0	47.8		ug/L		96	62 - 140
Tetrachloroethene	50.0	49.7		ug/L		99	70 - 128
Tetrahydrofuran	100	87.8		ug/L		88	59 - 139
Toluene	50.0	50.5		ug/L		101	70 - 125
trans-1,2-Dichloroethene	50.0	50.8		ug/L		102	70 - 125
trans-1,3-Dichloropropene	50.0	48.9		ug/L		98	62 - 128
1,2,3-Trichlorobenzene	50.0	49.3		ug/L		99	51 - 145
1,2,4-Trichlorobenzene	50.0	48.9		ug/L		98	57 - 137
1,1,1-Trichloroethane	50.0	52.2		ug/L		104	70 - 125
1,1,2-Trichloroethane	50.0	47.4		ug/L		95	71 - 130
Trichloroethene	50.0	52.6		ug/L		105	70 - 125
Trichlorofluoromethane	50.0	53.7		ug/L		107	55 - 128
1,2,3-Trichloropropane	50.0	47.8		ug/L		96	50 - 133
1,2,4-Trimethylbenzene	50.0	49.4		ug/L		99	70 - 123
1,3,5-Trimethylbenzene	50.0	50.3		ug/L		101	70 - 123
Vinyl chloride	50.0	42.6		ug/L		85	64 - 126

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: LCS 500-559170/4
Matrix: Water
Analysis Batch: 559170

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	100	99.6		ug/L		100	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		72 - 124
Dibromofluoromethane (Surr)	109		75 - 120
1,2-Dichloroethane-d4 (Surr)	109		75 - 126
Toluene-d8 (Surr)	103		75 - 120

Lab Sample ID: MB 500-559217/6
Matrix: Water
Analysis Batch: 559217

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			08/31/20 11:11	1
Benzene	<0.15		0.50	0.15	ug/L			08/31/20 11:11	1
Bromobenzene	<0.36		1.0	0.36	ug/L			08/31/20 11:11	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			08/31/20 11:11	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			08/31/20 11:11	1
Bromoform	<0.48		1.0	0.48	ug/L			08/31/20 11:11	1
Bromomethane	<0.80		3.0	0.80	ug/L			08/31/20 11:11	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			08/31/20 11:11	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			08/31/20 11:11	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			08/31/20 11:11	1
Chloroethane	<0.51		1.0	0.51	ug/L			08/31/20 11:11	1
Chloroform	<0.37		2.0	0.37	ug/L			08/31/20 11:11	1
Chloromethane	<0.32		1.0	0.32	ug/L			08/31/20 11:11	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			08/31/20 11:11	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			08/31/20 11:11	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			08/31/20 11:11	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			08/31/20 11:11	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			08/31/20 11:11	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			08/31/20 11:11	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			08/31/20 11:11	1
Dibromomethane	<0.27		1.0	0.27	ug/L			08/31/20 11:11	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			08/31/20 11:11	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			08/31/20 11:11	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			08/31/20 11:11	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			08/31/20 11:11	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			08/31/20 11:11	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			08/31/20 11:11	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			08/31/20 11:11	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			08/31/20 11:11	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			08/31/20 11:11	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			08/31/20 11:11	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			08/31/20 11:11	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			08/31/20 11:11	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			08/31/20 11:11	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			08/31/20 11:11	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: MB 500-559217/6
Matrix: Water
Analysis Batch: 559217

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.28		1.0	0.28	ug/L			08/31/20 11:11	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			08/31/20 11:11	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			08/31/20 11:11	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			08/31/20 11:11	1
Naphthalene	<0.34		1.0	0.34	ug/L			08/31/20 11:11	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			08/31/20 11:11	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			08/31/20 11:11	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			08/31/20 11:11	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			08/31/20 11:11	1
Styrene	<0.39		1.0	0.39	ug/L			08/31/20 11:11	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			08/31/20 11:11	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			08/31/20 11:11	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			08/31/20 11:11	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/31/20 11:11	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			08/31/20 11:11	1
Toluene	<0.15		0.50	0.15	ug/L			08/31/20 11:11	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			08/31/20 11:11	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			08/31/20 11:11	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			08/31/20 11:11	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			08/31/20 11:11	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/31/20 11:11	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/31/20 11:11	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/31/20 11:11	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			08/31/20 11:11	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			08/31/20 11:11	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			08/31/20 11:11	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			08/31/20 11:11	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/31/20 11:11	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			08/31/20 11:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		08/31/20 11:11	1
Dibromofluoromethane (Surr)	91		75 - 120		08/31/20 11:11	1
1,2-Dichloroethane-d4 (Surr)	112		75 - 126		08/31/20 11:11	1
Toluene-d8 (Surr)	92		75 - 120		08/31/20 11:11	1

Lab Sample ID: LCS 500-559217/4
Matrix: Water
Analysis Batch: 559217

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	53.3		ug/L		107	40 - 143
Benzene	50.0	51.9		ug/L		104	70 - 120
Bromobenzene	50.0	47.4		ug/L		95	70 - 122
Bromochloromethane	50.0	49.4		ug/L		99	65 - 122
Bromodichloromethane	50.0	48.2		ug/L		96	69 - 120
Bromoform	50.0	39.4		ug/L		79	56 - 132
Bromomethane	50.0	53.2		ug/L		106	40 - 152

Euofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: LCS 500-559217/4
Matrix: Water
Analysis Batch: 559217

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	50.0	47.4		ug/L		95	66 - 120
Carbon tetrachloride	50.0	56.3		ug/L		113	59 - 133
Chlorobenzene	50.0	51.3		ug/L		103	70 - 120
Chloroethane	50.0	58.6		ug/L		117	48 - 136
Chloroform	50.0	51.4		ug/L		103	70 - 120
Chloromethane	50.0	48.3		ug/L		97	56 - 152
2-Chlorotoluene	50.0	50.9		ug/L		102	70 - 125
4-Chlorotoluene	50.0	51.7		ug/L		103	68 - 124
cis-1,2-Dichloroethene	50.0	49.2		ug/L		98	70 - 125
cis-1,3-Dichloropropene	50.0	45.1		ug/L		90	64 - 127
Dibromochloromethane	50.0	42.6		ug/L		85	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	31.3		ug/L		63	56 - 123
1,2-Dibromoethane	50.0	44.6		ug/L		89	70 - 125
Dibromomethane	50.0	49.2		ug/L		98	70 - 120
1,2-Dichlorobenzene	50.0	48.5		ug/L		97	70 - 125
1,3-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 125
1,4-Dichlorobenzene	50.0	50.0		ug/L		100	70 - 120
Dichlorodifluoromethane	50.0	49.9		ug/L		100	40 - 159
1,1-Dichloroethane	50.0	55.7		ug/L		111	70 - 125
1,2-Dichloroethane	50.0	62.5		ug/L		125	68 - 127
1,1-Dichloroethene	50.0	48.7		ug/L		97	67 - 122
1,2-Dichloropropane	50.0	55.6		ug/L		111	67 - 130
1,3-Dichloropropane	50.0	45.5		ug/L		91	62 - 136
2,2-Dichloropropane	50.0	60.9		ug/L		122	58 - 139
1,1-Dichloropropene	50.0	55.2		ug/L		110	70 - 121
Ethylbenzene	50.0	54.8		ug/L		110	70 - 123
Hexachlorobutadiene	50.0	65.1		ug/L		130	51 - 150
Isopropylbenzene	50.0	53.2		ug/L		106	70 - 126
Methylene Chloride	50.0	44.7		ug/L		89	69 - 125
Methyl ethyl ketone (MEK)	50.0	55.5		ug/L		111	46 - 144
Methyl tert-butyl ether	50.0	51.8		ug/L		104	55 - 123
Naphthalene	50.0	40.8		ug/L		82	53 - 144
n-Butylbenzene	50.0	57.9		ug/L		116	68 - 125
N-Propylbenzene	50.0	53.4		ug/L		107	69 - 127
p-Isopropyltoluene	50.0	58.4		ug/L		117	70 - 125
sec-Butylbenzene	50.0	56.6		ug/L		113	70 - 123
Styrene	50.0	50.2		ug/L		100	70 - 120
tert-Butylbenzene	50.0	55.2		ug/L		110	70 - 121
1,1,1,2-Tetrachloroethane	50.0	49.0		ug/L		98	70 - 125
1,1,2,2-Tetrachloroethane	50.0	38.1		ug/L		76	62 - 140
Tetrachloroethene	50.0	57.7		ug/L		115	70 - 128
Tetrahydrofuran	100	101		ug/L		101	59 - 139
Toluene	50.0	51.6		ug/L		103	70 - 125
trans-1,2-Dichloroethene	50.0	51.4		ug/L		103	70 - 125
trans-1,3-Dichloropropene	50.0	44.1		ug/L		88	62 - 128
1,2,3-Trichlorobenzene	50.0	47.8		ug/L		96	51 - 145
1,2,4-Trichlorobenzene	50.0	49.3		ug/L		99	57 - 137
1,1,1-Trichloroethane	50.0	55.2		ug/L		110	70 - 125
1,1,2-Trichloroethane	50.0	44.4		ug/L		89	71 - 130

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: LCS 500-559217/4
Matrix: Water
Analysis Batch: 559217

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	50.0	54.8		ug/L		110	70 - 125
Trichlorofluoromethane	50.0	52.2		ug/L		104	55 - 128
1,2,3-Trichloropropane	50.0	41.0		ug/L		82	50 - 133
1,2,4-Trimethylbenzene	50.0	54.0		ug/L		108	70 - 123
1,3,5-Trimethylbenzene	50.0	54.6		ug/L		109	70 - 123
Vinyl chloride	50.0	50.9		ug/L		102	64 - 126
Xylenes, Total	100	111		ug/L		111	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane (Surr)	97		75 - 120
1,2-Dichloroethane-d4 (Surr)	111		75 - 126
Toluene-d8 (Surr)	95		75 - 120

Lab Sample ID: 500-187022-5 MS
Matrix: Water
Analysis Batch: 559217

Client Sample ID: 882 McDiarmid Dr.
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	<1.7		50.0	40.1		ug/L		80	40 - 143
Benzene	<0.15		50.0	46.5		ug/L		93	70 - 120
Bromobenzene	<0.36		50.0	43.2		ug/L		86	70 - 122
Bromochloromethane	<0.43		50.0	44.7		ug/L		89	65 - 122
Bromodichloromethane	<0.37		50.0	42.6		ug/L		85	69 - 120
Bromoform	<0.48		50.0	35.2		ug/L		70	56 - 132
Bromomethane	<0.80		50.0	50.8		ug/L		102	40 - 152
Carbon disulfide	<0.45		50.0	41.3		ug/L		83	66 - 120
Carbon tetrachloride	<0.38		50.0	49.3		ug/L		99	59 - 133
Chlorobenzene	<0.39		50.0	45.6		ug/L		91	70 - 120
Chloroethane	<0.51		50.0	56.0		ug/L		112	48 - 136
Chloroform	<0.37		50.0	46.6		ug/L		93	70 - 120
Chloromethane	<0.32		50.0	45.5		ug/L		91	56 - 152
2-Chlorotoluene	<0.31		50.0	45.4		ug/L		91	70 - 125
4-Chlorotoluene	<0.35		50.0	46.1		ug/L		92	68 - 124
cis-1,2-Dichloroethene	<0.41		50.0	44.3		ug/L		89	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	38.8		ug/L		78	64 - 127
Dibromochloromethane	<0.49		50.0	37.9		ug/L		76	68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	29.9		ug/L		60	56 - 123
1,2-Dibromoethane	<0.39		50.0	39.7		ug/L		79	70 - 125
Dibromomethane	<0.27		50.0	44.3		ug/L		89	70 - 120
1,2-Dichlorobenzene	<0.33		50.0	43.7		ug/L		87	70 - 125
1,3-Dichlorobenzene	<0.40		50.0	45.2		ug/L		90	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	44.8		ug/L		90	70 - 120
Dichlorodifluoromethane	<0.67		50.0	45.0		ug/L		90	40 - 159
1,1-Dichloroethane	<0.41		50.0	50.1		ug/L		100	70 - 125
1,2-Dichloroethane	<0.39		50.0	57.3		ug/L		115	68 - 127
1,1-Dichloroethene	<0.39		50.0	43.1		ug/L		86	67 - 122
1,2-Dichloropropane	<0.43		50.0	49.5		ug/L		99	67 - 130

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: 500-187022-5 MS

Matrix: Water

Analysis Batch: 559217

Client Sample ID: 882 McDiarmid Dr.

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	<0.36		50.0	40.3		ug/L		81	62 - 136
2,2-Dichloropropane	<0.44		50.0	51.7		ug/L		103	58 - 139
1,1-Dichloropropene	<0.30		50.0	49.0		ug/L		98	70 - 121
Ethylbenzene	<0.18		50.0	48.4		ug/L		97	70 - 123
Hexachlorobutadiene	<0.45		50.0	58.4		ug/L		117	51 - 150
Isopropylbenzene	<0.39		50.0	47.0		ug/L		94	70 - 126
Methylene Chloride	<1.6		50.0	40.2		ug/L		80	69 - 125
Methyl ethyl ketone (MEK)	<2.1		50.0	45.5		ug/L		91	46 - 144
Methyl tert-butyl ether	<0.39		50.0	47.8		ug/L		96	55 - 123
Naphthalene	<0.34		50.0	38.6		ug/L		77	53 - 144
n-Butylbenzene	<0.39		50.0	50.7		ug/L		101	68 - 125
N-Propylbenzene	<0.41		50.0	47.2		ug/L		94	69 - 127
p-Isopropyltoluene	<0.36		50.0	51.1		ug/L		102	70 - 125
sec-Butylbenzene	<0.40		50.0	50.1		ug/L		100	70 - 123
Styrene	<0.39		50.0	44.8		ug/L		90	70 - 120
tert-Butylbenzene	<0.40		50.0	49.0		ug/L		98	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	43.5		ug/L		87	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	34.7		ug/L		69	62 - 140
Tetrachloroethene	<0.37		50.0	50.2		ug/L		100	70 - 128
Tetrahydrofuran	<1.9		100	92.4		ug/L		92	59 - 139
Toluene	<0.15		50.0	44.7		ug/L		89	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	45.0		ug/L		90	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	38.1		ug/L		76	62 - 128
1,2,3-Trichlorobenzene	<0.46		50.0	43.7		ug/L		87	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	44.0		ug/L		88	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	49.4		ug/L		99	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	40.1		ug/L		80	71 - 130
Trichloroethene	<0.16		50.0	48.1		ug/L		96	70 - 125
Trichlorofluoromethane	<0.43		50.0	49.8		ug/L		100	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	38.1		ug/L		76	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	47.4		ug/L		95	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	48.3		ug/L		97	70 - 123
Vinyl chloride	<0.20		50.0	47.4		ug/L		95	64 - 126
Xylenes, Total	<0.22		100	98.2		ug/L		98	70 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		72 - 124
Dibromofluoromethane (Surr)	98		75 - 120
1,2-Dichloroethane-d4 (Surr)	113		75 - 126
Toluene-d8 (Surr)	92		75 - 120

Lab Sample ID: 500-187022-5 MSD

Matrix: Water

Analysis Batch: 559217

Client Sample ID: 882 McDiarmid Dr.

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	<1.7		50.0	47.7		ug/L		95	40 - 143	17	20
Benzene	<0.15		50.0	50.6		ug/L		101	70 - 120	8	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: 500-187022-5 MSD

Matrix: Water

Analysis Batch: 559217

Client Sample ID: 882 McDiarmid Dr.

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	<0.36		50.0	47.3		ug/L		95	70 - 122	9	20
Bromochloromethane	<0.43		50.0	49.4		ug/L		99	65 - 122	10	20
Bromodichloromethane	<0.37		50.0	48.2		ug/L		96	69 - 120	12	20
Bromoform	<0.48		50.0	38.3		ug/L		77	56 - 132	8	20
Bromomethane	<0.80		50.0	51.4		ug/L		103	40 - 152	1	20
Carbon disulfide	<0.45		50.0	45.4		ug/L		91	66 - 120	10	20
Carbon tetrachloride	<0.38		50.0	54.4		ug/L		109	59 - 133	10	20
Chlorobenzene	<0.39		50.0	49.3		ug/L		99	70 - 120	8	20
Chloroethane	<0.51		50.0	56.8		ug/L		114	48 - 136	1	20
Chloroform	<0.37		50.0	51.5		ug/L		103	70 - 120	10	20
Chloromethane	<0.32		50.0	45.7		ug/L		91	56 - 152	0	20
2-Chlorotoluene	<0.31		50.0	49.5		ug/L		99	70 - 125	9	20
4-Chlorotoluene	<0.35		50.0	50.2		ug/L		100	68 - 124	9	20
cis-1,2-Dichloroethene	<0.41		50.0	49.3		ug/L		99	70 - 125	11	20
cis-1,3-Dichloropropene	<0.42		50.0	41.8		ug/L		84	64 - 127	7	20
Dibromochloromethane	<0.49		50.0	41.2		ug/L		82	68 - 125	8	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	33.8		ug/L		68	56 - 123	12	20
1,2-Dibromoethane	<0.39		50.0	44.4		ug/L		89	70 - 125	11	20
Dibromomethane	<0.27		50.0	48.9		ug/L		98	70 - 120	10	20
1,2-Dichlorobenzene	<0.33		50.0	48.2		ug/L		96	70 - 125	10	20
1,3-Dichlorobenzene	<0.40		50.0	48.8		ug/L		98	70 - 125	8	20
1,4-Dichlorobenzene	<0.36		50.0	48.6		ug/L		97	70 - 120	8	20
Dichlorodifluoromethane	<0.67		50.0	45.8		ug/L		92	40 - 159	2	20
1,1-Dichloroethane	<0.41		50.0	54.9		ug/L		110	70 - 125	9	20
1,2-Dichloroethane	<0.39		50.0	62.7		ug/L		125	68 - 127	9	20
1,1-Dichloroethene	<0.39		50.0	47.5		ug/L		95	67 - 122	10	20
1,2-Dichloropropane	<0.43		50.0	52.7		ug/L		105	67 - 130	6	20
1,3-Dichloropropane	<0.36		50.0	44.1		ug/L		88	62 - 136	9	20
2,2-Dichloropropane	<0.44		50.0	56.9		ug/L		114	58 - 139	10	20
1,1-Dichloropropene	<0.30		50.0	53.1		ug/L		106	70 - 121	8	20
Ethylbenzene	<0.18		50.0	52.7		ug/L		105	70 - 123	9	20
Hexachlorobutadiene	<0.45		50.0	64.5		ug/L		129	51 - 150	10	20
Isopropylbenzene	<0.39		50.0	50.8		ug/L		102	70 - 126	8	20
Methylene Chloride	<1.6		50.0	44.5		ug/L		89	69 - 125	10	20
Methyl ethyl ketone (MEK)	<2.1		50.0	53.1		ug/L		106	46 - 144	15	20
Methyl tert-butyl ether	<0.39		50.0	52.9		ug/L		106	55 - 123	10	20
Naphthalene	<0.34		50.0	43.2		ug/L		86	53 - 144	11	20
n-Butylbenzene	<0.39		50.0	54.5		ug/L		109	68 - 125	7	20
N-Propylbenzene	<0.41		50.0	51.3		ug/L		103	69 - 127	8	20
p-Isopropyltoluene	<0.36		50.0	55.9		ug/L		112	70 - 125	9	20
sec-Butylbenzene	<0.40		50.0	54.1		ug/L		108	70 - 123	8	20
Styrene	<0.39		50.0	48.7		ug/L		97	70 - 120	8	20
tert-Butylbenzene	<0.40		50.0	53.4		ug/L		107	70 - 121	9	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	47.3		ug/L		95	70 - 125	8	20
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	37.8		ug/L		76	62 - 140	9	20
Tetrachloroethene	<0.37		50.0	53.2		ug/L		106	70 - 128	6	20
Tetrahydrofuran	<1.9		100	97.8		ug/L		98	59 - 139	6	20
Toluene	<0.15		50.0	48.2		ug/L		96	70 - 125	8	20
trans-1,2-Dichloroethene	<0.35		50.0	50.2		ug/L		100	70 - 125	11	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

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

Lab Sample ID: 500-187022-5 MSD

Matrix: Water

Analysis Batch: 559217

Client Sample ID: 882 McDiarmid Dr.

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	<0.36		50.0	41.5		ug/L		83	62 - 128	9	20
1,2,3-Trichlorobenzene	<0.46		50.0	48.0		ug/L		96	51 - 145	9	20
1,2,4-Trichlorobenzene	<0.34		50.0	47.5		ug/L		95	57 - 137	8	20
1,1,1-Trichloroethane	<0.38		50.0	54.0		ug/L		108	70 - 125	9	20
1,1,2-Trichloroethane	<0.35		50.0	43.5		ug/L		87	71 - 130	8	20
Trichloroethene	<0.16		50.0	52.5		ug/L		105	70 - 125	9	20
Trichlorofluoromethane	<0.43		50.0	50.8		ug/L		102	55 - 128	2	20
1,2,3-Trichloropropane	<0.41		50.0	41.1		ug/L		82	50 - 133	8	20
1,2,4-Trimethylbenzene	<0.36		50.0	52.3		ug/L		105	70 - 123	10	20
1,3,5-Trimethylbenzene	<0.25		50.0	52.1		ug/L		104	70 - 123	8	20
Vinyl chloride	<0.20		50.0	48.3		ug/L		97	64 - 126	2	20
Xylenes, Total	<0.22		100	106		ug/L		106	70 - 125	8	20
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	93		72 - 124								
Dibromofluoromethane (Surr)	98		75 - 120								
1,2-Dichloroethane-d4 (Surr)	115		75 - 126								
Toluene-d8 (Surr)	91		75 - 120								

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Client Sample ID: 874 Wyldwood Ln.

Date Collected: 08/26/20 10:45

Date Received: 08/28/20 10:10

Lab Sample ID: 500-187022-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	559166	08/30/20 20:07	JDD	TAL CHI

Client Sample ID: 860 Young Rd.

Date Collected: 08/26/20 11:00

Date Received: 08/28/20 10:10

Lab Sample ID: 500-187022-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	559166	08/30/20 20:33	JDD	TAL CHI

Client Sample ID: 873 Jane Cir.

Date Collected: 08/26/20 11:15

Date Received: 08/28/20 10:10

Lab Sample ID: 500-187022-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	559166	08/30/20 21:00	JDD	TAL CHI

Client Sample ID: 851 Polen Dr.

Date Collected: 08/26/20 11:30

Date Received: 08/28/20 10:10

Lab Sample ID: 500-187022-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	559217	08/31/20 12:06	PMF	TAL CHI

Client Sample ID: 882 McDiarmid Dr.

Date Collected: 08/26/20 13:00

Date Received: 08/28/20 10:10

Lab Sample ID: 500-187022-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	559217	08/31/20 12:33	PMF	TAL CHI

Client Sample ID: 877 Badlands Rd.

Date Collected: 08/26/20 13:15

Date Received: 08/28/20 10:10

Lab Sample ID: 500-187022-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	559170	08/30/20 16:48	JDD	TAL CHI

Client Sample ID: Trip Blank

Date Collected: 08/26/20 00:00

Date Received: 08/28/20 10:10

Lab Sample ID: 500-187022-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	559166	08/30/20 13:53	JDD	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Eurofins TestAmerica, Chicago

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187022-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Chain of Custody Record

397150




Environment Test
TestAmerica

Address: _____

Regulatory Program: DW NPDES RCRA Other:

TAL-82-

Client Contact		Project Manager: Mitch Evenson		Site Contact: Kirsten Lee		Date: 8/27/20		COC No.: 1 of 1 COCs	
Company Name: Cedar Corp		Tel/Email:		Lab Contact: Sandie F.		Carrier:		Sampler: KAL	
Address:		Analysis Turnaround Time							
City/State/Zip:		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day							
Phone: 715-235-9081		 500-187022 COC							
Fax:									
Project Name: Town of Warren									
Site:									
P O #		Job / SDG No.: 500-187022							

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes:
1 874 Wyldwood Ln.	8/26/20	1045		DW	3		X	
2 860 Young Rd.	↓	1100		↓	↓			
3 873 Jane Cir.	↓	1115		↓	↓			
4 851 Polen Dr.	↓	1130		↓	↓			
5 882 McDiarmid Dr.	↓	1300		↓	↓			
6 877 Badlands Rd.	✓	1315		✓	✓		✓	
7 Trip Blank					1		✓	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments: some samples may say 8/25/20, they were all really sampled on 8/26/20

Custody Seals Intact: Yes No

Custody Seal No.: _____ Cooler Temp. (°C): Obs'd: 0.9 Corr'd: _____ Therm ID No.: _____

Relinquished by: <i>Kirsten Lee</i>	Company: Cedar Corp	Date/Time: 8/27/20 0900	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: <i>Shirley Scott</i>	Company: TA-OHI	Date/Time: 8/28/20 1010



500-187022 Wayt

ORIGIN ID:PHDH (330) 966-9677
MITCH EVENSON
CEDAR CORPORATION
604 WILSON AVENUE
MENDONIE, WI 54751
UNITED STATES US

SHIP DATE: 23APR20
ACTWGT: 10.00 LB MAN
CAR: 568C2/7709/05A2

TO

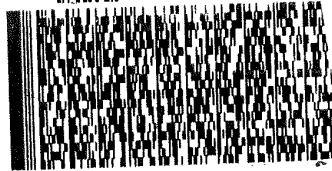
EUROFINS TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 604842104

(708) 634-5200

REF: S600-81357

RMA: III III III



RT 519
ST 29

5 10:30 A
8127
08.28 X
88



FRI - 28 AUG 10:30A
PRIORITY OVERNIGHT

FedEx

TI TRK# 1728 5841 8127
0221

NA JOTA

60484
IL-US
ORD



FID 543099 27AUG20 EAU 568C2/7709/05A2

568C2/7709/05A2

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

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-187022-1

Login Number: 187022

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-187133-1
Client Project/Site: Town of Warren

For:

Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



*Authorized for release by:
9/8/2020 11:49:24 AM*

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	15
QC Association	16
Surrogate Summary	17
QC Sample Results	18
Chronicle	22
Certification Summary	23
Chain of Custody	24
Receipt Checklists	26

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Job ID: 500-187133-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

**Job Narrative
500-187133-1**

Comments

No additional comments.

Receipt

The samples were received on 9/1/2020 10:20 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3° C.

GC/MS VOA

Methods 624, 8260B: Methylene chloride was detected in the following samples: 907 87th Ave (500-187133-1), 903 87th Ave (500-187133-2) and 875 Wyldwood Ln (500-187133-3). The method blank associated with these samples was non-detect for Methylene chloride. Methylene chloride is a known lab contaminant; therefore all low level detects for this compound could be suspected as lab contamination.

Method 8260B: The laboratory control sample (LCS) for 560057 recovered outside control limits for 1,2-Dibromo-3-Chloropropane. This analyte was biased low in the LCS and was not detected in the associated samples; therefore, the data have been reported. 907 87th Ave (500-187133-1), 903 87th Ave (500-187133-2), 875 Wyldwood Ln (500-187133-3) and Trip Blank (500-187133-4)

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Client Sample ID: 907 87th Ave

Lab Sample ID: 500-187133-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	4.2	J	5.0	1.6	ug/L	1		8260B	Total/NA
Trichloroethylene	3.7		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: 903 87th Ave

Lab Sample ID: 500-187133-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	4.5	J	5.0	1.6	ug/L	1		8260B	Total/NA
Trichloroethylene	1.2		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: 875 Wyldwood Ln

Lab Sample ID: 500-187133-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	5.1		5.0	1.6	ug/L	1		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 500-187133-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-187133-1	907 87th Ave	Water	08/28/20 09:00	09/01/20 10:20	
500-187133-2	903 87th Ave	Water	08/28/20 09:15	09/01/20 10:20	
500-187133-3	875 Wyldwood Ln	Water	08/28/20 12:30	09/01/20 10:20	
500-187133-4	Trip Blank	Water	08/28/20 00:00	09/01/20 10:20	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Client Sample ID: 907 87th Ave

Lab Sample ID: 500-187133-1

Date Collected: 08/28/20 09:00

Matrix: Water

Date Received: 09/01/20 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			09/04/20 14:07	1
Benzene	<0.15		0.50	0.15	ug/L			09/04/20 14:07	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/04/20 14:07	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/04/20 14:07	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/04/20 14:07	1
Bromoform	<0.48		1.0	0.48	ug/L			09/04/20 14:07	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/04/20 14:07	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/04/20 14:07	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/04/20 14:07	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/04/20 14:07	1
Chloroform	<0.37		2.0	0.37	ug/L			09/04/20 14:07	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/04/20 14:07	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/04/20 14:07	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/04/20 14:07	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/04/20 14:07	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/04/20 14:07	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			09/04/20 14:07	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/04/20 14:07	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/04/20 14:07	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/04/20 14:07	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/04/20 14:07	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/04/20 14:07	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/04/20 14:07	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/04/20 14:07	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/04/20 14:07	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/04/20 14:07	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/04/20 14:07	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/04/20 14:07	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/04/20 14:07	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/04/20 14:07	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/04/20 14:07	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/04/20 14:07	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/04/20 14:07	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/04/20 14:07	1
Methylene Chloride	4.2 J		5.0	1.6	ug/L			09/04/20 14:07	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/04/20 14:07	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/04/20 14:07	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/04/20 14:07	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/04/20 14:07	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/04/20 14:07	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/04/20 14:07	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/04/20 14:07	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/04/20 14:07	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/04/20 14:07	1
Styrene	<0.39		1.0	0.39	ug/L			09/04/20 14:07	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/04/20 14:07	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/04/20 14:07	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/04/20 14:07	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/04/20 14:07	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-187133-1

Client Sample ID: 907 87th Ave

Lab Sample ID: 500-187133-1

Date Collected: 08/28/20 09:00

Matrix: Water

Date Received: 09/01/20 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/04/20 14:07	1
Toluene	<0.15		0.50	0.15	ug/L			09/04/20 14:07	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/04/20 14:07	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/04/20 14:07	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/04/20 14:07	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/04/20 14:07	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/04/20 14:07	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/04/20 14:07	1
Trichloroethylene	3.7		0.50	0.16	ug/L			09/04/20 14:07	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/04/20 14:07	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/04/20 14:07	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/04/20 14:07	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/04/20 14:07	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/04/20 14:07	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/04/20 14:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		09/04/20 14:07	1
Dibromofluoromethane	93		75 - 120		09/04/20 14:07	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		09/04/20 14:07	1
Toluene-d8 (Surr)	93		75 - 120		09/04/20 14:07	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Client Sample ID: 903 87th Ave

Lab Sample ID: 500-187133-2

Date Collected: 08/28/20 09:15

Matrix: Water

Date Received: 09/01/20 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			09/04/20 14:34	1
Benzene	<0.15		0.50	0.15	ug/L			09/04/20 14:34	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/04/20 14:34	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/04/20 14:34	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/04/20 14:34	1
Bromoform	<0.48		1.0	0.48	ug/L			09/04/20 14:34	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/04/20 14:34	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/04/20 14:34	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/04/20 14:34	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/04/20 14:34	1
Chloroform	<0.37		2.0	0.37	ug/L			09/04/20 14:34	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/04/20 14:34	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/04/20 14:34	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/04/20 14:34	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/04/20 14:34	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/04/20 14:34	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			09/04/20 14:34	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/04/20 14:34	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/04/20 14:34	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/04/20 14:34	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/04/20 14:34	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/04/20 14:34	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/04/20 14:34	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/04/20 14:34	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/04/20 14:34	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/04/20 14:34	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/04/20 14:34	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/04/20 14:34	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/04/20 14:34	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/04/20 14:34	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/04/20 14:34	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/04/20 14:34	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/04/20 14:34	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/04/20 14:34	1
Methylene Chloride	4.5 J		5.0	1.6	ug/L			09/04/20 14:34	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/04/20 14:34	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/04/20 14:34	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/04/20 14:34	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/04/20 14:34	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/04/20 14:34	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/04/20 14:34	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/04/20 14:34	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/04/20 14:34	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/04/20 14:34	1
Styrene	<0.39		1.0	0.39	ug/L			09/04/20 14:34	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/04/20 14:34	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/04/20 14:34	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/04/20 14:34	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/04/20 14:34	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Client Sample ID: 903 87th Ave

Lab Sample ID: 500-187133-2

Date Collected: 08/28/20 09:15

Matrix: Water

Date Received: 09/01/20 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/04/20 14:34	1
Toluene	<0.15		0.50	0.15	ug/L			09/04/20 14:34	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/04/20 14:34	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/04/20 14:34	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/04/20 14:34	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/04/20 14:34	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/04/20 14:34	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/04/20 14:34	1
Trichloroethylene	1.2		0.50	0.16	ug/L			09/04/20 14:34	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/04/20 14:34	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/04/20 14:34	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/04/20 14:34	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/04/20 14:34	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/04/20 14:34	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/04/20 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		09/04/20 14:34	1
Dibromofluoromethane	92		75 - 120		09/04/20 14:34	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		09/04/20 14:34	1
Toluene-d8 (Surr)	92		75 - 120		09/04/20 14:34	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Client Sample ID: 875 Wyldwood Ln

Lab Sample ID: 500-187133-3

Date Collected: 08/28/20 12:30

Matrix: Water

Date Received: 09/01/20 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			09/04/20 15:02	1
Benzene	<0.15		0.50	0.15	ug/L			09/04/20 15:02	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/04/20 15:02	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/04/20 15:02	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/04/20 15:02	1
Bromoform	<0.48		1.0	0.48	ug/L			09/04/20 15:02	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/04/20 15:02	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/04/20 15:02	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/04/20 15:02	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/04/20 15:02	1
Chloroform	<0.37		2.0	0.37	ug/L			09/04/20 15:02	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/04/20 15:02	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/04/20 15:02	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/04/20 15:02	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/04/20 15:02	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/04/20 15:02	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			09/04/20 15:02	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/04/20 15:02	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/04/20 15:02	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/04/20 15:02	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/04/20 15:02	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/04/20 15:02	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/04/20 15:02	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/04/20 15:02	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/04/20 15:02	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/04/20 15:02	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/04/20 15:02	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/04/20 15:02	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/04/20 15:02	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/04/20 15:02	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/04/20 15:02	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/04/20 15:02	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/04/20 15:02	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/04/20 15:02	1
Methylene Chloride	5.1		5.0	1.6	ug/L			09/04/20 15:02	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/04/20 15:02	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/04/20 15:02	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/04/20 15:02	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/04/20 15:02	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/04/20 15:02	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/04/20 15:02	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/04/20 15:02	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/04/20 15:02	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/04/20 15:02	1
Styrene	<0.39		1.0	0.39	ug/L			09/04/20 15:02	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/04/20 15:02	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/04/20 15:02	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/04/20 15:02	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/04/20 15:02	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Client Sample ID: 875 Wyldwood Ln

Lab Sample ID: 500-187133-3

Date Collected: 08/28/20 12:30

Matrix: Water

Date Received: 09/01/20 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/04/20 15:02	1
Toluene	<0.15		0.50	0.15	ug/L			09/04/20 15:02	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/04/20 15:02	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/04/20 15:02	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/04/20 15:02	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/04/20 15:02	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/04/20 15:02	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/04/20 15:02	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			09/04/20 15:02	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/04/20 15:02	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/04/20 15:02	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/04/20 15:02	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/04/20 15:02	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/04/20 15:02	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/04/20 15:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		09/04/20 15:02	1
Dibromofluoromethane	94		75 - 120		09/04/20 15:02	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		09/04/20 15:02	1
Toluene-d8 (Surr)	93		75 - 120		09/04/20 15:02	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-187133-4

Date Collected: 08/28/20 00:00

Matrix: Water

Date Received: 09/01/20 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			09/04/20 11:49	1
Benzene	<0.15		0.50	0.15	ug/L			09/04/20 11:49	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/04/20 11:49	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/04/20 11:49	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/04/20 11:49	1
Bromoform	<0.48		1.0	0.48	ug/L			09/04/20 11:49	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/04/20 11:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/04/20 11:49	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/04/20 11:49	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/04/20 11:49	1
Chloroform	<0.37		2.0	0.37	ug/L			09/04/20 11:49	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/04/20 11:49	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/04/20 11:49	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/04/20 11:49	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/04/20 11:49	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/04/20 11:49	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			09/04/20 11:49	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/04/20 11:49	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/04/20 11:49	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/04/20 11:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/04/20 11:49	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/04/20 11:49	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/04/20 11:49	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/04/20 11:49	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/04/20 11:49	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/04/20 11:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/04/20 11:49	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/04/20 11:49	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/04/20 11:49	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/04/20 11:49	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/04/20 11:49	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/04/20 11:49	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/04/20 11:49	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/04/20 11:49	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/04/20 11:49	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/04/20 11:49	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/04/20 11:49	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/04/20 11:49	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/04/20 11:49	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/04/20 11:49	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/04/20 11:49	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/04/20 11:49	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/04/20 11:49	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/04/20 11:49	1
Styrene	<0.39		1.0	0.39	ug/L			09/04/20 11:49	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/04/20 11:49	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/04/20 11:49	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/04/20 11:49	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/04/20 11:49	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-187133-4

Date Collected: 08/28/20 00:00

Matrix: Water

Date Received: 09/01/20 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/04/20 11:49	1
Toluene	<0.15		0.50	0.15	ug/L			09/04/20 11:49	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/04/20 11:49	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/04/20 11:49	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/04/20 11:49	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/04/20 11:49	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/04/20 11:49	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/04/20 11:49	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			09/04/20 11:49	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/04/20 11:49	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/04/20 11:49	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/04/20 11:49	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/04/20 11:49	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/04/20 11:49	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/04/20 11:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		09/04/20 11:49	1
Dibromofluoromethane	92		75 - 120		09/04/20 11:49	1
1,2-Dichloroethane-d4 (Surr)	112		75 - 126		09/04/20 11:49	1
Toluene-d8 (Surr)	93		75 - 120		09/04/20 11:49	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

GC/MS VOA

Analysis Batch: 560057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-187133-1	907 87th Ave	Total/NA	Water	8260B	
500-187133-2	903 87th Ave	Total/NA	Water	8260B	
500-187133-3	875 Wyldwood Ln	Total/NA	Water	8260B	
500-187133-4	Trip Blank	Total/NA	Water	8260B	
MB 500-560057/6	Method Blank	Total/NA	Water	8260B	
LCS 500-560057/4	Lab Control Sample	Total/NA	Water	8260B	

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

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-187133-1	907 87th Ave	95	93	113	93
500-187133-2	903 87th Ave	96	92	113	92
500-187133-3	875 Wyldwood Ln	96	94	113	93
500-187133-4	Trip Blank	96	92	112	93
LCS 500-560057/4	Lab Control Sample	93	94	110	95
MB 500-560057/6	Method Blank	97	92	112	93

Surrogate Legend

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

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-187133-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-560057/6
 Matrix: Water
 Analysis Batch: 560057

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			09/04/20 10:53	1
Benzene	<0.15		0.50	0.15	ug/L			09/04/20 10:53	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/04/20 10:53	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/04/20 10:53	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/04/20 10:53	1
Bromoform	<0.48		1.0	0.48	ug/L			09/04/20 10:53	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/04/20 10:53	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/04/20 10:53	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/04/20 10:53	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/04/20 10:53	1
Chloroform	<0.37		2.0	0.37	ug/L			09/04/20 10:53	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/04/20 10:53	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/04/20 10:53	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/04/20 10:53	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/04/20 10:53	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/04/20 10:53	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/04/20 10:53	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/04/20 10:53	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/04/20 10:53	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/04/20 10:53	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/04/20 10:53	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/04/20 10:53	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/04/20 10:53	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/04/20 10:53	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/04/20 10:53	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/04/20 10:53	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/04/20 10:53	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/04/20 10:53	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/04/20 10:53	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/04/20 10:53	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/04/20 10:53	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/04/20 10:53	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/04/20 10:53	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/04/20 10:53	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/04/20 10:53	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/04/20 10:53	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/04/20 10:53	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/04/20 10:53	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/04/20 10:53	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/04/20 10:53	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/04/20 10:53	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/04/20 10:53	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/04/20 10:53	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/04/20 10:53	1
Styrene	<0.39		1.0	0.39	ug/L			09/04/20 10:53	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/04/20 10:53	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/04/20 10:53	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/04/20 10:53	1

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

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

Lab Sample ID: MB 500-560057/6
Matrix: Water
Analysis Batch: 560057

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/04/20 10:53	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/04/20 10:53	1
Toluene	<0.15		0.50	0.15	ug/L			09/04/20 10:53	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/04/20 10:53	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/04/20 10:53	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/04/20 10:53	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/04/20 10:53	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/04/20 10:53	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/04/20 10:53	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			09/04/20 10:53	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/04/20 10:53	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/04/20 10:53	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/04/20 10:53	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/04/20 10:53	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/04/20 10:53	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/04/20 10:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124		09/04/20 10:53	1
Dibromofluoromethane	92		75 - 120		09/04/20 10:53	1
1,2-Dichloroethane-d4 (Surr)	112		75 - 126		09/04/20 10:53	1
Toluene-d8 (Surr)	93		75 - 120		09/04/20 10:53	1

Lab Sample ID: LCS 500-560057/4
Matrix: Water
Analysis Batch: 560057

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	45.2		ug/L		90	40 - 143
Benzene	50.0	47.6		ug/L		95	70 - 120
Bromobenzene	50.0	42.5		ug/L		85	70 - 122
Bromochloromethane	50.0	43.7		ug/L		87	65 - 122
Bromodichloromethane	50.0	43.2		ug/L		86	69 - 120
Bromoform	50.0	34.4		ug/L		69	56 - 132
Carbon disulfide	50.0	43.7		ug/L		87	66 - 120
Carbon tetrachloride	50.0	51.5		ug/L		103	59 - 133
Chlorobenzene	50.0	46.6		ug/L		93	70 - 120
Chloroethane	50.0	58.2		ug/L		116	48 - 136
Chloroform	50.0	46.7		ug/L		93	70 - 120
2-Chlorotoluene	50.0	46.4		ug/L		93	70 - 125
4-Chlorotoluene	50.0	47.2		ug/L		94	68 - 124
cis-1,2-Dichloroethylene	50.0	45.1		ug/L		90	70 - 125
cis-1,3-Dichloropropene	50.0	41.1		ug/L		82	64 - 127
Dibromochloromethane	50.0	37.7		ug/L		75	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	27.4	*	ug/L		55	56 - 123
1,2-Dibromoethane	50.0	39.9		ug/L		80	70 - 125
Dichlorodifluoromethane	50.0	57.9		ug/L		116	40 - 159
1,1-Dichloroethane	50.0	50.9		ug/L		102	70 - 125

Euofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

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

Lab Sample ID: LCS 500-560057/4

Matrix: Water

Analysis Batch: 560057

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	56.6		ug/L		113	68 - 127
1,1-Dichloroethylene	50.0	45.0		ug/L		90	67 - 122
1,2-Dichloropropane	50.0	50.8		ug/L		102	67 - 130
1,3-Dichloropropane	50.0	40.7		ug/L		81	62 - 136
2,2-Dichloropropane	50.0	57.2		ug/L		114	58 - 139
1,1-Dichloropropene	50.0	50.7		ug/L		101	70 - 121
Ethylbenzene	50.0	50.2		ug/L		100	70 - 123
Hexachlorobutadiene	50.0	60.4		ug/L		121	51 - 150
Isopropylbenzene	50.0	48.5		ug/L		97	70 - 126
m-Dichlorobenzene	50.0	45.9		ug/L		92	70 - 125
Methyl bromide	50.0	52.3		ug/L		105	40 - 152
Methyl chloride	50.0	51.6		ug/L		103	56 - 152
Methylene bromide	50.0	43.1		ug/L		86	70 - 120
Methylene Chloride	50.0	41.3		ug/L		83	69 - 125
Methyl ethyl ketone (MEK)	50.0	43.3		ug/L		87	46 - 144
Methyl tert-butyl ether	50.0	47.0		ug/L		94	55 - 123
Naphthalene	50.0	36.4		ug/L		73	53 - 144
n-Butylbenzene	50.0	52.9		ug/L		106	68 - 125
N-Propylbenzene	50.0	48.7		ug/L		97	69 - 127
o-Dichlorobenzene	50.0	43.2		ug/L		86	70 - 125
p-Dichlorobenzene	50.0	45.2		ug/L		90	70 - 120
p-Isopropyltoluene	50.0	53.4		ug/L		107	70 - 125
sec-Butylbenzene	50.0	52.0		ug/L		104	70 - 123
Styrene	50.0	45.2		ug/L		90	70 - 120
tert-Butylbenzene	50.0	50.3		ug/L		101	70 - 121
1,1,1,2-Tetrachloroethane	50.0	44.2		ug/L		88	70 - 125
1,1,2,2-Tetrachloroethane	50.0	33.4		ug/L		67	62 - 140
Tetrachloroethylene	50.0	52.4		ug/L		105	70 - 128
Tetrahydrofuran	100	88.4		ug/L		88	59 - 139
Toluene	50.0	47.1		ug/L		94	70 - 125
1,2-trans-Dichloroethylene	50.0	46.8		ug/L		94	70 - 125
trans-1,3-Dichloropropene	50.0	39.7		ug/L		79	62 - 128
1,2,3-Trichlorobenzene	50.0	42.9		ug/L		86	51 - 145
1,2,4-Trichlorobenzene	50.0	44.8		ug/L		90	57 - 137
1,1,1-Trichloroethane	50.0	50.8		ug/L		102	70 - 125
1,1,2-Trichloroethane	50.0	39.8		ug/L		80	71 - 130
Trichloroethylene	50.0	49.5		ug/L		99	70 - 125
Trichlorofluoromethane	50.0	50.5		ug/L		101	55 - 128
1,2,3-Trichloropropane	50.0	36.4		ug/L		73	50 - 133
1,2,4-Trimethylbenzene	50.0	48.9		ug/L		98	70 - 123
1,3,5-Trimethylbenzene	50.0	49.9		ug/L		100	70 - 123
Vinyl chloride	50.0	52.0		ug/L		104	64 - 126
Xylenes, Total	100	102		ug/L		102	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane	94		75 - 120
1,2-Dichloroethane-d4 (Surr)	110		75 - 126

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

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

Lab Sample ID: LCS 500-560057/4

Matrix: Water

Analysis Batch: 560057

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

<u>Surrogate</u>	<u>LCS</u> <u>%Recovery</u>	<u>LCS</u> <u>Qualifier</u>	<u>Limits</u>
Toluene-d8 (Surr)	95		75 - 120

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Client Sample ID: 907 87th Ave

Date Collected: 08/28/20 09:00

Date Received: 09/01/20 10:20

Lab Sample ID: 500-187133-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	560057	09/04/20 14:07	PMF	TAL CHI

Client Sample ID: 903 87th Ave

Date Collected: 08/28/20 09:15

Date Received: 09/01/20 10:20

Lab Sample ID: 500-187133-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	560057	09/04/20 14:34	PMF	TAL CHI

Client Sample ID: 875 Wyldwood Ln

Date Collected: 08/28/20 12:30

Date Received: 09/01/20 10:20

Lab Sample ID: 500-187133-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	560057	09/04/20 15:02	PMF	TAL CHI

Client Sample ID: Trip Blank

Date Collected: 08/28/20 00:00

Date Received: 09/01/20 10:20

Lab Sample ID: 500-187133-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	560057	09/04/20 11:49	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187133-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

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

Chain of Custody Record

378548




Environment Testing
TestAmerica

TAL-8210

Address: _____

Regulatory Program: DW NPDES RCRA Other:

Client Contact		Project Manager: Mitch Evenson			Site Contact: Kirsten Lee		Date: 8/31/20		COC No.:			
Company Name: Cedar Corp		Tel/Email:			Lab Contact: Sandie Fredrick		Carrier:		1 of 1 COCs			
Address:		Analysis Turnaround Time			Filtered Sample (Y/N) Perform MS / MSD (Y / N) VOCs		 500-187133 COC		Sampler: KAL			
City/State/Zip:		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS							TAT if different from Below _____		For Lab Use Only:	
Phone: 75-235-9081		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day									Walk-in Client:	
Fax:											Lab Sampling:	
Project Name: Town of Warren											Job / SDG No.:	
Site:							500-187133					
P O #												

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y / N)	Sample Specific Notes:
1 907 87th Ave	8/30/20	0900		DW	3	X		
2 903 87th Ave	↓	0915		↓	↓	↓		
3 875 Wildwood Ln	↓	1230		↓	↓	↓		
4 Trip Blank					1	↓		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard
 Flammable
 Skin Irritant
 Poison B
 Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client
 Disposal by Lab
 Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: Yes No
 Custody Seal No.: _____
 Cooler Temp. (°C): Obs'd: 0.3
 Corr'd: _____
 Therm ID No.: _____

Relinquished by: <i>Kirsten Lee</i>	Company: Cedar Corp	Date/Time: 8/31/20 1100	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: <i>Paula Buckley</i>	Company: TH	Date/Time: 9/1/20 1020

Part 1 18939-434 R12 EXP 03/17/00



Environment Testing
TestAmerica

ORIGIN ID: PHDA (330) 966-9677
MITCH EVENSON
CEDAR CORPORATION
604 WILSON AVENUE
MEMONONIE, WI 54751
UNITED STATES US

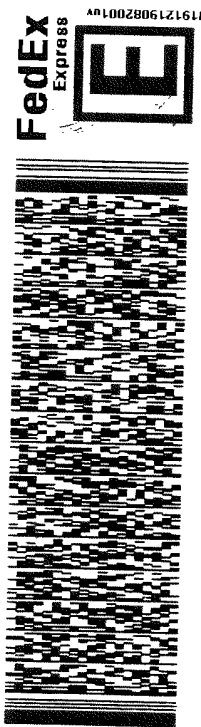
SHIP DATE: 23APR20
ACTWGT: 10.00 LB MAN
CAD: 0562065/CAFE9313

TO
EUROFINS TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 604843101

(709) 634-6200
REF: \$500 - 81957

RMA: ||| |||||



TRK# 0221 1728 5841 8138

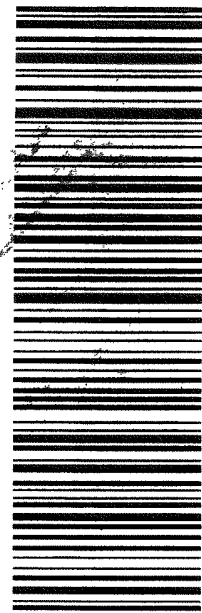
NA JOTA



500-187133 Wayt

RETURNS MON - SAT
TUE - 01 SEP 10:30A HT
PRIORITY OVERNIGHT

60484
IL-US
ORD



FID 543699 31AUC20 EAU 568C3/3044/05A2

565C4/7B3A/05A2



Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-187133-1

Login Number: 187133

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Buckley, Paula M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-187509-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
9/16/2020 10:28:30 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	17
QC Association	18
Surrogate Summary	19
QC Sample Results	20
Chronicle	24
Certification Summary	25
Chain of Custody	26
Receipt Checklists	27

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Job ID: 500-187509-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

**Job Narrative
500-187509-1**

Comments

No additional comments.

Receipt

The samples were received on 9/9/2020 10:20 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3° C.

GC/MS VOA

Method 8260B: Acetone was detected in the following samples: 967 80th Ave (500-187509-3), 898 Badlands Rd (500-187509-4) and Trip Blank (500-187509-5). The method blank associated with these samples was non-detect for Acetone. Acetone is a known lab contaminant; therefore all low level detects for this compound could be suspected as lab contamination.

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



Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: 836 Hidden Lake Rd

Lab Sample ID: 500-187509-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	0.30	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: 824 Hidden Lake Rd

Lab Sample ID: 500-187509-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.45	J B	2.0	0.37	ug/L	1		8260B	Total/NA

Client Sample ID: 967 80th Ave

Lab Sample ID: 500-187509-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: 898 Badlands Rd

Lab Sample ID: 500-187509-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.4	J	10	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 500-187509-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.4	J	10	1.7	ug/L	1		8260B	Total/NA
Chloroform	0.40	J B	2.0	0.37	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Euofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-187509-1	836 Hidden Lake Rd	Water	09/03/20 09:00	09/09/20 10:20	
500-187509-2	824 Hidden Lake Rd	Water	09/03/20 11:00	09/09/20 10:20	
500-187509-3	967 80th Ave	Water	09/04/20 12:00	09/09/20 10:20	
500-187509-4	898 Badlands Rd	Water	09/04/20 12:30	09/09/20 10:20	
500-187509-5	Trip Blank	Water	09/03/20 00:00	09/09/20 10:20	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: 836 Hidden Lake Rd

Lab Sample ID: 500-187509-1

Date Collected: 09/03/20 09:00

Matrix: Water

Date Received: 09/09/20 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			09/15/20 16:20	1
Benzene	<0.15		0.50	0.15	ug/L			09/15/20 16:20	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/15/20 16:20	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/15/20 16:20	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/15/20 16:20	1
Bromoform	<0.48		1.0	0.48	ug/L			09/15/20 16:20	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/15/20 16:20	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/15/20 16:20	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/15/20 16:20	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/15/20 16:20	1
Chloroform	<0.37		2.0	0.37	ug/L			09/15/20 16:20	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/15/20 16:20	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/15/20 16:20	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/15/20 16:20	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/15/20 16:20	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/15/20 16:20	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/15/20 16:20	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/15/20 16:20	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/15/20 16:20	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/15/20 16:20	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/15/20 16:20	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/15/20 16:20	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/15/20 16:20	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/15/20 16:20	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/15/20 16:20	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/15/20 16:20	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/15/20 16:20	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/15/20 16:20	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 16:20	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/15/20 16:20	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/15/20 16:20	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/15/20 16:20	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/15/20 16:20	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/15/20 16:20	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/15/20 16:20	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/15/20 16:20	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/15/20 16:20	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/15/20 16:20	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 16:20	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/15/20 16:20	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/15/20 16:20	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/15/20 16:20	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/15/20 16:20	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 16:20	1
Styrene	<0.39		1.0	0.39	ug/L			09/15/20 16:20	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 16:20	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/15/20 16:20	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/15/20 16:20	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/15/20 16:20	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: 836 Hidden Lake Rd

Lab Sample ID: 500-187509-1

Date Collected: 09/03/20 09:00

Matrix: Water

Date Received: 09/09/20 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/15/20 16:20	1
Toluene	<0.15		0.50	0.15	ug/L			09/15/20 16:20	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/15/20 16:20	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/15/20 16:20	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/15/20 16:20	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/15/20 16:20	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/15/20 16:20	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/15/20 16:20	1
Trichloroethylene	0.30	J	0.50	0.16	ug/L			09/15/20 16:20	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/15/20 16:20	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/15/20 16:20	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/15/20 16:20	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/15/20 16:20	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/15/20 16:20	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/15/20 16:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124					09/15/20 16:20	1
Dibromofluoromethane	111		75 - 120					09/15/20 16:20	1
1,2-Dichloroethane-d4 (Surr)	112		75 - 126					09/15/20 16:20	1
Toluene-d8 (Surr)	102		75 - 120					09/15/20 16:20	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: 824 Hidden Lake Rd

Lab Sample ID: 500-187509-2

Date Collected: 09/03/20 11:00

Matrix: Water

Date Received: 09/09/20 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			09/15/20 16:49	1
Benzene	<0.15		0.50	0.15	ug/L			09/15/20 16:49	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/15/20 16:49	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/15/20 16:49	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/15/20 16:49	1
Bromoform	<0.48		1.0	0.48	ug/L			09/15/20 16:49	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/15/20 16:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/15/20 16:49	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/15/20 16:49	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/15/20 16:49	1
Chloroform	0.45	J B	2.0	0.37	ug/L			09/15/20 16:49	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/15/20 16:49	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/15/20 16:49	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/15/20 16:49	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/15/20 16:49	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/15/20 16:49	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/15/20 16:49	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/15/20 16:49	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/15/20 16:49	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/15/20 16:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/15/20 16:49	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/15/20 16:49	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/15/20 16:49	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/15/20 16:49	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/15/20 16:49	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/15/20 16:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/15/20 16:49	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/15/20 16:49	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 16:49	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/15/20 16:49	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/15/20 16:49	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/15/20 16:49	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/15/20 16:49	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/15/20 16:49	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/15/20 16:49	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/15/20 16:49	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/15/20 16:49	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/15/20 16:49	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 16:49	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/15/20 16:49	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/15/20 16:49	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/15/20 16:49	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/15/20 16:49	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 16:49	1
Styrene	<0.39		1.0	0.39	ug/L			09/15/20 16:49	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 16:49	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/15/20 16:49	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/15/20 16:49	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/15/20 16:49	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: 824 Hidden Lake Rd

Lab Sample ID: 500-187509-2

Date Collected: 09/03/20 11:00

Matrix: Water

Date Received: 09/09/20 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/15/20 16:49	1
Toluene	<0.15		0.50	0.15	ug/L			09/15/20 16:49	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/15/20 16:49	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/15/20 16:49	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/15/20 16:49	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/15/20 16:49	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/15/20 16:49	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/15/20 16:49	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			09/15/20 16:49	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/15/20 16:49	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/15/20 16:49	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/15/20 16:49	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/15/20 16:49	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/15/20 16:49	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/15/20 16:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124					09/15/20 16:49	1
Dibromofluoromethane	112		75 - 120					09/15/20 16:49	1
1,2-Dichloroethane-d4 (Surr)	114		75 - 126					09/15/20 16:49	1
Toluene-d8 (Surr)	101		75 - 120					09/15/20 16:49	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: 967 80th Ave

Lab Sample ID: 500-187509-3

Date Collected: 09/04/20 12:00

Matrix: Water

Date Received: 09/09/20 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.8	J	10	1.7	ug/L			09/15/20 17:17	1
Benzene	<0.15		0.50	0.15	ug/L			09/15/20 17:17	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/15/20 17:17	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/15/20 17:17	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/15/20 17:17	1
Bromoform	<0.48		1.0	0.48	ug/L			09/15/20 17:17	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/15/20 17:17	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/15/20 17:17	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/15/20 17:17	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/15/20 17:17	1
Chloroform	<0.37		2.0	0.37	ug/L			09/15/20 17:17	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/15/20 17:17	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/15/20 17:17	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/15/20 17:17	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/15/20 17:17	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/15/20 17:17	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/15/20 17:17	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/15/20 17:17	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/15/20 17:17	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/15/20 17:17	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/15/20 17:17	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/15/20 17:17	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/15/20 17:17	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/15/20 17:17	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/15/20 17:17	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/15/20 17:17	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/15/20 17:17	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/15/20 17:17	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 17:17	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/15/20 17:17	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/15/20 17:17	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/15/20 17:17	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/15/20 17:17	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/15/20 17:17	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/15/20 17:17	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/15/20 17:17	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/15/20 17:17	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/15/20 17:17	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 17:17	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/15/20 17:17	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/15/20 17:17	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/15/20 17:17	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/15/20 17:17	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 17:17	1
Styrene	<0.39		1.0	0.39	ug/L			09/15/20 17:17	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 17:17	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/15/20 17:17	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/15/20 17:17	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/15/20 17:17	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: 967 80th Ave

Lab Sample ID: 500-187509-3

Date Collected: 09/04/20 12:00

Matrix: Water

Date Received: 09/09/20 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/15/20 17:17	1
Toluene	<0.15		0.50	0.15	ug/L			09/15/20 17:17	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/15/20 17:17	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/15/20 17:17	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/15/20 17:17	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/15/20 17:17	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/15/20 17:17	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/15/20 17:17	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			09/15/20 17:17	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/15/20 17:17	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/15/20 17:17	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/15/20 17:17	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/15/20 17:17	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/15/20 17:17	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/15/20 17:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124					09/15/20 17:17	1
Dibromofluoromethane	112		75 - 120					09/15/20 17:17	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126					09/15/20 17:17	1
Toluene-d8 (Surr)	101		75 - 120					09/15/20 17:17	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: 898 Badlands Rd

Lab Sample ID: 500-187509-4

Date Collected: 09/04/20 12:30

Matrix: Water

Date Received: 09/09/20 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.4	J	10	1.7	ug/L			09/15/20 17:46	1
Benzene	<0.15		0.50	0.15	ug/L			09/15/20 17:46	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/15/20 17:46	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/15/20 17:46	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/15/20 17:46	1
Bromoform	<0.48		1.0	0.48	ug/L			09/15/20 17:46	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/15/20 17:46	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/15/20 17:46	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/15/20 17:46	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/15/20 17:46	1
Chloroform	<0.37		2.0	0.37	ug/L			09/15/20 17:46	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/15/20 17:46	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/15/20 17:46	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/15/20 17:46	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/15/20 17:46	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/15/20 17:46	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/15/20 17:46	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/15/20 17:46	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/15/20 17:46	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/15/20 17:46	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/15/20 17:46	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/15/20 17:46	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/15/20 17:46	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/15/20 17:46	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/15/20 17:46	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/15/20 17:46	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/15/20 17:46	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/15/20 17:46	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 17:46	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/15/20 17:46	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/15/20 17:46	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/15/20 17:46	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/15/20 17:46	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/15/20 17:46	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/15/20 17:46	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/15/20 17:46	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/15/20 17:46	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/15/20 17:46	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 17:46	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/15/20 17:46	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/15/20 17:46	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/15/20 17:46	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/15/20 17:46	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 17:46	1
Styrene	<0.39		1.0	0.39	ug/L			09/15/20 17:46	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 17:46	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/15/20 17:46	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/15/20 17:46	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/15/20 17:46	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: 898 Badlands Rd

Lab Sample ID: 500-187509-4

Date Collected: 09/04/20 12:30

Matrix: Water

Date Received: 09/09/20 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/15/20 17:46	1
Toluene	<0.15		0.50	0.15	ug/L			09/15/20 17:46	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/15/20 17:46	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/15/20 17:46	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/15/20 17:46	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/15/20 17:46	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/15/20 17:46	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/15/20 17:46	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			09/15/20 17:46	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/15/20 17:46	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/15/20 17:46	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/15/20 17:46	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/15/20 17:46	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/15/20 17:46	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/15/20 17:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124					09/15/20 17:46	1
Dibromofluoromethane	113		75 - 120					09/15/20 17:46	1
1,2-Dichloroethane-d4 (Surr)	115		75 - 126					09/15/20 17:46	1
Toluene-d8 (Surr)	100		75 - 120					09/15/20 17:46	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-187509-5

Date Collected: 09/03/20 00:00

Matrix: Water

Date Received: 09/09/20 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.4	J	10	1.7	ug/L			09/15/20 18:14	1
Benzene	<0.15		0.50	0.15	ug/L			09/15/20 18:14	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/15/20 18:14	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/15/20 18:14	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/15/20 18:14	1
Bromoform	<0.48		1.0	0.48	ug/L			09/15/20 18:14	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/15/20 18:14	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/15/20 18:14	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/15/20 18:14	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/15/20 18:14	1
Chloroform	0.40	J B	2.0	0.37	ug/L			09/15/20 18:14	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/15/20 18:14	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/15/20 18:14	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/15/20 18:14	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/15/20 18:14	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/15/20 18:14	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/15/20 18:14	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/15/20 18:14	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/15/20 18:14	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/15/20 18:14	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/15/20 18:14	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/15/20 18:14	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/15/20 18:14	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/15/20 18:14	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/15/20 18:14	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/15/20 18:14	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/15/20 18:14	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/15/20 18:14	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 18:14	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/15/20 18:14	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/15/20 18:14	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/15/20 18:14	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/15/20 18:14	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/15/20 18:14	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/15/20 18:14	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/15/20 18:14	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/15/20 18:14	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/15/20 18:14	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 18:14	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/15/20 18:14	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/15/20 18:14	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/15/20 18:14	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/15/20 18:14	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 18:14	1
Styrene	<0.39		1.0	0.39	ug/L			09/15/20 18:14	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 18:14	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/15/20 18:14	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/15/20 18:14	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/15/20 18:14	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-187509-5

Date Collected: 09/03/20 00:00

Matrix: Water

Date Received: 09/09/20 10:20

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/15/20 18:14	1
Toluene	<0.15		0.50	0.15	ug/L			09/15/20 18:14	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/15/20 18:14	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/15/20 18:14	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/15/20 18:14	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/15/20 18:14	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/15/20 18:14	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/15/20 18:14	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			09/15/20 18:14	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/15/20 18:14	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/15/20 18:14	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/15/20 18:14	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/15/20 18:14	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/15/20 18:14	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/15/20 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		09/15/20 18:14	1
Dibromofluoromethane	112		75 - 120		09/15/20 18:14	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		09/15/20 18:14	1
Toluene-d8 (Surr)	100		75 - 120		09/15/20 18:14	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

GC/MS VOA

Analysis Batch: 561391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-187509-1	836 Hidden Lake Rd	Total/NA	Water	8260B	
500-187509-2	824 Hidden Lake Rd	Total/NA	Water	8260B	
500-187509-3	967 80th Ave	Total/NA	Water	8260B	
500-187509-4	898 Badlands Rd	Total/NA	Water	8260B	
500-187509-5	Trip Blank	Total/NA	Water	8260B	
MB 500-561391/6	Method Blank	Total/NA	Water	8260B	
LCS 500-561391/4	Lab Control Sample	Total/NA	Water	8260B	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-187509-1	836 Hidden Lake Rd	94	111	112	102
500-187509-2	824 Hidden Lake Rd	95	112	114	101
500-187509-3	967 80th Ave	94	112	113	101
500-187509-4	898 Badlands Rd	95	113	115	100
500-187509-5	Trip Blank	93	112	113	100
LCS 500-561391/4	Lab Control Sample	93	108	108	101
MB 500-561391/6	Method Blank	93	110	110	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-561391/6
Matrix: Water
Analysis Batch: 561391

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			09/15/20 10:10	1
Benzene	<0.15		0.50	0.15	ug/L			09/15/20 10:10	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/15/20 10:10	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/15/20 10:10	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/15/20 10:10	1
Bromoform	<0.48		1.0	0.48	ug/L			09/15/20 10:10	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/15/20 10:10	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/15/20 10:10	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/15/20 10:10	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/15/20 10:10	1
Chloroform	0.414	J	2.0	0.37	ug/L			09/15/20 10:10	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/15/20 10:10	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/15/20 10:10	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/15/20 10:10	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/15/20 10:10	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/15/20 10:10	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/15/20 10:10	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/15/20 10:10	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/15/20 10:10	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/15/20 10:10	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/15/20 10:10	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/15/20 10:10	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/15/20 10:10	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/15/20 10:10	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/15/20 10:10	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/15/20 10:10	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/15/20 10:10	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/15/20 10:10	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 10:10	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/15/20 10:10	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/15/20 10:10	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/15/20 10:10	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/15/20 10:10	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/15/20 10:10	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/15/20 10:10	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/15/20 10:10	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/15/20 10:10	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/15/20 10:10	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/15/20 10:10	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/15/20 10:10	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/15/20 10:10	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/15/20 10:10	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/15/20 10:10	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 10:10	1
Styrene	<0.39		1.0	0.39	ug/L			09/15/20 10:10	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/15/20 10:10	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/15/20 10:10	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/15/20 10:10	1

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

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

Lab Sample ID: MB 500-561391/6
Matrix: Water
Analysis Batch: 561391

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/15/20 10:10	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/15/20 10:10	1
Toluene	<0.15		0.50	0.15	ug/L			09/15/20 10:10	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/15/20 10:10	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/15/20 10:10	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/15/20 10:10	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/15/20 10:10	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/15/20 10:10	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/15/20 10:10	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			09/15/20 10:10	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/15/20 10:10	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/15/20 10:10	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/15/20 10:10	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/15/20 10:10	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/15/20 10:10	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/15/20 10:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		09/15/20 10:10	1
Dibromofluoromethane	110		75 - 120		09/15/20 10:10	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		09/15/20 10:10	1
Toluene-d8 (Surr)	100		75 - 120		09/15/20 10:10	1

Lab Sample ID: LCS 500-561391/4
Matrix: Water
Analysis Batch: 561391

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	39.1		ug/L		78	40 - 143
Benzene	50.0	45.2		ug/L		90	70 - 120
Bromobenzene	50.0	47.1		ug/L		94	70 - 122
Bromochloromethane	50.0	48.0		ug/L		96	65 - 122
Bromodichloromethane	50.0	47.6		ug/L		95	69 - 120
Bromoform	50.0	49.8		ug/L		100	56 - 132
Carbon disulfide	50.0	44.4		ug/L		89	66 - 120
Carbon tetrachloride	50.0	56.4		ug/L		113	59 - 133
Chlorobenzene	50.0	47.6		ug/L		95	70 - 120
Chloroethane	50.0	45.4		ug/L		91	48 - 136
Chloroform	50.0	47.7		ug/L		95	70 - 120
2-Chlorotoluene	50.0	44.8		ug/L		90	70 - 125
4-Chlorotoluene	50.0	45.5		ug/L		91	68 - 124
cis-1,2-Dichloroethylene	50.0	47.4		ug/L		95	70 - 125
cis-1,3-Dichloropropene	50.0	44.5		ug/L		89	64 - 127
Dibromochloromethane	50.0	49.0		ug/L		98	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	40.2		ug/L		80	56 - 123
1,2-Dibromoethane	50.0	45.3		ug/L		91	70 - 125
Dichlorodifluoromethane	50.0	39.8		ug/L		80	40 - 159
1,1-Dichloroethane	50.0	48.9		ug/L		98	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

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

Lab Sample ID: LCS 500-561391/4
Matrix: Water
Analysis Batch: 561391

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	51.3		ug/L		103	68 - 127
1,1-Dichloroethylene	50.0	48.5		ug/L		97	67 - 122
1,2-Dichloropropane	50.0	46.0		ug/L		92	67 - 130
1,3-Dichloropropane	50.0	44.3		ug/L		89	62 - 136
2,2-Dichloropropane	50.0	46.9		ug/L		94	58 - 139
1,1-Dichloropropene	50.0	49.1		ug/L		98	70 - 121
Ethylbenzene	50.0	48.5		ug/L		97	70 - 123
Hexachlorobutadiene	50.0	53.7		ug/L		107	51 - 150
Isopropylbenzene	50.0	47.2		ug/L		94	70 - 126
m-Dichlorobenzene	50.0	46.9		ug/L		94	70 - 125
Methyl bromide	50.0	63.5		ug/L		127	40 - 152
Methyl chloride	50.0	45.0		ug/L		90	56 - 152
Methylene bromide	50.0	45.9		ug/L		92	70 - 120
Methylene Chloride	50.0	43.8		ug/L		88	69 - 125
Methyl ethyl ketone (MEK)	50.0	43.6		ug/L		87	46 - 144
Methyl tert-butyl ether	50.0	42.7		ug/L		85	55 - 123
Naphthalene	50.0	41.8		ug/L		84	53 - 144
n-Butylbenzene	50.0	47.8		ug/L		96	68 - 125
N-Propylbenzene	50.0	46.1		ug/L		92	69 - 127
o-Dichlorobenzene	50.0	46.0		ug/L		92	70 - 125
p-Dichlorobenzene	50.0	47.0		ug/L		94	70 - 120
p-Isopropyltoluene	50.0	49.1		ug/L		98	70 - 125
sec-Butylbenzene	50.0	47.3		ug/L		95	70 - 123
Styrene	50.0	47.4		ug/L		95	70 - 120
tert-Butylbenzene	50.0	48.3		ug/L		97	70 - 121
1,1,1,2-Tetrachloroethane	50.0	51.1		ug/L		102	70 - 125
1,1,2,2-Tetrachloroethane	50.0	39.6		ug/L		79	62 - 140
Tetrachloroethylene	50.0	53.2		ug/L		106	70 - 128
Tetrahydrofuran	100	65.7		ug/L		66	59 - 139
Toluene	50.0	46.3		ug/L		93	70 - 125
1,2-trans-Dichloroethylene	50.0	48.2		ug/L		96	70 - 125
trans-1,3-Dichloropropene	50.0	44.3		ug/L		89	62 - 128
1,2,3-Trichlorobenzene	50.0	45.6		ug/L		91	51 - 145
1,2,4-Trichlorobenzene	50.0	45.9		ug/L		92	57 - 137
1,1,1-Trichloroethane	50.0	53.7		ug/L		107	70 - 125
1,1,2-Trichloroethane	50.0	44.2		ug/L		88	71 - 130
Trichloroethylene	50.0	51.8		ug/L		104	70 - 125
Trichlorofluoromethane	50.0	52.7		ug/L		105	55 - 128
1,2,3-Trichloropropane	50.0	44.4		ug/L		89	50 - 133
1,2,4-Trimethylbenzene	50.0	46.5		ug/L		93	70 - 123
1,3,5-Trimethylbenzene	50.0	46.6		ug/L		93	70 - 123
Vinyl chloride	50.0	41.6		ug/L		83	64 - 126
Xylenes, Total	100	94.4		ug/L		94	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane	108		75 - 120
1,2-Dichloroethane-d4 (Surr)	108		75 - 126

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

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

Lab Sample ID: LCS 500-561391/4

Matrix: Water

Analysis Batch: 561391

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

<i>Surrogate</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>
<i>Toluene-d8 (Surr)</i>	101		75 - 120

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Client Sample ID: 836 Hidden Lake Rd

Lab Sample ID: 500-187509-1

Date Collected: 09/03/20 09:00

Matrix: Water

Date Received: 09/09/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	561391	09/15/20 16:20	PMF	TAL CHI

Client Sample ID: 824 Hidden Lake Rd

Lab Sample ID: 500-187509-2

Date Collected: 09/03/20 11:00

Matrix: Water

Date Received: 09/09/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	561391	09/15/20 16:49	PMF	TAL CHI

Client Sample ID: 967 80th Ave

Lab Sample ID: 500-187509-3

Date Collected: 09/04/20 12:00

Matrix: Water

Date Received: 09/09/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	561391	09/15/20 17:17	PMF	TAL CHI

Client Sample ID: 898 Badlands Rd

Lab Sample ID: 500-187509-4

Date Collected: 09/04/20 12:30

Matrix: Water

Date Received: 09/09/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	561391	09/15/20 17:46	PMF	TAL CHI

Client Sample ID: Trip Blank

Lab Sample ID: 500-187509-5

Date Collected: 09/03/20 00:00

Matrix: Water

Date Received: 09/09/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	561391	09/15/20 18:14	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-187509-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15


Chain of Custody Record 397151 eurofins

Environment Testing
TestAmerica

Address: _____

Regulatory Program: DW NPDES RCRA Other:

TAL-8210

Client Contact Company Name: <u>Cedar Corp</u> Address: _____ City/State/Zip: _____ Phone: <u>715-235-9081</u> Fax: _____ Project Name: <u>Town of Warren</u> Site: _____ P O #: _____		Project Manager: <u>Mitch Evenson</u> Tel/Email: _____ Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Site Contact: <u>Kirsten Lee</u> Date: <u>9/8/20</u> Lab Contact: <u>Jamie Frank</u> Carrier: _____ COC No: _____ of _____ COCs Sampler: <u>HAL</u> For Lab Use Only: Walk-in Client: _____ Lab Sampling: _____ Job / SDG No.: <u>500-187509</u> Sample Specific Notes: _____	
		 500-187509 COC		Filtered Sample (Y/N) _____ Perform MS / MSD (Y/N) _____ <u>VOCs</u>	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.
<u>1 836 Hidden Lake Rd</u>	<u>9/3/20</u>	<u>0900</u>		<u>DW</u>	<u>3</u>
<u>2 824 Hidden Lake Rd</u>	<u>↓</u>	<u>1100</u>		<u>↓</u>	<u>↓</u>
<u>3 967 80th Ave</u>	<u>9/4/20</u>	<u>1200</u>		<u>↓</u>	<u>↓</u>
<u>4 898 Badlands Rd</u>	<u>↓</u>	<u>1230</u>		<u>↓</u>	<u>↓</u>
<u>5 Trip Blank</u>	<u>-</u>			<u>-</u>	<u>1</u>
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____					
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months		
Special Instructions/QC Requirements & Comments: _____					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: _____		Cooler Temp. (°C): Obs'd: <u>13</u> Corr'd: _____ Therm ID No.: _____	
Relinquished by: <u>Kirsten Lee</u>		Company: <u>Cedar Corp</u>		Date/Time: <u>9/8/20 0830</u>	
Relinquished by: _____		Company: _____		Date/Time: _____	
Relinquished by: _____		Company: _____		Date/Time: _____	
		Received by: <u>Shirley Scott</u>		Date/Time: <u>9/9/20 1020</u>	

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-187509-1

Login Number: 187509

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-188153-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
9/29/2020 2:32:49 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	9
QC Association	10
Surrogate Summary	11
QC Sample Results	12
Chronicle	16
Certification Summary	17
Chain of Custody	18
Receipt Checklists	19

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

Job ID: 500-188153-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-188153-1

Comments

No additional comments.

Receipt

The sample was received on 9/22/2020 9:35 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

Client Sample ID: 908 87th Ave

Lab Sample ID: 500-188153-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	3.8		0.50	0.16	ug/L	1		8260B	Total/NA

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

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-188153-1	908 87th Ave	Water	09/18/20 10:00	09/22/20 09:35	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

Client Sample ID: 908 87th Ave

Lab Sample ID: 500-188153-1

Date Collected: 09/18/20 10:00

Matrix: Water

Date Received: 09/22/20 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			09/28/20 17:49	1
Benzene	<0.15		0.50	0.15	ug/L			09/28/20 17:49	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/28/20 17:49	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/28/20 17:49	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/28/20 17:49	1
Bromoform	<0.48		1.0	0.48	ug/L			09/28/20 17:49	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/28/20 17:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/28/20 17:49	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/28/20 17:49	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/28/20 17:49	1
Chloroform	<0.37		2.0	0.37	ug/L			09/28/20 17:49	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/28/20 17:49	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/28/20 17:49	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/28/20 17:49	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/28/20 17:49	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/28/20 17:49	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/28/20 17:49	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/28/20 17:49	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/28/20 17:49	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/28/20 17:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/28/20 17:49	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/28/20 17:49	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/28/20 17:49	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/28/20 17:49	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/28/20 17:49	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/28/20 17:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/28/20 17:49	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/28/20 17:49	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/28/20 17:49	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/28/20 17:49	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/28/20 17:49	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/28/20 17:49	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/28/20 17:49	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/28/20 17:49	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/28/20 17:49	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/28/20 17:49	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/28/20 17:49	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/28/20 17:49	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/28/20 17:49	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/28/20 17:49	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/28/20 17:49	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/28/20 17:49	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/28/20 17:49	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/28/20 17:49	1
Styrene	<0.39		1.0	0.39	ug/L			09/28/20 17:49	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/28/20 17:49	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/28/20 17:49	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/28/20 17:49	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/28/20 17:49	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-188153-1

Client Sample ID: 908 87th Ave

Lab Sample ID: 500-188153-1

Date Collected: 09/18/20 10:00

Matrix: Water

Date Received: 09/22/20 09:35

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/28/20 17:49	1
Toluene	<0.15		0.50	0.15	ug/L			09/28/20 17:49	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/28/20 17:49	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/28/20 17:49	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/28/20 17:49	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/28/20 17:49	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/28/20 17:49	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/28/20 17:49	1
Trichloroethylene	3.8		0.50	0.16	ug/L			09/28/20 17:49	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/28/20 17:49	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/28/20 17:49	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/28/20 17:49	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/28/20 17:49	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/28/20 17:49	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/28/20 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		72 - 124		09/28/20 17:49	1
Dibromofluoromethane	108		75 - 120		09/28/20 17:49	1
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		09/28/20 17:49	1
Toluene-d8 (Surr)	100		75 - 120		09/28/20 17:49	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

GC/MS VOA

Analysis Batch: 563633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-188153-1	908 87th Ave	Total/NA	Water	8260B	
MB 500-563633/6	Method Blank	Total/NA	Water	8260B	
LCS 500-563633/4	Lab Control Sample	Total/NA	Water	8260B	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-188153-1	908 87th Ave	93	108	100	100
LCS 500-563633/4	Lab Control Sample	93	104	97	100
MB 500-563633/6	Method Blank	94	105	100	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-563633/6
Matrix: Water
Analysis Batch: 563633

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<1.7		10	1.7	ug/L			09/28/20 11:11	1
Benzene	<0.15		0.50	0.15	ug/L			09/28/20 11:11	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/28/20 11:11	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/28/20 11:11	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/28/20 11:11	1
Bromoform	<0.48		1.0	0.48	ug/L			09/28/20 11:11	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			09/28/20 11:11	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/28/20 11:11	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/28/20 11:11	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/28/20 11:11	1
Chloroform	<0.37		2.0	0.37	ug/L			09/28/20 11:11	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/28/20 11:11	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/28/20 11:11	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			09/28/20 11:11	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/28/20 11:11	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/28/20 11:11	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/28/20 11:11	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/28/20 11:11	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/28/20 11:11	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/28/20 11:11	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/28/20 11:11	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			09/28/20 11:11	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/28/20 11:11	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/28/20 11:11	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/28/20 11:11	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/28/20 11:11	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/28/20 11:11	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/28/20 11:11	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/28/20 11:11	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/28/20 11:11	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/28/20 11:11	1
Methyl bromide	<0.80		3.0	0.80	ug/L			09/28/20 11:11	1
Methyl chloride	<0.32		1.0	0.32	ug/L			09/28/20 11:11	1
Methylene bromide	<0.27		1.0	0.27	ug/L			09/28/20 11:11	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			09/28/20 11:11	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			09/28/20 11:11	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/28/20 11:11	1
Naphthalene	0.381	J	1.0	0.34	ug/L			09/28/20 11:11	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/28/20 11:11	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/28/20 11:11	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/28/20 11:11	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/28/20 11:11	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/28/20 11:11	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/28/20 11:11	1
Styrene	<0.39		1.0	0.39	ug/L			09/28/20 11:11	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/28/20 11:11	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/28/20 11:11	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/28/20 11:11	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

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

Lab Sample ID: MB 500-563633/6
Matrix: Water
Analysis Batch: 563633

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			09/28/20 11:11	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			09/28/20 11:11	1
Toluene	<0.15		0.50	0.15	ug/L			09/28/20 11:11	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			09/28/20 11:11	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/28/20 11:11	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/28/20 11:11	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/28/20 11:11	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/28/20 11:11	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/28/20 11:11	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			09/28/20 11:11	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/28/20 11:11	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/28/20 11:11	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/28/20 11:11	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/28/20 11:11	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/28/20 11:11	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/28/20 11:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		72 - 124		09/28/20 11:11	1
Dibromofluoromethane	105		75 - 120		09/28/20 11:11	1
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		09/28/20 11:11	1
Toluene-d8 (Surr)	100		75 - 120		09/28/20 11:11	1

Lab Sample ID: LCS 500-563633/4
Matrix: Water
Analysis Batch: 563633

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	32.4		ug/L		65	40 - 143
Benzene	50.0	46.8		ug/L		94	70 - 120
Bromobenzene	50.0	46.8		ug/L		94	70 - 122
Bromochloromethane	50.0	47.6		ug/L		95	65 - 122
Bromodichloromethane	50.0	46.5		ug/L		93	69 - 120
Bromoform	50.0	47.9		ug/L		96	56 - 132
Carbon disulfide	50.0	45.8		ug/L		92	66 - 120
Carbon tetrachloride	50.0	52.0		ug/L		104	59 - 133
Chlorobenzene	50.0	47.2		ug/L		94	70 - 120
Chloroethane	50.0	41.7		ug/L		83	48 - 136
Chloroform	50.0	46.4		ug/L		93	70 - 120
2-Chlorotoluene	50.0	44.6		ug/L		89	70 - 125
4-Chlorotoluene	50.0	44.8		ug/L		90	68 - 124
cis-1,2-Dichloroethylene	50.0	46.9		ug/L		94	70 - 125
cis-1,3-Dichloropropene	50.0	45.2		ug/L		90	64 - 127
Dibromochloromethane	50.0	46.3		ug/L		93	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	40.5		ug/L		81	56 - 123
1,2-Dibromoethane	50.0	43.1		ug/L		86	70 - 125
Dichlorodifluoromethane	50.0	39.2		ug/L		78	40 - 159
1,1-Dichloroethane	50.0	44.0		ug/L		88	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

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

Lab Sample ID: LCS 500-563633/4
Matrix: Water
Analysis Batch: 563633

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	43.3		ug/L		87	68 - 127
1,1-Dichloroethylene	50.0	47.8		ug/L		96	67 - 122
1,2-Dichloropropane	50.0	42.0		ug/L		84	67 - 130
1,3-Dichloropropane	50.0	44.4		ug/L		89	62 - 136
2,2-Dichloropropane	50.0	47.3		ug/L		95	58 - 139
1,1-Dichloropropene	50.0	49.6		ug/L		99	70 - 121
Ethylbenzene	50.0	46.5		ug/L		93	70 - 123
Hexachlorobutadiene	50.0	52.4		ug/L		105	51 - 150
Isopropylbenzene	50.0	46.6		ug/L		93	70 - 126
m-Dichlorobenzene	50.0	46.2		ug/L		92	70 - 125
Methyl bromide	50.0	65.3		ug/L		131	40 - 152
Methyl chloride	50.0	33.7		ug/L		67	56 - 152
Methylene bromide	50.0	46.0		ug/L		92	70 - 120
Methylene Chloride	50.0	44.2		ug/L		88	69 - 125
Methyl ethyl ketone (MEK)	50.0	35.2		ug/L		70	46 - 144
Methyl tert-butyl ether	50.0	42.9		ug/L		86	55 - 123
Naphthalene	50.0	40.9		ug/L		82	53 - 144
n-Butylbenzene	50.0	46.7		ug/L		93	68 - 125
N-Propylbenzene	50.0	45.7		ug/L		91	69 - 127
o-Dichlorobenzene	50.0	45.3		ug/L		91	70 - 125
p-Dichlorobenzene	50.0	45.9		ug/L		92	70 - 120
p-Isopropyltoluene	50.0	47.4		ug/L		95	70 - 125
sec-Butylbenzene	50.0	46.6		ug/L		93	70 - 123
Styrene	50.0	46.4		ug/L		93	70 - 120
tert-Butylbenzene	50.0	46.5		ug/L		93	70 - 121
1,1,1,2-Tetrachloroethane	50.0	48.3		ug/L		97	70 - 125
1,1,2,2-Tetrachloroethane	50.0	39.5		ug/L		79	62 - 140
Tetrachloroethylene	50.0	51.2		ug/L		102	70 - 128
Tetrahydrofuran	100	61.4		ug/L		61	59 - 139
Toluene	50.0	45.9		ug/L		92	70 - 125
1,2-trans-Dichloroethylene	50.0	47.7		ug/L		95	70 - 125
trans-1,3-Dichloropropene	50.0	44.3		ug/L		89	62 - 128
1,2,3-Trichlorobenzene	50.0	45.5		ug/L		91	51 - 145
1,2,4-Trichlorobenzene	50.0	46.3		ug/L		93	57 - 137
1,1,1-Trichloroethane	50.0	49.8		ug/L		100	70 - 125
1,1,2-Trichloroethane	50.0	43.0		ug/L		86	71 - 130
Trichloroethylene	50.0	51.1		ug/L		102	70 - 125
Trichlorofluoromethane	50.0	47.5		ug/L		95	55 - 128
1,2,3-Trichloropropane	50.0	41.7		ug/L		83	50 - 133
1,2,4-Trimethylbenzene	50.0	46.0		ug/L		92	70 - 123
1,3,5-Trimethylbenzene	50.0	46.2		ug/L		92	70 - 123
Vinyl chloride	50.0	39.1		ug/L		78	64 - 126
Xylenes, Total	100	90.9		ug/L		91	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane	104		75 - 120
1,2-Dichloroethane-d4 (Surr)	97		75 - 126

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

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

Lab Sample ID: LCS 500-563633/4
Matrix: Water
Analysis Batch: 563633

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

<u>Surrogate</u>	<u>LCS</u> <u>%Recovery</u>	<u>LCS</u> <u>Qualifier</u>	<u>Limits</u>
Toluene-d8 (Surr)	100		75 - 120

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

Client Sample ID: 908 87th Ave

Lab Sample ID: 500-188153-1

Date Collected: 09/18/20 10:00

Matrix: Water

Date Received: 09/22/20 09:35

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	563633	09/28/20 17:49	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-188153-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

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

Chain of Custody Record 435030

Environment Testing
TestAmerica

Address: _____

Regulatory Program: DW NPDES RCRA Other:

TAL-8210

Client Contact		Project Manager: Mitch Evenson		Site Contact: Kirsten Lee		Date: 9/21/20		COC No.:	
Company Name: Cedar Corp		Tel/Email:		Lab Contact: Sami F.		Carrier:		1 of 1 COCs	
Address:		Analysis Turnaround Time							
City/State/Zip:		<input type="checkbox"/> CALENDAR DAYS		<input type="checkbox"/> WORKING DAYS		 500-188153 COC			
Phone: 715-235-9081		TAT if different from Below _____							
Fax:		<input type="checkbox"/> 2 weeks							
Project Name: Town of Warren		<input type="checkbox"/> 1 week							
Site:		<input type="checkbox"/> 2 days							
P O #		<input type="checkbox"/> 1 day							
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N) _____ Perform MS / MSD (Y / N) _____ VOCS _____		
908 8 th Ave		9/18/20	1000		DW	3			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months		
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown									
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: 311		Corr'd: _____		Therm ID No.:	
Relinquished by: <i>W. Stadel</i>		Company: Cedar Corp		Date/Time: 9/21/20 0900		Received by:		Company: _____	
Relinquished by:		Company:		Date/Time:		Received by:		Company:	
Relinquished by:		Company:		Date/Time:		Received by: <i>Samuel...</i>		Company: <i>TA-INT</i>	
								Date/Time: 9/22/20 0935	

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-188153-1

Login Number: 188153

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-189034-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
10/16/2020 4:33:45 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	9
QC Association	10
Surrogate Summary	11
QC Sample Results	12
Chronicle	16
Certification Summary	17
Chain of Custody	18
Receipt Checklists	19

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

Job ID: 500-189034-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

**Job Narrative
500-189034-1**

Comments

No additional comments.

Receipt

The sample was received on 10/8/2020 9:30 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8° C.

GC/MS VOA

Method 8260B: The method blank for preparation batch 566656 contained Methylene chloride above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of sample was not performed.908 87th Ave DW (500-189034-1)

Method 8260B: The laboratory control sample (LCS) for 566656 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane and Dibromochloromethane. These analytes were biased low in the LCS and were not detected in the associated samples; therefore, the data have been reported.908 87th Ave DW (500-189034-1)

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



Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

Client Sample ID: 908 87th Ave DW

Lab Sample ID: 500-189034-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	3.0		0.50	0.16	ug/L	1		8260B	Total/NA

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

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-189034-1	908 87th Ave DW	Water	10/06/20 11:00	10/08/20 09:30	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

Client Sample ID: 908 87th Ave DW

Lab Sample ID: 500-189034-1

Date Collected: 10/06/20 11:00

Matrix: Water

Date Received: 10/08/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			10/15/20 17:19	1
Benzene	<0.15		0.50	0.15	ug/L			10/15/20 17:19	1
Bromobenzene	<0.36		1.0	0.36	ug/L			10/15/20 17:19	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/15/20 17:19	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			10/15/20 17:19	1
Bromoform	<0.48		1.0	0.48	ug/L			10/15/20 17:19	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/15/20 17:19	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/15/20 17:19	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/15/20 17:19	1
Chloroethane	<0.51		1.0	0.51	ug/L			10/15/20 17:19	1
Chloroform	<0.37		2.0	0.37	ug/L			10/15/20 17:19	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			10/15/20 17:19	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			10/15/20 17:19	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			10/15/20 17:19	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/15/20 17:19	1
Dibromochloromethane	<0.49 *		1.0	0.49	ug/L			10/15/20 17:19	1
1,2-Dibromo-3-Chloropropane	<2.0 *		5.0	2.0	ug/L			10/15/20 17:19	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			10/15/20 17:19	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/15/20 17:19	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/15/20 17:19	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/15/20 17:19	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			10/15/20 17:19	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/15/20 17:19	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			10/15/20 17:19	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			10/15/20 17:19	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			10/15/20 17:19	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/15/20 17:19	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			10/15/20 17:19	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/15/20 17:19	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			10/15/20 17:19	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/15/20 17:19	1
Methyl bromide	<0.80		3.0	0.80	ug/L			10/15/20 17:19	1
Methyl chloride	<0.32		1.0	0.32	ug/L			10/15/20 17:19	1
Methylene bromide	<0.27		1.0	0.27	ug/L			10/15/20 17:19	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			10/15/20 17:19	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			10/15/20 17:19	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/15/20 17:19	1
Naphthalene	<0.34		1.0	0.34	ug/L			10/15/20 17:19	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			10/15/20 17:19	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			10/15/20 17:19	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/15/20 17:19	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/15/20 17:19	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			10/15/20 17:19	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			10/15/20 17:19	1
Styrene	<0.39		1.0	0.39	ug/L			10/15/20 17:19	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			10/15/20 17:19	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			10/15/20 17:19	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/15/20 17:19	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			10/15/20 17:19	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-189034-1

Client Sample ID: 908 87th Ave DW

Lab Sample ID: 500-189034-1

Date Collected: 10/06/20 11:00

Matrix: Water

Date Received: 10/08/20 09:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			10/15/20 17:19	1
Toluene	<0.15		0.50	0.15	ug/L			10/15/20 17:19	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			10/15/20 17:19	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/15/20 17:19	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/15/20 17:19	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/15/20 17:19	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/15/20 17:19	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/15/20 17:19	1
Trichloroethylene	3.0		0.50	0.16	ug/L			10/15/20 17:19	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/15/20 17:19	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			10/15/20 17:19	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/15/20 17:19	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/15/20 17:19	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/15/20 17:19	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			10/15/20 17:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		10/15/20 17:19	1
Dibromofluoromethane	88		75 - 120		10/15/20 17:19	1
1,2-Dichloroethane-d4 (Surr)	90		75 - 126		10/15/20 17:19	1
Toluene-d8 (Surr)	96		75 - 120		10/15/20 17:19	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

GC/MS VOA

Analysis Batch: 566656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-189034-1	908 87th Ave DW	Total/NA	Water	8260B	
MB 500-566656/6	Method Blank	Total/NA	Water	8260B	
LCS 500-566656/4	Lab Control Sample	Total/NA	Water	8260B	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-189034-1	908 87th Ave DW	92	88	90	96
LCS 500-566656/4	Lab Control Sample	90	88	86	97
MB 500-566656/6	Method Blank	92	87	90	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-566656/6
Matrix: Water
Analysis Batch: 566656

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			10/15/20 11:31	1
Benzene	<0.15		0.50	0.15	ug/L			10/15/20 11:31	1
Bromobenzene	<0.36		1.0	0.36	ug/L			10/15/20 11:31	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/15/20 11:31	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			10/15/20 11:31	1
Bromoform	<0.48		1.0	0.48	ug/L			10/15/20 11:31	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/15/20 11:31	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/15/20 11:31	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/15/20 11:31	1
Chloroethane	<0.51		1.0	0.51	ug/L			10/15/20 11:31	1
Chloroform	<0.37		2.0	0.37	ug/L			10/15/20 11:31	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			10/15/20 11:31	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			10/15/20 11:31	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			10/15/20 11:31	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/15/20 11:31	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			10/15/20 11:31	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/15/20 11:31	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			10/15/20 11:31	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/15/20 11:31	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/15/20 11:31	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/15/20 11:31	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			10/15/20 11:31	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/15/20 11:31	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			10/15/20 11:31	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			10/15/20 11:31	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			10/15/20 11:31	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/15/20 11:31	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			10/15/20 11:31	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/15/20 11:31	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			10/15/20 11:31	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/15/20 11:31	1
Methyl bromide	<0.80		3.0	0.80	ug/L			10/15/20 11:31	1
Methyl chloride	<0.32		1.0	0.32	ug/L			10/15/20 11:31	1
Methylene bromide	<0.27		1.0	0.27	ug/L			10/15/20 11:31	1
Methylene Chloride	5.54		5.0	1.6	ug/L			10/15/20 11:31	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			10/15/20 11:31	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/15/20 11:31	1
Naphthalene	<0.34		1.0	0.34	ug/L			10/15/20 11:31	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			10/15/20 11:31	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			10/15/20 11:31	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/15/20 11:31	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/15/20 11:31	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			10/15/20 11:31	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			10/15/20 11:31	1
Styrene	<0.39		1.0	0.39	ug/L			10/15/20 11:31	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			10/15/20 11:31	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			10/15/20 11:31	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/15/20 11:31	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

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

Lab Sample ID: MB 500-566656/6
Matrix: Water
Analysis Batch: 566656

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			10/15/20 11:31	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			10/15/20 11:31	1
Toluene	<0.15		0.50	0.15	ug/L			10/15/20 11:31	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			10/15/20 11:31	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/15/20 11:31	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/15/20 11:31	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/15/20 11:31	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/15/20 11:31	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/15/20 11:31	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			10/15/20 11:31	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/15/20 11:31	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			10/15/20 11:31	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/15/20 11:31	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/15/20 11:31	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/15/20 11:31	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			10/15/20 11:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		72 - 124		10/15/20 11:31	1
Dibromofluoromethane	87		75 - 120		10/15/20 11:31	1
1,2-Dichloroethane-d4 (Surr)	90		75 - 126		10/15/20 11:31	1
Toluene-d8 (Surr)	96		75 - 120		10/15/20 11:31	1

Lab Sample ID: LCS 500-566656/4
Matrix: Water
Analysis Batch: 566656

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	30.1		ug/L		60	40 - 143
Benzene	50.0	43.2		ug/L		86	70 - 120
Bromobenzene	50.0	38.5		ug/L		77	70 - 122
Bromochloromethane	50.0	39.5		ug/L		79	65 - 122
Bromodichloromethane	50.0	35.7		ug/L		71	69 - 120
Bromoform	50.0	31.0		ug/L		62	56 - 132
Carbon disulfide	50.0	39.9		ug/L		80	66 - 120
Carbon tetrachloride	50.0	40.8		ug/L		82	59 - 133
Chlorobenzene	50.0	44.1		ug/L		88	70 - 120
Chloroethane	50.0	53.6		ug/L		107	48 - 136
Chloroform	50.0	38.7		ug/L		77	70 - 120
2-Chlorotoluene	50.0	43.3		ug/L		87	70 - 125
4-Chlorotoluene	50.0	43.0		ug/L		86	68 - 124
cis-1,2-Dichloroethylene	50.0	41.0		ug/L		82	70 - 125
cis-1,3-Dichloropropene	50.0	37.9		ug/L		76	64 - 127
Dibromochloromethane	50.0	33.0	*	ug/L		66	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	26.3	*	ug/L		53	56 - 123
1,2-Dibromoethane	50.0	35.4		ug/L		71	70 - 125
Dichlorodifluoromethane	50.0	49.9		ug/L		100	40 - 159
1,1-Dichloroethane	50.0	43.7		ug/L		87	70 - 125

Euofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

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

Lab Sample ID: LCS 500-566656/4

Matrix: Water

Analysis Batch: 566656

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	40.6		ug/L		81	68 - 127
1,1-Dichloroethylene	50.0	41.4		ug/L		83	67 - 122
1,2-Dichloropropane	50.0	45.4		ug/L		91	67 - 130
1,3-Dichloropropane	50.0	38.2		ug/L		76	62 - 136
2,2-Dichloropropane	50.0	46.4		ug/L		93	58 - 139
1,1-Dichloropropene	50.0	45.3		ug/L		91	70 - 121
Ethylbenzene	50.0	45.4		ug/L		91	70 - 123
Hexachlorobutadiene	50.0	50.2		ug/L		100	51 - 150
Isopropylbenzene	50.0	44.5		ug/L		89	70 - 126
m-Dichlorobenzene	50.0	42.9		ug/L		86	70 - 125
Methyl bromide	50.0	48.1		ug/L		96	40 - 152
Methyl chloride	50.0	52.3		ug/L		105	56 - 152
Methylene bromide	50.0	37.6		ug/L		75	70 - 120
Methylene Chloride	50.0	38.4		ug/L		77	69 - 125
Methyl ethyl ketone (MEK)	50.0	38.9		ug/L		78	46 - 144
Methyl tert-butyl ether	50.0	40.4		ug/L		81	55 - 123
Naphthalene	50.0	36.5		ug/L		73	53 - 144
n-Butylbenzene	50.0	50.1		ug/L		100	68 - 125
N-Propylbenzene	50.0	46.4		ug/L		93	69 - 127
o-Dichlorobenzene	50.0	39.6		ug/L		79	70 - 125
p-Dichlorobenzene	50.0	42.2		ug/L		84	70 - 120
p-Isopropyltoluene	50.0	49.9		ug/L		100	70 - 125
sec-Butylbenzene	50.0	47.1		ug/L		94	70 - 123
Styrene	50.0	42.4		ug/L		85	70 - 120
tert-Butylbenzene	50.0	46.5		ug/L		93	70 - 121
1,1,1,2-Tetrachloroethane	50.0	40.1		ug/L		80	70 - 125
1,1,2,2-Tetrachloroethane	50.0	31.8		ug/L		64	62 - 140
Tetrachloroethylene	50.0	46.7		ug/L		93	70 - 128
Tetrahydrofuran	100	83.2		ug/L		83	59 - 139
Toluene	50.0	45.0		ug/L		90	70 - 125
1,2-trans-Dichloroethylene	50.0	42.5		ug/L		85	70 - 125
trans-1,3-Dichloropropene	50.0	35.1		ug/L		70	62 - 128
1,2,3-Trichlorobenzene	50.0	40.6		ug/L		81	51 - 145
1,2,4-Trichlorobenzene	50.0	41.9		ug/L		84	57 - 137
1,1,1-Trichloroethane	50.0	41.8		ug/L		84	70 - 125
1,1,2-Trichloroethane	50.0	37.1		ug/L		74	71 - 130
Trichloroethylene	50.0	45.0		ug/L		90	70 - 125
Trichlorofluoromethane	50.0	38.5		ug/L		77	55 - 128
1,2,3-Trichloropropane	50.0	32.4		ug/L		65	50 - 133
1,2,4-Trimethylbenzene	50.0	43.7		ug/L		87	70 - 123
1,3,5-Trimethylbenzene	50.0	44.3		ug/L		89	70 - 123
Vinyl chloride	50.0	50.5		ug/L		101	64 - 126
Xylenes, Total	100	93.7		ug/L		94	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	90		72 - 124
Dibromofluoromethane	88		75 - 120
1,2-Dichloroethane-d4 (Surr)	86		75 - 126

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

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

Lab Sample ID: LCS 500-566656/4

Matrix: Water

Analysis Batch: 566656

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

<u>Surrogate</u>	<u>LCS</u> <u>%Recovery</u>	<u>LCS</u> <u>Qualifier</u>	<u>Limits</u>
Toluene-d8 (Surr)	97		75 - 120

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

Client Sample ID: 908 87th Ave DW

Lab Sample ID: 500-189034-1

Date Collected: 10/06/20 11:00

Matrix: Water

Date Received: 10/08/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	566656	10/15/20 17:19	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-189034-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

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


Chain of Custody Record 439379 eurofins

Environment Testing
TestAmerica

Address: _____

Regulatory Program: DW NPDES RCRA Other:

TAL-8210

Client Contact	Project Manager: <u>Mitch Evenson</u>	Site Contact: <u>Kirsten Lee</u>	Date: <u>10/7/20</u>	COC No: _____					
Company Name: <u>Cedar Corp</u>	Tel/Email: _____	Lab Contact: <u>Sandie French</u>	Carrier: _____	_____ of _____ COCs					
Address: _____	Analysis Turnaround Time		 500-189034 COC	Sampler: <u>KAL</u>					
City/State/Zip: _____	<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS			For Lab Use Only:					
Phone: <u>715-235-9081</u>	TAT if different from Below _____			Walk-in Client: _____					
Fax: _____	<input type="checkbox"/> 2 weeks			Lab Sampling: _____					
Project Name: <u>Town of Warren</u>	<input type="checkbox"/> 1 week			Job / SDG No.: <u>500-189034</u>					
Site: _____	<input type="checkbox"/> 2 days								
P O # _____	<input type="checkbox"/> 1 day								
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)		Sample Specific Notes:
<u>908 87th Ave DW</u>	<u>10/6/20</u>	<u>1100</u>		<u>DW</u>	<u>3</u>	<u>X</u>	<u>VOCs</u>		
Preservation Used: <u>1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other</u>						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.						<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown									
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No.: _____		Cooler Temp. (°C): Obs'd: <u>1.5</u> Corr'd: <u>2.0</u>		Therm ID No.: _____		
Relinquished by: <u>Kirsten Lee</u>	Company: <u>Cedar Corp</u>		Date/Time: <u>10/7/20 1330</u>		Received by: _____		Company: _____		Date/Time: _____
Relinquished by: _____	Company: _____		Date/Time: _____		Received by: _____		Company: _____		Date/Time: _____
Relinquished by: _____	Company: _____		Date/Time: _____		Received in Laboratory by: <u>Paula Buckley</u>		Company: <u>TH</u>		Date/Time: <u>10/8/20 0930</u>

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-189034-1

Login Number: 189034

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Buckley, Paula M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-191211-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
11/25/2020 9:13:47 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	11
QC Association	12
Surrogate Summary	13
QC Sample Results	14
Chronicle	18
Certification Summary	19
Chain of Custody	20
Receipt Checklists	21

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Job ID: 500-191211-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

**Job Narrative
500-191211-1**

Comments

No additional comments.

Receipt

The samples were received on 11/17/2020 10:10 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.5° C.

GC/MS VOA

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Client Sample ID: 908 87th Ave Raw

Lab Sample ID: 500-191211-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	3.6		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: 908 87th Ave DW

Lab Sample ID: 500-191211-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-191211-1	908 87th Ave Raw	Water	11/11/20 10:30	11/17/20 10:10	
500-191211-2	908 87th Ave DW	Water	11/11/20 10:30	11/17/20 10:10	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Client Sample ID: 908 87th Ave Raw

Lab Sample ID: 500-191211-1

Date Collected: 11/11/20 10:30

Matrix: Water

Date Received: 11/17/20 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			11/23/20 19:10	1
Benzene	<0.15		0.50	0.15	ug/L			11/23/20 19:10	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/23/20 19:10	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/23/20 19:10	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/23/20 19:10	1
Bromoform	<0.48		1.0	0.48	ug/L			11/23/20 19:10	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			11/23/20 19:10	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/23/20 19:10	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/23/20 19:10	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/23/20 19:10	1
Chloroform	<0.37		2.0	0.37	ug/L			11/23/20 19:10	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/23/20 19:10	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/23/20 19:10	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			11/23/20 19:10	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/23/20 19:10	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/23/20 19:10	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/23/20 19:10	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/23/20 19:10	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/23/20 19:10	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/23/20 19:10	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/23/20 19:10	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			11/23/20 19:10	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/23/20 19:10	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/23/20 19:10	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/23/20 19:10	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/23/20 19:10	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/23/20 19:10	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/23/20 19:10	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/23/20 19:10	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/23/20 19:10	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/23/20 19:10	1
Methyl bromide	<0.80		3.0	0.80	ug/L			11/23/20 19:10	1
Methyl chloride	<0.32		1.0	0.32	ug/L			11/23/20 19:10	1
Methylene bromide	<0.27		1.0	0.27	ug/L			11/23/20 19:10	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/23/20 19:10	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			11/23/20 19:10	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/23/20 19:10	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/23/20 19:10	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/23/20 19:10	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/23/20 19:10	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/23/20 19:10	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/23/20 19:10	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/23/20 19:10	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/23/20 19:10	1
Styrene	<0.39		1.0	0.39	ug/L			11/23/20 19:10	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/23/20 19:10	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/23/20 19:10	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/23/20 19:10	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			11/23/20 19:10	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Client Sample ID: 908 87th Ave Raw

Lab Sample ID: 500-191211-1

Date Collected: 11/11/20 10:30

Matrix: Water

Date Received: 11/17/20 10:10

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			11/23/20 19:10	1
Toluene	<0.15		0.50	0.15	ug/L			11/23/20 19:10	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			11/23/20 19:10	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/23/20 19:10	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/23/20 19:10	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/23/20 19:10	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/23/20 19:10	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/23/20 19:10	1
Trichloroethylene	3.6		0.50	0.16	ug/L			11/23/20 19:10	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/23/20 19:10	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/23/20 19:10	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/23/20 19:10	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/23/20 19:10	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/23/20 19:10	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/23/20 19:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124					11/23/20 19:10	1
Dibromofluoromethane	98		75 - 120					11/23/20 19:10	1
1,2-Dichloroethane-d4 (Surr)	93		75 - 126					11/23/20 19:10	1
Toluene-d8 (Surr)	93		75 - 120					11/23/20 19:10	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Client Sample ID: 908 87th Ave DW

Lab Sample ID: 500-191211-2

Date Collected: 11/11/20 10:30

Matrix: Water

Date Received: 11/17/20 10:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			11/23/20 19:37	1
Benzene	<0.15		0.50	0.15	ug/L			11/23/20 19:37	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/23/20 19:37	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/23/20 19:37	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/23/20 19:37	1
Bromoform	<0.48		1.0	0.48	ug/L			11/23/20 19:37	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			11/23/20 19:37	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/23/20 19:37	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/23/20 19:37	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/23/20 19:37	1
Chloroform	<0.37		2.0	0.37	ug/L			11/23/20 19:37	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/23/20 19:37	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/23/20 19:37	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			11/23/20 19:37	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/23/20 19:37	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/23/20 19:37	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/23/20 19:37	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/23/20 19:37	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/23/20 19:37	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/23/20 19:37	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/23/20 19:37	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			11/23/20 19:37	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/23/20 19:37	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/23/20 19:37	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/23/20 19:37	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/23/20 19:37	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/23/20 19:37	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/23/20 19:37	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/23/20 19:37	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/23/20 19:37	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/23/20 19:37	1
Methyl bromide	<0.80		3.0	0.80	ug/L			11/23/20 19:37	1
Methyl chloride	<0.32		1.0	0.32	ug/L			11/23/20 19:37	1
Methylene bromide	<0.27		1.0	0.27	ug/L			11/23/20 19:37	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/23/20 19:37	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			11/23/20 19:37	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/23/20 19:37	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/23/20 19:37	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/23/20 19:37	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/23/20 19:37	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/23/20 19:37	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/23/20 19:37	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/23/20 19:37	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/23/20 19:37	1
Styrene	<0.39		1.0	0.39	ug/L			11/23/20 19:37	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/23/20 19:37	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/23/20 19:37	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/23/20 19:37	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			11/23/20 19:37	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Client Sample ID: 908 87th Ave DW

Lab Sample ID: 500-191211-2

Date Collected: 11/11/20 10:30

Matrix: Water

Date Received: 11/17/20 10:10

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			11/23/20 19:37	1
Toluene	<0.15		0.50	0.15	ug/L			11/23/20 19:37	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			11/23/20 19:37	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/23/20 19:37	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/23/20 19:37	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/23/20 19:37	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/23/20 19:37	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/23/20 19:37	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			11/23/20 19:37	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/23/20 19:37	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/23/20 19:37	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/23/20 19:37	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/23/20 19:37	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/23/20 19:37	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/23/20 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		72 - 124		11/23/20 19:37	1
Dibromofluoromethane	97		75 - 120		11/23/20 19:37	1
1,2-Dichloroethane-d4 (Surr)	93		75 - 126		11/23/20 19:37	1
Toluene-d8 (Surr)	93		75 - 120		11/23/20 19:37	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

GC/MS VOA

Analysis Batch: 573547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191211-1	908 87th Ave Raw	Total/NA	Water	8260B	
500-191211-2	908 87th Ave DW	Total/NA	Water	8260B	
MB 500-573547/6	Method Blank	Total/NA	Water	8260B	
LCS 500-573547/5	Lab Control Sample	Total/NA	Water	8260B	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-191211-1	908 87th Ave Raw	89	98	93	93
500-191211-2	908 87th Ave DW	88	97	93	93
LCS 500-573547/5	Lab Control Sample	88	94	91	94
MB 500-573547/6	Method Blank	87	93	93	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-191211-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-573547/6
 Matrix: Water
 Analysis Batch: 573547

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<1.7		10	1.7	ug/L			11/23/20 12:21	1
Benzene	<0.15		0.50	0.15	ug/L			11/23/20 12:21	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/23/20 12:21	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/23/20 12:21	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/23/20 12:21	1
Bromoform	<0.48		1.0	0.48	ug/L			11/23/20 12:21	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			11/23/20 12:21	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/23/20 12:21	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/23/20 12:21	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/23/20 12:21	1
Chloroform	<0.37		2.0	0.37	ug/L			11/23/20 12:21	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/23/20 12:21	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/23/20 12:21	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			11/23/20 12:21	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/23/20 12:21	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/23/20 12:21	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/23/20 12:21	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/23/20 12:21	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/23/20 12:21	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/23/20 12:21	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/23/20 12:21	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			11/23/20 12:21	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/23/20 12:21	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/23/20 12:21	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/23/20 12:21	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/23/20 12:21	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/23/20 12:21	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/23/20 12:21	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/23/20 12:21	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/23/20 12:21	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/23/20 12:21	1
Methyl bromide	<0.80		3.0	0.80	ug/L			11/23/20 12:21	1
Methyl chloride	<0.32		1.0	0.32	ug/L			11/23/20 12:21	1
Methylene bromide	<0.27		1.0	0.27	ug/L			11/23/20 12:21	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/23/20 12:21	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			11/23/20 12:21	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/23/20 12:21	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/23/20 12:21	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/23/20 12:21	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/23/20 12:21	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/23/20 12:21	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/23/20 12:21	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/23/20 12:21	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/23/20 12:21	1
Styrene	<0.39		1.0	0.39	ug/L			11/23/20 12:21	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/23/20 12:21	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/23/20 12:21	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/23/20 12:21	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

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

Lab Sample ID: MB 500-573547/6
Matrix: Water
Analysis Batch: 573547

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			11/23/20 12:21	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			11/23/20 12:21	1
Toluene	<0.15		0.50	0.15	ug/L			11/23/20 12:21	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			11/23/20 12:21	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/23/20 12:21	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/23/20 12:21	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/23/20 12:21	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/23/20 12:21	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/23/20 12:21	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			11/23/20 12:21	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/23/20 12:21	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/23/20 12:21	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/23/20 12:21	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/23/20 12:21	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/23/20 12:21	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/23/20 12:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		72 - 124		11/23/20 12:21	1
Dibromofluoromethane	93		75 - 120		11/23/20 12:21	1
1,2-Dichloroethane-d4 (Surr)	93		75 - 126		11/23/20 12:21	1
Toluene-d8 (Surr)	93		75 - 120		11/23/20 12:21	1

Lab Sample ID: LCS 500-573547/5
Matrix: Water
Analysis Batch: 573547

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	61.2		ug/L		122	40 - 143
Benzene	50.0	44.8		ug/L		90	70 - 120
Bromobenzene	50.0	39.7		ug/L		79	70 - 122
Bromochloromethane	50.0	45.8		ug/L		92	65 - 122
Bromodichloromethane	50.0	42.7		ug/L		85	69 - 120
Bromoform	50.0	40.7		ug/L		81	56 - 132
Carbon disulfide	50.0	45.8		ug/L		92	66 - 120
Carbon tetrachloride	50.0	47.7		ug/L		95	59 - 133
Chlorobenzene	50.0	45.2		ug/L		90	70 - 120
Chloroethane	50.0	60.7		ug/L		121	48 - 136
Chloroform	50.0	42.8		ug/L		86	70 - 120
2-Chlorotoluene	50.0	43.3		ug/L		87	70 - 125
4-Chlorotoluene	50.0	43.4		ug/L		87	68 - 124
cis-1,2-Dichloroethylene	50.0	43.8		ug/L		88	70 - 125
cis-1,3-Dichloropropene	50.0	38.8		ug/L		78	64 - 127
Dibromochloromethane	50.0	41.6		ug/L		83	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	31.7		ug/L		63	56 - 123
1,2-Dibromoethane	50.0	38.6		ug/L		77	70 - 125
Dichlorodifluoromethane	50.0	54.6		ug/L		109	40 - 159
1,1-Dichloroethane	50.0	48.6		ug/L		97	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

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

Lab Sample ID: LCS 500-573547/5

Matrix: Water

Analysis Batch: 573547

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	45.3		ug/L		91	68 - 127
1,1-Dichloroethylene	50.0	45.1		ug/L		90	67 - 122
1,2-Dichloropropane	50.0	49.0		ug/L		98	67 - 130
1,3-Dichloropropane	50.0	38.3		ug/L		77	62 - 136
2,2-Dichloropropane	50.0	47.6		ug/L		95	58 - 139
1,1-Dichloropropene	50.0	45.1		ug/L		90	70 - 121
Ethylbenzene	50.0	48.1		ug/L		96	70 - 123
Hexachlorobutadiene	50.0	45.4		ug/L		91	51 - 150
Isopropylbenzene	50.0	45.8		ug/L		92	70 - 126
m-Dichlorobenzene	50.0	43.7		ug/L		87	70 - 125
Methyl bromide	50.0	54.0		ug/L		108	40 - 152
Methyl chloride	50.0	65.9		ug/L		132	56 - 152
Methylene bromide	50.0	41.9		ug/L		84	70 - 120
Methylene Chloride	50.0	40.6		ug/L		81	69 - 125
Methyl ethyl ketone (MEK)	50.0	58.5		ug/L		117	46 - 144
Methyl tert-butyl ether	50.0	41.5		ug/L		83	55 - 123
Naphthalene	50.0	35.3		ug/L		71	53 - 144
n-Butylbenzene	50.0	47.5		ug/L		95	68 - 125
N-Propylbenzene	50.0	46.6		ug/L		93	69 - 127
o-Dichlorobenzene	50.0	41.0		ug/L		82	70 - 125
p-Dichlorobenzene	50.0	42.6		ug/L		85	70 - 120
p-Isopropyltoluene	50.0	48.5		ug/L		97	70 - 125
sec-Butylbenzene	50.0	47.1		ug/L		94	70 - 123
Styrene	50.0	43.8		ug/L		88	70 - 120
tert-Butylbenzene	50.0	46.4		ug/L		93	70 - 121
1,1,1,2-Tetrachloroethane	50.0	44.7		ug/L		89	70 - 125
1,1,2,2-Tetrachloroethane	50.0	35.3		ug/L		71	62 - 140
Tetrachloroethylene	50.0	49.0		ug/L		98	70 - 128
Tetrahydrofuran	100	104		ug/L		104	59 - 139
Toluene	50.0	45.6		ug/L		91	70 - 125
1,2-trans-Dichloroethylene	50.0	45.6		ug/L		91	70 - 125
trans-1,3-Dichloropropene	50.0	36.1		ug/L		72	62 - 128
1,2,3-Trichlorobenzene	50.0	34.7		ug/L		69	51 - 145
1,2,4-Trichlorobenzene	50.0	35.5		ug/L		71	57 - 137
1,1,1-Trichloroethane	50.0	46.8		ug/L		94	70 - 125
1,1,2-Trichloroethane	50.0	39.2		ug/L		78	71 - 130
Trichloroethylene	50.0	48.0		ug/L		96	70 - 125
Trichlorofluoromethane	50.0	43.6		ug/L		87	55 - 128
1,2,3-Trichloropropane	50.0	34.7		ug/L		69	50 - 133
1,2,4-Trimethylbenzene	50.0	44.6		ug/L		89	70 - 123
1,3,5-Trimethylbenzene	50.0	45.1		ug/L		90	70 - 123
Vinyl chloride	50.0	56.1		ug/L		112	64 - 126
Xylenes, Total	100	96.2		ug/L		96	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	88		72 - 124
Dibromofluoromethane	94		75 - 120
1,2-Dichloroethane-d4 (Surr)	91		75 - 126

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

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

Lab Sample ID: LCS 500-573547/5

Matrix: Water

Analysis Batch: 573547

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

<u>Surrogate</u>	<u>LCS</u> <u>%Recovery</u>	<u>LCS</u> <u>Qualifier</u>	<u>Limits</u>
Toluene-d8 (Surr)	94		75 - 120

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Client Sample ID: 908 87th Ave Raw

Lab Sample ID: 500-191211-1

Date Collected: 11/11/20 10:30

Matrix: Water

Date Received: 11/17/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	573547	11/23/20 19:10	PMF	TAL CHI

Client Sample ID: 908 87th Ave DW

Lab Sample ID: 500-191211-2

Date Collected: 11/11/20 10:30

Matrix: Water

Date Received: 11/17/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	573547	11/23/20 19:37	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-191211-1

Laboratory: Eurofins TestAmerica, Chicago

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


Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

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

Address: _____

Regulatory Program: DW NPDES RCRA Other:

TAL-8210

Client Contact Company Name: Cedar Corp Address: City/State/Zip: Phone: 715-235-9081 Fax: Project Name: Town of Women Site: P O #		Project Manager: Mitch E. Tel/Email:		Site Contact: Kirsten L. Lab Contact: Sandie F.		Date: 11/16/20 Carrier:		COC No: _____ of _____ COCs Sampler: KAL For Lab Use Only: Walk-in Client: Lab Sampling:	
		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) Perform MS / MSD (Y/N) VOGS		 500-191211 COC		Job / SDG No.: 500-191211	
Sample Identification								Sample Specific Notes:	
		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.			
1 908 87th Ave Raw 2 908 87th Ave DW		11/16/20 ↓	1030 ↓		DW ↓	3 ↓	↓		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____									
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: 24 Corr'd: 0.5		Therm ID No.:			
Relinquished by: [Signature]		Company: Cedar Corp		Date/Time: 11/16/20 0800		Received by:		Date/Time:	
Relinquished by:		Company:		Date/Time:		Received by:		Date/Time:	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by: [Signature]		Date/Time: 11/17/20 1010	

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-191211-1

Login Number: 191211

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-193754-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
1/21/2021 2:08:26 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	9
QC Association	10
Surrogate Summary	11
QC Sample Results	12
Chronicle	19
Certification Summary	20
Chain of Custody	21
Receipt Checklists	22

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Job ID: 500-193754-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

**Job Narrative
500-193754-1**

Comments

No additional comments.

Receipt

The sample was received on 1/14/2021 10:05 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° C.

GC/MS VOA

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Client Sample ID: 852 Polen Dr Raw

Lab Sample ID: 500-193754-1

No Detections.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-193754-1	852 Polen Dr Raw	Water	01/12/21 11:00	01/14/21 10:05	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Client Sample ID: 852 Polen Dr Raw

Lab Sample ID: 500-193754-1

Date Collected: 01/12/21 11:00

Matrix: Water

Date Received: 01/14/21 10:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			01/19/21 18:26	1
Benzene	<0.15		0.50	0.15	ug/L			01/19/21 18:26	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/19/21 18:26	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/19/21 18:26	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/19/21 18:26	1
Bromoform	<0.48		1.0	0.48	ug/L			01/19/21 18:26	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			01/19/21 18:26	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/19/21 18:26	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/19/21 18:26	1
Chloroethane	<0.51	F1	1.0	0.51	ug/L			01/19/21 18:26	1
Chloroform	<0.37		2.0	0.37	ug/L			01/19/21 18:26	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/19/21 18:26	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/19/21 18:26	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			01/19/21 18:26	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/19/21 18:26	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/19/21 18:26	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/19/21 18:26	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/19/21 18:26	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/19/21 18:26	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/19/21 18:26	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/19/21 18:26	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			01/19/21 18:26	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/19/21 18:26	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/19/21 18:26	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/19/21 18:26	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/19/21 18:26	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/19/21 18:26	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/19/21 18:26	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/19/21 18:26	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/19/21 18:26	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/19/21 18:26	1
Methyl bromide	<0.80		3.0	0.80	ug/L			01/19/21 18:26	1
Methyl chloride	<0.32		1.0	0.32	ug/L			01/19/21 18:26	1
Methylene bromide	<0.27		1.0	0.27	ug/L			01/19/21 18:26	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/19/21 18:26	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			01/19/21 18:26	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/19/21 18:26	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/19/21 18:26	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/19/21 18:26	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/19/21 18:26	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/19/21 18:26	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/19/21 18:26	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/19/21 18:26	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/19/21 18:26	1
Styrene	<0.39		1.0	0.39	ug/L			01/19/21 18:26	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/19/21 18:26	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/19/21 18:26	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/19/21 18:26	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			01/19/21 18:26	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Client Sample ID: 852 Polen Dr Raw

Lab Sample ID: 500-193754-1

Date Collected: 01/12/21 11:00

Matrix: Water

Date Received: 01/14/21 10:05

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			01/19/21 18:26	1
Toluene	<0.15		0.50	0.15	ug/L			01/19/21 18:26	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			01/19/21 18:26	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/19/21 18:26	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/19/21 18:26	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/19/21 18:26	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/19/21 18:26	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/19/21 18:26	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			01/19/21 18:26	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/19/21 18:26	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/19/21 18:26	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/19/21 18:26	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/19/21 18:26	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/19/21 18:26	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/19/21 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124		01/19/21 18:26	1
Dibromofluoromethane (Surr)	88		75 - 120		01/19/21 18:26	1
1,2-Dichloroethane-d4 (Surr)	101		75 - 126		01/19/21 18:26	1
Toluene-d8 (Surr)	93		75 - 120		01/19/21 18:26	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

GC/MS VOA

Analysis Batch: 581520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-193754-1	852 Polen Dr Raw	Total/NA	Water	8260B	
MB 500-581520/6	Method Blank	Total/NA	Water	8260B	
LCS 500-581520/4	Lab Control Sample	Total/NA	Water	8260B	
500-193754-1 MS	852 Polen Dr Raw	Total/NA	Water	8260B	
500-193754-1 MSD	852 Polen Dr Raw	Total/NA	Water	8260B	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-193754-1	852 Polen Dr Raw	90	88	101	93
500-193754-1 MS	852 Polen Dr Raw	94	93	103	93
500-193754-1 MSD	852 Polen Dr Raw	94	93	103	93
LCS 500-581520/4	Lab Control Sample	92	91	98	95
MB 500-581520/6	Method Blank	92	88	99	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-581520/6
Matrix: Water
Analysis Batch: 581520

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			01/19/21 10:44	1
Benzene	<0.15		0.50	0.15	ug/L			01/19/21 10:44	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/19/21 10:44	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/19/21 10:44	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/19/21 10:44	1
Bromoform	<0.48		1.0	0.48	ug/L			01/19/21 10:44	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			01/19/21 10:44	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/19/21 10:44	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/19/21 10:44	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/19/21 10:44	1
Chloroform	<0.37		2.0	0.37	ug/L			01/19/21 10:44	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/19/21 10:44	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/19/21 10:44	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			01/19/21 10:44	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/19/21 10:44	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/19/21 10:44	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/19/21 10:44	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/19/21 10:44	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			01/19/21 10:44	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/19/21 10:44	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/19/21 10:44	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			01/19/21 10:44	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/19/21 10:44	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/19/21 10:44	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/19/21 10:44	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/19/21 10:44	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/19/21 10:44	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/19/21 10:44	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/19/21 10:44	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/19/21 10:44	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/19/21 10:44	1
Methyl bromide	<0.80		3.0	0.80	ug/L			01/19/21 10:44	1
Methyl chloride	<0.32		1.0	0.32	ug/L			01/19/21 10:44	1
Methylene bromide	<0.27		1.0	0.27	ug/L			01/19/21 10:44	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/19/21 10:44	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			01/19/21 10:44	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/19/21 10:44	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/19/21 10:44	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/19/21 10:44	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/19/21 10:44	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/19/21 10:44	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/19/21 10:44	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/19/21 10:44	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/19/21 10:44	1
Styrene	<0.39		1.0	0.39	ug/L			01/19/21 10:44	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/19/21 10:44	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/19/21 10:44	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/19/21 10:44	1

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

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

Lab Sample ID: MB 500-581520/6
Matrix: Water
Analysis Batch: 581520

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

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			01/19/21 10:44	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			01/19/21 10:44	1
Toluene	<0.15		0.50	0.15	ug/L			01/19/21 10:44	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			01/19/21 10:44	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/19/21 10:44	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/19/21 10:44	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/19/21 10:44	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/19/21 10:44	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/19/21 10:44	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			01/19/21 10:44	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/19/21 10:44	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			01/19/21 10:44	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/19/21 10:44	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/19/21 10:44	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/19/21 10:44	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/19/21 10:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	92		72 - 124		01/19/21 10:44	1
Dibromofluoromethane (Surr)	88		75 - 120		01/19/21 10:44	1
1,2-Dichloroethane-d4 (Surr)	99		75 - 126		01/19/21 10:44	1
Toluene-d8 (Surr)	93		75 - 120		01/19/21 10:44	1

Lab Sample ID: LCS 500-581520/4
Matrix: Water
Analysis Batch: 581520

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	51.4		ug/L		103	70 - 120
Bromobenzene	50.0	44.5		ug/L		89	70 - 122
Bromochloromethane	50.0	45.5		ug/L		91	65 - 122
Bromodichloromethane	50.0	43.3		ug/L		87	69 - 120
Bromoform	50.0	32.6		ug/L		65	56 - 132
Carbon disulfide	50.0	43.5		ug/L		87	66 - 120
Carbon tetrachloride	50.0	47.0		ug/L		94	59 - 133
Chlorobenzene	50.0	49.5		ug/L		99	70 - 120
Chloroethane	50.0	63.8		ug/L		128	48 - 136
Chloroform	50.0	47.1		ug/L		94	70 - 120
2-Chlorotoluene	50.0	50.3		ug/L		101	70 - 125
4-Chlorotoluene	50.0	49.4		ug/L		99	68 - 124
cis-1,2-Dichloroethylene	50.0	46.4		ug/L		93	70 - 125
cis-1,3-Dichloropropene	50.0	43.0		ug/L		86	64 - 127
Dibromochloromethane	50.0	36.2		ug/L		72	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	31.5		ug/L		63	56 - 123
1,2-Dibromoethane	50.0	41.9		ug/L		84	70 - 125
Dichlorodifluoromethane	50.0	54.0		ug/L		108	40 - 159
1,1-Dichloroethane	50.0	53.4		ug/L		107	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

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

Lab Sample ID: LCS 500-581520/4
Matrix: Water
Analysis Batch: 581520

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	51.8		ug/L		104	68 - 127
1,1-Dichloroethylene	50.0	46.2		ug/L		92	67 - 122
1,2-Dichloropropane	50.0	53.6		ug/L		107	67 - 130
1,3-Dichloropropane	50.0	45.8		ug/L		92	62 - 136
2,2-Dichloropropane	50.0	55.1		ug/L		110	58 - 139
1,1-Dichloropropene	50.0	52.2		ug/L		104	70 - 121
Ethylbenzene	50.0	52.7		ug/L		105	70 - 123
Hexachlorobutadiene	50.0	57.1		ug/L		114	51 - 150
Isopropylbenzene	50.0	52.5		ug/L		105	70 - 126
m-Dichlorobenzene	50.0	48.9		ug/L		98	70 - 125
Methyl bromide	50.0	55.4		ug/L		111	40 - 152
Methyl chloride	50.0	62.5		ug/L		125	56 - 152
Methylene bromide	50.0	45.2		ug/L		90	70 - 120
Methylene Chloride	50.0	43.4		ug/L		87	69 - 125
Methyl ethyl ketone (MEK)	50.0	35.0		ug/L		70	46 - 144
Methyl tert-butyl ether	50.0	48.5		ug/L		97	55 - 123
Naphthalene	50.0	40.2		ug/L		80	53 - 144
n-Butylbenzene	50.0	53.9		ug/L		108	68 - 125
N-Propylbenzene	50.0	52.4		ug/L		105	69 - 127
o-Dichlorobenzene	50.0	45.6		ug/L		91	70 - 125
p-Dichlorobenzene	50.0	47.4		ug/L		95	70 - 120
p-Isopropyltoluene	50.0	54.2		ug/L		108	70 - 125
sec-Butylbenzene	50.0	53.6		ug/L		107	70 - 123
Styrene	50.0	48.7		ug/L		97	70 - 120
tert-Butylbenzene	50.0	52.0		ug/L		104	70 - 121
1,1,1,2-Tetrachloroethane	50.0	44.8		ug/L		90	70 - 125
1,1,2,2-Tetrachloroethane	50.0	39.3		ug/L		79	62 - 140
Tetrachloroethylene	50.0	51.2		ug/L		102	70 - 128
Tetrahydrofuran	100	82.5		ug/L		83	59 - 139
Toluene	50.0	50.0		ug/L		100	70 - 125
1,2-trans-Dichloroethylene	50.0	47.4		ug/L		95	70 - 125
trans-1,3-Dichloropropene	50.0	39.3		ug/L		79	62 - 128
1,2,3-Trichlorobenzene	50.0	44.5		ug/L		89	51 - 145
1,2,4-Trichlorobenzene	50.0	45.1		ug/L		90	57 - 137
1,1,1-Trichloroethane	50.0	48.9		ug/L		98	70 - 125
1,1,2-Trichloroethane	50.0	42.4		ug/L		85	71 - 130
Trichloroethylene	50.0	49.9		ug/L		100	70 - 125
Trichlorofluoromethane	50.0	49.2		ug/L		98	55 - 128
1,2,3-Trichloropropane	50.0	40.5		ug/L		81	50 - 133
1,2,4-Trimethylbenzene	50.0	50.6		ug/L		101	70 - 123
1,3,5-Trimethylbenzene	50.0	51.8		ug/L		104	70 - 123
Vinyl chloride	50.0	54.7		ug/L		109	64 - 126
Xylenes, Total	100	107		ug/L		107	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	92		72 - 124
Dibromofluoromethane (Surr)	91		75 - 120
1,2-Dichloroethane-d4 (Surr)	98		75 - 126

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

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

Lab Sample ID: LCS 500-581520/4
Matrix: Water
Analysis Batch: 581520

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

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	95		75 - 120

Lab Sample ID: 500-193754-1 MS
Matrix: Water
Analysis Batch: 581520

Client Sample ID: 852 Polen Dr Raw
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Acetone	<1.7		50.0	29.5		ug/L		59		40 - 143
Benzene	<0.15		50.0	52.1		ug/L		104		70 - 120
Bromobenzene	<0.36		50.0	46.4		ug/L		93		70 - 122
Bromochloromethane	<0.43		50.0	47.9		ug/L		96		65 - 122
Bromodichloromethane	<0.37		50.0	44.1		ug/L		88		69 - 120
Bromoform	<0.48		50.0	33.4		ug/L		67		56 - 132
Carbon disulfide	<0.45		50.0	43.1		ug/L		86		66 - 120
Carbon tetrachloride	<0.38		50.0	45.1		ug/L		90		59 - 133
Chlorobenzene	<0.39		50.0	49.1		ug/L		98		70 - 120
Chloroethane	<0.51	F1	50.0	66.0		ug/L		132		48 - 136
Chloroform	<0.37		50.0	49.1		ug/L		98		70 - 120
2-Chlorotoluene	<0.31		50.0	49.8		ug/L		100		70 - 125
4-Chlorotoluene	<0.35		50.0	49.2		ug/L		98		68 - 124
cis-1,2-Dichloroethylene	<0.41		50.0	48.3		ug/L		97		70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	41.8		ug/L		84		64 - 127
Dibromochloromethane	<0.49		50.0	36.0		ug/L		72		68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	32.8		ug/L		66		56 - 123
1,2-Dibromoethane	<0.39		50.0	42.1		ug/L		84		70 - 125
Dichlorodifluoromethane	<0.67		50.0	53.6		ug/L		107		40 - 159
1,1-Dichloroethane	<0.41		50.0	54.5		ug/L		109		70 - 125
1,2-Dichloroethane	<0.39		50.0	54.6		ug/L		109		68 - 127
1,1-Dichloroethylene	<0.39		50.0	45.4		ug/L		91		67 - 122
1,2-Dichloropropane	<0.43		50.0	56.6		ug/L		113		67 - 130
1,3-Dichloropropane	<0.36		50.0	47.4		ug/L		95		62 - 136
2,2-Dichloropropane	<0.44		50.0	50.7		ug/L		101		58 - 139
1,1-Dichloropropene	<0.30		50.0	50.6		ug/L		101		70 - 121
Ethylbenzene	<0.18		50.0	51.6		ug/L		103		70 - 123
Hexachlorobutadiene	<0.45		50.0	56.1		ug/L		112		51 - 150
Isopropylbenzene	<0.39		50.0	51.1		ug/L		102		70 - 126
m-Dichlorobenzene	<0.40		50.0	48.7		ug/L		97		70 - 125
Methyl bromide	<0.80		50.0	58.0		ug/L		116		40 - 152
Methyl chloride	<0.32		50.0	63.9		ug/L		128		56 - 152
Methylene bromide	<0.27		50.0	47.7		ug/L		95		70 - 120
Methylene Chloride	<1.6		50.0	46.2		ug/L		92		69 - 125
Methyl ethyl ketone (MEK)	<2.1		50.0	37.4		ug/L		75		46 - 144
Methyl tert-butyl ether	<0.39		50.0	51.2		ug/L		102		55 - 123
Naphthalene	<0.34		50.0	41.5		ug/L		83		53 - 144
n-Butylbenzene	<0.39		50.0	51.4		ug/L		103		68 - 125
N-Propylbenzene	<0.41		50.0	51.4		ug/L		103		69 - 127
o-Dichlorobenzene	<0.33		50.0	47.2		ug/L		94		70 - 125
p-Dichlorobenzene	<0.36		50.0	47.9		ug/L		96		70 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

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

Lab Sample ID: 500-193754-1 MS
Matrix: Water
Analysis Batch: 581520

Client Sample ID: 852 Polen Dr Raw
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	<0.36		50.0	52.4		ug/L		105	70 - 125
sec-Butylbenzene	<0.40		50.0	52.3		ug/L		105	70 - 123
Styrene	<0.39		50.0	48.6		ug/L		97	70 - 120
tert-Butylbenzene	<0.40		50.0	51.1		ug/L		102	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	44.9		ug/L		90	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	40.8		ug/L		82	62 - 140
Tetrachloroethylene	<0.37		50.0	48.6		ug/L		97	70 - 128
Tetrahydrofuran	<1.9		100	87.7		ug/L		88	59 - 139
Toluene	<0.15		50.0	49.3		ug/L		99	70 - 125
1,2-trans-Dichloroethylene	<0.35		50.0	47.7		ug/L		95	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	38.3		ug/L		77	62 - 128
1,2,3-Trichlorobenzene	<0.46		50.0	45.8		ug/L		92	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	43.3		ug/L		87	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	48.4		ug/L		97	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	43.8		ug/L		88	71 - 130
Trichloroethylene	<0.16		50.0	48.9		ug/L		98	70 - 125
Trichlorofluoromethane	<0.43		50.0	49.6		ug/L		99	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	42.4		ug/L		85	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	50.1		ug/L		100	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	51.1		ug/L		102	70 - 123
Vinyl chloride	<0.20		50.0	55.2		ug/L		110	64 - 126
Xylenes, Total	<0.22		100	105		ug/L		105	70 - 125

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	94		72 - 124
Dibromofluoromethane (Surr)	93		75 - 120
1,2-Dichloroethane-d4 (Surr)	103		75 - 126
Toluene-d8 (Surr)	93		75 - 120

Lab Sample ID: 500-193754-1 MSD
Matrix: Water
Analysis Batch: 581520

Client Sample ID: 852 Polen Dr Raw
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	<1.7		50.0	30.5		ug/L		61	40 - 143	3	20
Benzene	<0.15		50.0	54.1		ug/L		108	70 - 120	4	20
Bromobenzene	<0.36		50.0	47.6		ug/L		95	70 - 122	3	20
Bromochloromethane	<0.43		50.0	50.3		ug/L		101	65 - 122	5	20
Bromodichloromethane	<0.37		50.0	46.1		ug/L		92	69 - 120	4	20
Bromoform	<0.48		50.0	35.6		ug/L		71	56 - 132	6	20
Carbon disulfide	<0.45		50.0	44.9		ug/L		90	66 - 120	4	20
Carbon tetrachloride	<0.38		50.0	46.9		ug/L		94	59 - 133	4	20
Chlorobenzene	<0.39		50.0	51.4		ug/L		103	70 - 120	4	20
Chloroethane	<0.51	F1	50.0	69.8	F1	ug/L		140	48 - 136	6	20
Chloroform	<0.37		50.0	50.6		ug/L		101	70 - 120	3	20
2-Chlorotoluene	<0.31		50.0	52.0		ug/L		104	70 - 125	4	20
4-Chlorotoluene	<0.35		50.0	51.0		ug/L		102	68 - 124	4	20
cis-1,2-Dichloroethylene	<0.41		50.0	50.3		ug/L		101	70 - 125	4	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

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

Lab Sample ID: 500-193754-1 MSD

Client Sample ID: 852 Polen Dr Raw

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 581520

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	<0.42		50.0	43.9		ug/L		88	64 - 127	5	20
Dibromochloromethane	<0.49		50.0	38.2		ug/L		76	68 - 125	6	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	35.1		ug/L		70	56 - 123	7	20
1,2-Dibromoethane	<0.39		50.0	45.1		ug/L		90	70 - 125	7	20
Dichlorodifluoromethane	<0.67		50.0	54.8		ug/L		110	40 - 159	2	20
1,1-Dichloroethane	<0.41		50.0	56.4		ug/L		113	70 - 125	4	20
1,2-Dichloroethane	<0.39		50.0	56.7		ug/L		113	68 - 127	4	20
1,1-Dichloroethylene	<0.39		50.0	47.2		ug/L		94	67 - 122	4	20
1,2-Dichloropropane	<0.43		50.0	60.5		ug/L		121	67 - 130	7	20
1,3-Dichloropropane	<0.36		50.0	49.5		ug/L		99	62 - 136	4	20
2,2-Dichloropropane	<0.44		50.0	54.3		ug/L		109	58 - 139	7	20
1,1-Dichloropropene	<0.30		50.0	52.8		ug/L		106	70 - 121	4	20
Ethylbenzene	<0.18		50.0	53.9		ug/L		108	70 - 123	4	20
Hexachlorobutadiene	<0.45		50.0	59.1		ug/L		118	51 - 150	5	20
Isopropylbenzene	<0.39		50.0	53.0		ug/L		106	70 - 126	4	20
m-Dichlorobenzene	<0.40		50.0	50.2		ug/L		100	70 - 125	3	20
Methyl bromide	<0.80		50.0	60.4		ug/L		121	40 - 152	4	20
Methyl chloride	<0.32		50.0	66.9		ug/L		134	56 - 152	5	20
Methylene bromide	<0.27		50.0	49.1		ug/L		98	70 - 120	3	20
Methylene Chloride	<1.6		50.0	48.2		ug/L		96	69 - 125	4	20
Methyl ethyl ketone (MEK)	<2.1		50.0	39.6		ug/L		79	46 - 144	6	20
Methyl tert-butyl ether	<0.39		50.0	55.0		ug/L		110	55 - 123	7	20
Naphthalene	<0.34		50.0	45.2		ug/L		90	53 - 144	8	20
n-Butylbenzene	<0.39		50.0	52.8		ug/L		106	68 - 125	3	20
N-Propylbenzene	<0.41		50.0	53.2		ug/L		106	69 - 127	3	20
o-Dichlorobenzene	<0.33		50.0	48.6		ug/L		97	70 - 125	3	20
p-Dichlorobenzene	<0.36		50.0	49.3		ug/L		99	70 - 120	3	20
p-Isopropyltoluene	<0.36		50.0	54.1		ug/L		108	70 - 125	3	20
sec-Butylbenzene	<0.40		50.0	54.2		ug/L		108	70 - 123	3	20
Styrene	<0.39		50.0	51.1		ug/L		102	70 - 120	5	20
tert-Butylbenzene	<0.40		50.0	52.6		ug/L		105	70 - 121	3	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	46.7		ug/L		93	70 - 125	4	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	44.4		ug/L		89	62 - 140	8	20
Tetrachloroethylene	<0.37		50.0	50.1		ug/L		100	70 - 128	3	20
Tetrahydrofuran	<1.9		100	91.5		ug/L		92	59 - 139	4	20
Toluene	<0.15		50.0	51.0		ug/L		102	70 - 125	3	20
1,2-trans-Dichloroethylene	<0.35		50.0	49.5		ug/L		99	70 - 125	4	20
trans-1,3-Dichloropropene	<0.36		50.0	41.4		ug/L		83	62 - 128	8	20
1,2,3-Trichlorobenzene	<0.46		50.0	48.2		ug/L		96	51 - 145	5	20
1,2,4-Trichlorobenzene	<0.34		50.0	45.0		ug/L		90	57 - 137	4	20
1,1,1-Trichloroethane	<0.38		50.0	50.7		ug/L		101	70 - 125	5	20
1,1,2-Trichloroethane	<0.35		50.0	46.3		ug/L		93	71 - 130	5	20
Trichloroethylene	<0.16		50.0	51.4		ug/L		103	70 - 125	5	20
Trichlorofluoromethane	<0.43		50.0	51.3		ug/L		103	55 - 128	3	20
1,2,3-Trichloropropane	<0.41		50.0	43.9		ug/L		88	50 - 133	3	20
1,2,4-Trimethylbenzene	<0.36		50.0	52.0		ug/L		104	70 - 123	4	20
1,3,5-Trimethylbenzene	<0.25		50.0	52.5		ug/L		105	70 - 123	3	20
Vinyl chloride	<0.20		50.0	57.2		ug/L		114	64 - 126	4	20
Xylenes, Total	<0.22		100	109		ug/L		109	70 - 125	3	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

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

<i>Surrogate</i>	<i>MSD MSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>4-Bromofluorobenzene (Surr)</i>	94		72 - 124
<i>Dibromofluoromethane (Surr)</i>	93		75 - 120
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		75 - 126
<i>Toluene-d8 (Surr)</i>	93		75 - 120

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

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Client Sample ID: 852 Polen Dr Raw

Lab Sample ID: 500-193754-1

Date Collected: 01/12/21 11:00

Matrix: Water

Date Received: 01/14/21 10:05

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	581520	01/19/21 18:26	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-193754-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

1

2

3

4

5

6

7

8

9

10

11

12

13

14


15



Address _____

Regulatory Program: DW NPDES RCRA Other

TAL-8210

Client Contact Company Name: Cedar Corp Address: City/State/Zip: Phone: Fax: Project Name: Town of Warren Site: PO#		Project Manager. Tel/Email: Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day			Site Contact Kirsten Lee Lab Contact Sandie F Date: 1/12/21 Carrier:		COC No _____ of _____ COCs Sampler: KAL For Lab Use Only Walk-in Client _____ Lab Sampling _____ Job / SDG No. 500-193754			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N) Perform MS / MSD (Y/N)	 500-193754 COC		Sample Specific Notes
1 852 Polen Dr Raw		1/12/21	1100	PW	3	3	X			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other		Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample <input type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments:										
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____			Cooler Temp (°C) Obs'd <u>16</u> Corr'd <u>21</u>		Therm ID No _____			
Relinquished by <u>Kristen Lee</u>		Company <u>Cedar Corp</u>		Date/Time <u>1/12/21 0900</u>		Received by _____		Company _____		Date/Time _____
Relinquished by _____		Company _____		Date/Time _____		Received by _____		Company _____		Date/Time _____
Relinquished by _____		Company _____		Date/Time _____		Received by <u>Shirley Scott</u> Laboratory of _____		Company <u>ETA-CHEM</u>		Date/Time <u>1/14/21 1005</u>

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

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-193754-1

Login Number: 193754

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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.	True	

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-194179-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
2/5/2021 11:42:10 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	9
QC Association	10
Surrogate Summary	11
QC Sample Results	12
Chronicle	19
Certification Summary	20
Chain of Custody	21
Receipt Checklists	22

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Job ID: 500-194179-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-194179-1

Comments

No additional comments.

Receipt

The sample was received on 1/27/2021 9:45 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.6° C.

GC/MS VOA

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Client Sample ID: 922 80th Ave Raw

Lab Sample ID: 500-194179-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	0.80		0.50	0.16	ug/L	1		8260B	Total/NA

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

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-194179-1	922 80th Ave Raw	Water	01/25/21 12:30	01/27/21 09:45	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Client Sample ID: 922 80th Ave Raw

Lab Sample ID: 500-194179-1

Date Collected: 01/25/21 12:30

Matrix: Water

Date Received: 01/27/21 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			02/04/21 17:21	1
Benzene	<0.15		0.50	0.15	ug/L			02/04/21 17:21	1
Bromobenzene	<0.36		1.0	0.36	ug/L			02/04/21 17:21	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			02/04/21 17:21	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			02/04/21 17:21	1
Bromoform	<0.48		1.0	0.48	ug/L			02/04/21 17:21	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			02/04/21 17:21	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			02/04/21 17:21	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			02/04/21 17:21	1
Chloroethane	<0.51		1.0	0.51	ug/L			02/04/21 17:21	1
Chloroform	<0.37		2.0	0.37	ug/L			02/04/21 17:21	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			02/04/21 17:21	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			02/04/21 17:21	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			02/04/21 17:21	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			02/04/21 17:21	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			02/04/21 17:21	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			02/04/21 17:21	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			02/04/21 17:21	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			02/04/21 17:21	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			02/04/21 17:21	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			02/04/21 17:21	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			02/04/21 17:21	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			02/04/21 17:21	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			02/04/21 17:21	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			02/04/21 17:21	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			02/04/21 17:21	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			02/04/21 17:21	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			02/04/21 17:21	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			02/04/21 17:21	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			02/04/21 17:21	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			02/04/21 17:21	1
Methyl bromide	<0.80		3.0	0.80	ug/L			02/04/21 17:21	1
Methyl chloride	<0.32		1.0	0.32	ug/L			02/04/21 17:21	1
Methylene bromide	<0.27		1.0	0.27	ug/L			02/04/21 17:21	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			02/04/21 17:21	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			02/04/21 17:21	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			02/04/21 17:21	1
Naphthalene	<0.34		1.0	0.34	ug/L			02/04/21 17:21	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			02/04/21 17:21	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			02/04/21 17:21	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			02/04/21 17:21	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			02/04/21 17:21	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			02/04/21 17:21	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			02/04/21 17:21	1
Styrene	<0.39		1.0	0.39	ug/L			02/04/21 17:21	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			02/04/21 17:21	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			02/04/21 17:21	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			02/04/21 17:21	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			02/04/21 17:21	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Client Sample ID: 922 80th Ave Raw

Lab Sample ID: 500-194179-1

Date Collected: 01/25/21 12:30

Matrix: Water

Date Received: 01/27/21 09:45

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			02/04/21 17:21	1
Toluene	<0.15		0.50	0.15	ug/L			02/04/21 17:21	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			02/04/21 17:21	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			02/04/21 17:21	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			02/04/21 17:21	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			02/04/21 17:21	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			02/04/21 17:21	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			02/04/21 17:21	1
Trichloroethylene	0.80		0.50	0.16	ug/L			02/04/21 17:21	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			02/04/21 17:21	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			02/04/21 17:21	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			02/04/21 17:21	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			02/04/21 17:21	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			02/04/21 17:21	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			02/04/21 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		72 - 124		02/04/21 17:21	1
Dibromofluoromethane (Surr)	96		75 - 120		02/04/21 17:21	1
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		02/04/21 17:21	1
Toluene-d8 (Surr)	100		75 - 120		02/04/21 17:21	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

GC/MS VOA

Analysis Batch: 583710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-194179-1	922 80th Ave Raw	Total/NA	Water	8260B	
MB 500-583710/7	Method Blank	Total/NA	Water	8260B	
LCS 500-583710/5	Lab Control Sample	Total/NA	Water	8260B	
500-194179-1 MS	922 80th Ave Raw	Total/NA	Water	8260B	
500-194179-1 MSD	922 80th Ave Raw	Total/NA	Water	8260B	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Surrogate Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-194179-1	922 80th Ave Raw	98	96	103	100
500-194179-1 MS	922 80th Ave Raw	97	98	101	98
500-194179-1 MSD	922 80th Ave Raw	95	97	101	98
LCS 500-583710/5	Lab Control Sample	95	96	98	98
MB 500-583710/7	Method Blank	100	97	102	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-583710/7

Matrix: Water

Analysis Batch: 583710

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<1.7		10	1.7	ug/L			02/04/21 12:17	1
Benzene	<0.15		0.50	0.15	ug/L			02/04/21 12:17	1
Bromobenzene	<0.36		1.0	0.36	ug/L			02/04/21 12:17	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			02/04/21 12:17	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			02/04/21 12:17	1
Bromoform	<0.48		1.0	0.48	ug/L			02/04/21 12:17	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			02/04/21 12:17	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			02/04/21 12:17	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			02/04/21 12:17	1
Chloroethane	<0.51		1.0	0.51	ug/L			02/04/21 12:17	1
Chloroform	<0.37		2.0	0.37	ug/L			02/04/21 12:17	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			02/04/21 12:17	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			02/04/21 12:17	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			02/04/21 12:17	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			02/04/21 12:17	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			02/04/21 12:17	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			02/04/21 12:17	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			02/04/21 12:17	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			02/04/21 12:17	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			02/04/21 12:17	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			02/04/21 12:17	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			02/04/21 12:17	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			02/04/21 12:17	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			02/04/21 12:17	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			02/04/21 12:17	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			02/04/21 12:17	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			02/04/21 12:17	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			02/04/21 12:17	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			02/04/21 12:17	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			02/04/21 12:17	1
m-Dichlorobenzene	<0.40		1.0	0.40	ug/L			02/04/21 12:17	1
Methyl bromide	<0.80		3.0	0.80	ug/L			02/04/21 12:17	1
Methyl chloride	<0.32		1.0	0.32	ug/L			02/04/21 12:17	1
Methylene bromide	<0.27		1.0	0.27	ug/L			02/04/21 12:17	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			02/04/21 12:17	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			02/04/21 12:17	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			02/04/21 12:17	1
Naphthalene	<0.34		1.0	0.34	ug/L			02/04/21 12:17	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			02/04/21 12:17	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			02/04/21 12:17	1
o-Dichlorobenzene	<0.33		1.0	0.33	ug/L			02/04/21 12:17	1
p-Dichlorobenzene	<0.36		1.0	0.36	ug/L			02/04/21 12:17	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			02/04/21 12:17	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			02/04/21 12:17	1
Styrene	<0.39		1.0	0.39	ug/L			02/04/21 12:17	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			02/04/21 12:17	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			02/04/21 12:17	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			02/04/21 12:17	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

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

Lab Sample ID: MB 500-583710/7
Matrix: Water
Analysis Batch: 583710

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			02/04/21 12:17	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			02/04/21 12:17	1
Toluene	<0.15		0.50	0.15	ug/L			02/04/21 12:17	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			02/04/21 12:17	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			02/04/21 12:17	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			02/04/21 12:17	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			02/04/21 12:17	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			02/04/21 12:17	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			02/04/21 12:17	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			02/04/21 12:17	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			02/04/21 12:17	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			02/04/21 12:17	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			02/04/21 12:17	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			02/04/21 12:17	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			02/04/21 12:17	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			02/04/21 12:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		72 - 124		02/04/21 12:17	1
Dibromofluoromethane (Surr)	97		75 - 120		02/04/21 12:17	1
1,2-Dichloroethane-d4 (Surr)	102		75 - 126		02/04/21 12:17	1
Toluene-d8 (Surr)	96		75 - 120		02/04/21 12:17	1

Lab Sample ID: LCS 500-583710/5
Matrix: Water
Analysis Batch: 583710

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	56.8		ug/L		114	40 - 143
Benzene	50.0	47.0		ug/L		94	70 - 120
Bromobenzene	50.0	44.9		ug/L		90	70 - 122
Bromochloromethane	50.0	44.9		ug/L		90	65 - 122
Bromodichloromethane	50.0	43.0		ug/L		86	69 - 120
Bromoform	50.0	39.6		ug/L		79	56 - 132
Carbon disulfide	50.0	47.1		ug/L		94	66 - 120
Carbon tetrachloride	50.0	44.8		ug/L		90	59 - 133
Chlorobenzene	50.0	44.9		ug/L		90	70 - 120
Chloroethane	50.0	52.7		ug/L		105	48 - 136
Chloroform	50.0	43.4		ug/L		87	70 - 120
2-Chlorotoluene	50.0	45.5		ug/L		91	70 - 125
4-Chlorotoluene	50.0	45.1		ug/L		90	68 - 124
cis-1,2-Dichloroethylene	50.0	44.6		ug/L		89	70 - 125
cis-1,3-Dichloropropene	50.0	44.7		ug/L		89	64 - 127
Dibromochloromethane	50.0	40.3		ug/L		81	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	38.9		ug/L		78	56 - 123
1,2-Dibromoethane	50.0	45.5		ug/L		91	70 - 125
Dichlorodifluoromethane	50.0	48.4		ug/L		97	40 - 159
1,1-Dichloroethane	50.0	52.4		ug/L		105	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

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

Lab Sample ID: LCS 500-583710/5
Matrix: Water
Analysis Batch: 583710

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	45.5		ug/L		91	68 - 127
1,1-Dichloroethylene	50.0	46.8		ug/L		94	67 - 122
1,2-Dichloropropane	50.0	53.4		ug/L		107	67 - 130
1,3-Dichloropropane	50.0	44.7		ug/L		89	62 - 136
2,2-Dichloropropane	50.0	51.4		ug/L		103	58 - 139
1,1-Dichloropropene	50.0	47.8		ug/L		96	70 - 121
Ethylbenzene	50.0	47.5		ug/L		95	70 - 123
Hexachlorobutadiene	50.0	43.7		ug/L		87	51 - 150
Isopropylbenzene	50.0	48.5		ug/L		97	70 - 126
m-Dichlorobenzene	50.0	45.2		ug/L		90	70 - 125
Methyl bromide	50.0	50.6		ug/L		101	40 - 152
Methyl chloride	50.0	64.8		ug/L		130	56 - 152
Methylene bromide	50.0	43.6		ug/L		87	70 - 120
Methylene Chloride	50.0	46.4		ug/L		93	69 - 125
Methyl ethyl ketone (MEK)	50.0	59.5		ug/L		119	46 - 144
Methyl tert-butyl ether	50.0	42.8		ug/L		86	55 - 123
Naphthalene	50.0	50.7		ug/L		101	53 - 144
n-Butylbenzene	50.0	46.9		ug/L		94	68 - 125
N-Propylbenzene	50.0	47.0		ug/L		94	69 - 127
o-Dichlorobenzene	50.0	43.6		ug/L		87	70 - 125
p-Dichlorobenzene	50.0	44.5		ug/L		89	70 - 120
p-Isopropyltoluene	50.0	46.3		ug/L		93	70 - 125
sec-Butylbenzene	50.0	47.6		ug/L		95	70 - 123
Styrene	50.0	46.7		ug/L		93	70 - 120
tert-Butylbenzene	50.0	45.4		ug/L		91	70 - 121
1,1,1,2-Tetrachloroethane	50.0	44.5		ug/L		89	70 - 125
1,1,2,2-Tetrachloroethane	50.0	45.8		ug/L		92	62 - 140
Tetrachloroethylene	50.0	46.8		ug/L		94	70 - 128
Tetrahydrofuran	100	107		ug/L		107	59 - 139
Toluene	50.0	45.8		ug/L		92	70 - 125
1,2-trans-Dichloroethylene	50.0	45.3		ug/L		91	70 - 125
trans-1,3-Dichloropropene	50.0	42.8		ug/L		86	62 - 128
1,2,3-Trichlorobenzene	50.0	59.4		ug/L		119	51 - 145
1,2,4-Trichlorobenzene	50.0	51.9		ug/L		104	57 - 137
1,1,1-Trichloroethane	50.0	45.1		ug/L		90	70 - 125
1,1,2-Trichloroethane	50.0	43.6		ug/L		87	71 - 130
Trichloroethylene	50.0	46.1		ug/L		92	70 - 125
Trichlorofluoromethane	50.0	43.7		ug/L		87	55 - 128
1,2,3-Trichloropropane	50.0	46.6		ug/L		93	50 - 133
1,2,4-Trimethylbenzene	50.0	46.7		ug/L		93	70 - 123
1,3,5-Trimethylbenzene	50.0	46.4		ug/L		93	70 - 123
Vinyl chloride	50.0	57.5		ug/L		115	64 - 126
Xylenes, Total	100	88.9		ug/L		89	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane (Surr)	96		75 - 120
1,2-Dichloroethane-d4 (Surr)	98		75 - 126

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

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

Lab Sample ID: LCS 500-583710/5
Matrix: Water
Analysis Batch: 583710

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

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	98		75 - 120

Lab Sample ID: 500-194179-1 MS
Matrix: Water
Analysis Batch: 583710

Client Sample ID: 922 80th Ave Raw
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Acetone	<1.7		50.0	50.6		ug/L		101	40 - 143
Benzene	<0.15		50.0	51.0		ug/L		102	70 - 120
Bromobenzene	<0.36		50.0	48.3		ug/L		97	70 - 122
Bromochloromethane	<0.43		50.0	46.7		ug/L		93	65 - 122
Bromodichloromethane	<0.37		50.0	46.0		ug/L		92	69 - 120
Bromoform	<0.48		50.0	43.3		ug/L		87	56 - 132
Carbon disulfide	<0.45		50.0	48.9		ug/L		98	66 - 120
Carbon tetrachloride	<0.38		50.0	47.3		ug/L		95	59 - 133
Chlorobenzene	<0.39		50.0	48.2		ug/L		96	70 - 120
Chloroethane	<0.51		50.0	55.4		ug/L		111	48 - 136
Chloroform	<0.37		50.0	46.6		ug/L		93	70 - 120
2-Chlorotoluene	<0.31		50.0	48.6		ug/L		97	70 - 125
4-Chlorotoluene	<0.35		50.0	47.9		ug/L		96	68 - 124
cis-1,2-Dichloroethylene	<0.41		50.0	48.6		ug/L		97	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	47.2		ug/L		94	64 - 127
Dibromochloromethane	<0.49		50.0	42.5		ug/L		85	68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	37.8		ug/L		76	56 - 123
1,2-Dibromoethane	<0.39		50.0	48.6		ug/L		97	70 - 125
Dichlorodifluoromethane	<0.67		50.0	50.6		ug/L		101	40 - 159
1,1-Dichloroethane	<0.41		50.0	57.0		ug/L		114	70 - 125
1,2-Dichloroethane	<0.39		50.0	48.8		ug/L		98	68 - 127
1,1-Dichloroethylene	<0.39		50.0	48.5		ug/L		97	67 - 122
1,2-Dichloropropane	<0.43		50.0	57.4		ug/L		115	67 - 130
1,3-Dichloropropane	<0.36		50.0	48.4		ug/L		97	62 - 136
2,2-Dichloropropane	<0.44		50.0	49.4		ug/L		99	58 - 139
1,1-Dichloropropene	<0.30		50.0	49.6		ug/L		99	70 - 121
Ethylbenzene	<0.18		50.0	50.3		ug/L		101	70 - 123
Hexachlorobutadiene	<0.45		50.0	46.7		ug/L		93	51 - 150
Isopropylbenzene	<0.39		50.0	52.3		ug/L		105	70 - 126
m-Dichlorobenzene	<0.40		50.0	47.6		ug/L		95	70 - 125
Methyl bromide	<0.80		50.0	53.2		ug/L		106	40 - 152
Methyl chloride	<0.32		50.0	70.4		ug/L		141	56 - 152
Methylene bromide	<0.27		50.0	46.8		ug/L		94	70 - 120
Methylene Chloride	<1.6		50.0	50.2		ug/L		100	69 - 125
Methyl ethyl ketone (MEK)	<2.1		50.0	55.2		ug/L		110	46 - 144
Methyl tert-butyl ether	<0.39		50.0	44.8		ug/L		90	55 - 123
Naphthalene	<0.34		50.0	42.8		ug/L		86	53 - 144
n-Butylbenzene	<0.39		50.0	48.0		ug/L		96	68 - 125
N-Propylbenzene	<0.41		50.0	50.1		ug/L		100	69 - 127
o-Dichlorobenzene	<0.33		50.0	47.0		ug/L		94	70 - 125
p-Dichlorobenzene	<0.36		50.0	47.3		ug/L		95	70 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

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

Lab Sample ID: 500-194179-1 MS
Matrix: Water
Analysis Batch: 583710

Client Sample ID: 922 80th Ave Raw
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	<0.36		50.0	49.2		ug/L		98	70 - 125
sec-Butylbenzene	<0.40		50.0	51.3		ug/L		103	70 - 123
Styrene	<0.39		50.0	50.9		ug/L		102	70 - 120
tert-Butylbenzene	<0.40		50.0	49.2		ug/L		98	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	49.1		ug/L		98	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	49.8		ug/L		100	62 - 140
Tetrachloroethylene	<0.37		50.0	47.6		ug/L		95	70 - 128
Tetrahydrofuran	<1.9		100	117		ug/L		117	59 - 139
Toluene	<0.15		50.0	48.8		ug/L		98	70 - 125
1,2-trans-Dichloroethylene	<0.35		50.0	48.3		ug/L		97	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	44.1		ug/L		88	62 - 128
1,2,3-Trichlorobenzene	<0.46		50.0	46.4		ug/L		93	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	46.4		ug/L		93	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	47.7		ug/L		95	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	47.5		ug/L		95	71 - 130
Trichloroethylene	0.80		50.0	49.5		ug/L		97	70 - 125
Trichlorofluoromethane	<0.43		50.0	45.7		ug/L		91	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	50.4		ug/L		101	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	50.7		ug/L		101	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	50.6		ug/L		101	70 - 123
Vinyl chloride	<0.20		50.0	59.5		ug/L		119	64 - 126
Xylenes, Total	<0.22		100	94.7		ug/L		95	70 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		72 - 124
Dibromofluoromethane (Surr)	98		75 - 120
1,2-Dichloroethane-d4 (Surr)	101		75 - 126
Toluene-d8 (Surr)	98		75 - 120

Lab Sample ID: 500-194179-1 MSD
Matrix: Water
Analysis Batch: 583710

Client Sample ID: 922 80th Ave Raw
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	<1.7		50.0	46.8		ug/L		94	40 - 143	8	20
Benzene	<0.15		50.0	50.6		ug/L		101	70 - 120	1	20
Bromobenzene	<0.36		50.0	49.5		ug/L		99	70 - 122	2	20
Bromochloromethane	<0.43		50.0	49.8		ug/L		100	65 - 122	6	20
Bromodichloromethane	<0.37		50.0	47.6		ug/L		95	69 - 120	3	20
Bromoform	<0.48		50.0	43.9		ug/L		88	56 - 132	1	20
Carbon disulfide	<0.45		50.0	50.5		ug/L		101	66 - 120	3	20
Carbon tetrachloride	<0.38		50.0	47.8		ug/L		96	59 - 133	1	20
Chlorobenzene	<0.39		50.0	48.7		ug/L		97	70 - 120	1	20
Chloroethane	<0.51		50.0	48.8		ug/L		98	48 - 136	13	20
Chloroform	<0.37		50.0	46.3		ug/L		93	70 - 120	1	20
2-Chlorotoluene	<0.31		50.0	49.0		ug/L		98	70 - 125	1	20
4-Chlorotoluene	<0.35		50.0	48.2		ug/L		96	68 - 124	1	20
cis-1,2-Dichloroethylene	<0.41		50.0	48.0		ug/L		96	70 - 125	1	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

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

Lab Sample ID: 500-194179-1 MSD

Client Sample ID: 922 80th Ave Raw

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 583710

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	<0.42		50.0	47.8		ug/L		96	64 - 127	1	20
Dibromochloromethane	<0.49		50.0	44.1		ug/L		88	68 - 125	4	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	41.1		ug/L		82	56 - 123	8	20
1,2-Dibromoethane	<0.39		50.0	49.2		ug/L		98	70 - 125	1	20
Dichlorodifluoromethane	<0.67		50.0	46.5		ug/L		93	40 - 159	8	20
1,1-Dichloroethane	<0.41		50.0	56.8		ug/L		114	70 - 125	1	20
1,2-Dichloroethane	<0.39		50.0	50.9		ug/L		102	68 - 127	4	20
1,1-Dichloroethylene	<0.39		50.0	48.9		ug/L		98	67 - 122	1	20
1,2-Dichloropropane	<0.43		50.0	58.8		ug/L		118	67 - 130	2	20
1,3-Dichloropropane	<0.36		50.0	49.0		ug/L		98	62 - 136	1	20
2,2-Dichloropropane	<0.44		50.0	52.6		ug/L		105	58 - 139	6	20
1,1-Dichloropropene	<0.30		50.0	49.7		ug/L		99	70 - 121	0	20
Ethylbenzene	<0.18		50.0	50.6		ug/L		101	70 - 123	1	20
Hexachlorobutadiene	<0.45		50.0	46.6		ug/L		93	51 - 150	0	20
Isopropylbenzene	<0.39		50.0	52.6		ug/L		105	70 - 126	1	20
m-Dichlorobenzene	<0.40		50.0	48.6		ug/L		97	70 - 125	2	20
Methyl bromide	<0.80		50.0	48.0		ug/L		96	40 - 152	10	20
Methyl chloride	<0.32		50.0	63.9		ug/L		128	56 - 152	10	20
Methylene bromide	<0.27		50.0	48.6		ug/L		97	70 - 120	4	20
Methylene Chloride	<1.6		50.0	51.7		ug/L		103	69 - 125	3	20
Methyl ethyl ketone (MEK)	<2.1		50.0	57.6		ug/L		115	46 - 144	4	20
Methyl tert-butyl ether	<0.39		50.0	46.1		ug/L		92	55 - 123	3	20
Naphthalene	<0.34		50.0	51.9		ug/L		104	53 - 144	19	20
n-Butylbenzene	<0.39		50.0	48.4		ug/L		97	68 - 125	1	20
N-Propylbenzene	<0.41		50.0	50.2		ug/L		100	69 - 127	0	20
o-Dichlorobenzene	<0.33		50.0	47.4		ug/L		95	70 - 125	1	20
p-Dichlorobenzene	<0.36		50.0	47.9		ug/L		96	70 - 120	1	20
p-Isopropyltoluene	<0.36		50.0	48.9		ug/L		98	70 - 125	1	20
sec-Butylbenzene	<0.40		50.0	51.1		ug/L		102	70 - 123	0	20
Styrene	<0.39		50.0	50.5		ug/L		101	70 - 120	1	20
tert-Butylbenzene	<0.40		50.0	49.2		ug/L		98	70 - 121	0	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	48.5		ug/L		97	70 - 125	1	20
1,1,1,2,2-Tetrachloroethane	<0.40		50.0	51.5		ug/L		103	62 - 140	3	20
Tetrachloroethylene	<0.37		50.0	47.7		ug/L		95	70 - 128	0	20
Tetrahydrofuran	<1.9		100	115		ug/L		115	59 - 139	2	20
Toluene	<0.15		50.0	48.2		ug/L		96	70 - 125	1	20
1,2-trans-Dichloroethylene	<0.35		50.0	48.0		ug/L		96	70 - 125	1	20
trans-1,3-Dichloropropene	<0.36		50.0	46.0		ug/L		92	62 - 128	4	20
1,2,3-Trichlorobenzene	<0.46		50.0	59.2	F2	ug/L		118	51 - 145	24	20
1,2,4-Trichlorobenzene	<0.34		50.0	51.7		ug/L		103	57 - 137	11	20
1,1,1-Trichloroethane	<0.38		50.0	48.7		ug/L		97	70 - 125	2	20
1,1,2-Trichloroethane	<0.35		50.0	47.6		ug/L		95	71 - 130	0	20
Trichloroethylene	0.80		50.0	49.9		ug/L		98	70 - 125	1	20
Trichlorofluoromethane	<0.43		50.0	41.0		ug/L		82	55 - 128	11	20
1,2,3-Trichloropropane	<0.41		50.0	50.1		ug/L		100	50 - 133	1	20
1,2,4-Trimethylbenzene	<0.36		50.0	50.2		ug/L		100	70 - 123	1	20
1,3,5-Trimethylbenzene	<0.25		50.0	50.0		ug/L		100	70 - 123	1	20
Vinyl chloride	<0.20		50.0	54.0		ug/L		108	64 - 126	10	20
Xylenes, Total	<0.22		100	94.8		ug/L		95	70 - 125	0	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

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

<i>Surrogate</i>	<i>MSD MSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>4-Bromofluorobenzene (Surr)</i>	95		72 - 124
<i>Dibromofluoromethane (Surr)</i>	97		75 - 120
<i>1,2-Dichloroethane-d4 (Surr)</i>	101		75 - 126
<i>Toluene-d8 (Surr)</i>	98		75 - 120

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

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Client Sample ID: 922 80th Ave Raw

Lab Sample ID: 500-194179-1

Date Collected: 01/25/21 12:30

Matrix: Water

Date Received: 01/27/21 09:45

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	583710	02/04/21 17:21	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-194179-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

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

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-194179-1

Login Number: 194179

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Buckley, Paula M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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	

Appendix C.2.

Laboratory Analytical Reports-PFAS/1,4-Dioxane

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-167232-2
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
8/12/2019 5:03:00 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	9
Sample Summary	10
Client Sample Results	11
Definitions	53
QC Association	54
QC Sample Results	56
Chronicle	65
Certification Summary	69
Chain of Custody	70
Receipt Checklists	77
Field Data Sheets	79
Isotope Dilution Summary	80

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Job ID: 500-167232-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-167232-2

Comments

No additional comments.

Receipt

The samples were received on 7/26/2019 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.4° C and 2.8° C.

LCMS

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for several analytes the following samples: P-18 (500-167232-10), P-19 (500-167232-11) and P-23 (500-167232-15). The samples were re-analyzed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit for 13C2 PFHxDA: MW-22 (500-167232-14). The sample was re-analyzed with concurring results. Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample. All detection limits are below the lower calibration.

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-8:2 FTS the following samples: MW-9 (500-167232-5), P-10 (500-167232-6) and P-25S (500-167232-16). The samples were re-analyzed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit for 13C4 PFBA: P-27 (500-167232-19). The sample was re-analyzed with concurring results. Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample. All detection limits are below the lower calibration.

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

Organic Prep

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-310777. Method Code: 3535 PFC

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-310779. Method Code: 3535 PFC

Method(s) 3535: The following samples were observed to contain sediment and a thin layer of mud at the bottom of the container prior to extraction: MW-8 (500-167232-4), MW-22 (500-167232-14), P-25D (500-167232-17) and MW-28 (500-167232-20). Method Code: 3535 PFC preparation batch 320-310779

Method(s) 3535: The following samples were observed to be a light pink color and contained sediment prior to extraction: MW-17 (500-167232-9), P-19 (500-167232-11) and MW-26 (500-167232-18). Method Code: 3535 PFC preparation batch 320-310779

Method(s) 3535: The following samples were observed to be a purple color and contained sediment prior to extraction: MW-1 (500-167232-1), P-6 (500-167232-2), P-20 (500-167232-12), P-23 (500-167232-15) and P-27 (500-167232-19). Method Code: 3535 PFC preparation batch 320-310779

Method(s) 3535: The following samples contain non-settleable particulate matter which plugged the solid-phase extraction column: MW-1 (500-167232-1), MW-7 (500-167232-3), MW-8 (500-167232-4), MW-22 (500-167232-14), P-25D (500-167232-17), MW-26 (500-167232-18) and MW-28 (500-167232-20). Method Code: 3535 PFC preparation batch 320-310779

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-1

Lab Sample ID: 500-167232-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	36		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.0	J	1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.73	J	1.8	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.44	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.3	J	1.8	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.36	J B	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.51	J B	1.8	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.83	J	1.8	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.65	J	1.8	0.32	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	1.3	J	1.9	0.81	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-6

Lab Sample ID: 500-167232-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	35		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.3	J	1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.3	J	1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.82	J	1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.8		1.9	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.6	J	1.9	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.6	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.68	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.36	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.57	J	1.9	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.57	J	1.9	0.33	ng/L	1		537 (modified)	Total/NA
6:2 FTS	5.1	J	19	1.9	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	4.0		2.0	0.82	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 500-167232-3

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	51		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.4	J	1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.59	J	1.9	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.89	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.55	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.63	J	1.9	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.45	J	1.9	0.33	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-8

Lab Sample ID: 500-167232-4

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	44		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.6		1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.68	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.37	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 500-167232-5

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	36		1.9	0.33	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-9 (Continued)

Lab Sample ID: 500-167232-5

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.32	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.2		1.9	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.35	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.53	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.1		1.9	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	1.9		1.9	0.33	ng/L	1		537 (modified)	Total/NA
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	8.4	J	19	3.0	ng/L	1		537 (modified)	Total/NA
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	7.3	J	19	1.8	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	2.2		2.0	0.84	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-10

Lab Sample ID: 500-167232-6

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	24		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.20	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.69	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.9		1.9	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.91	J	1.9	0.33	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 500-167232-7

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	35		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.63	J	1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.35	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.35	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 500-167232-8

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	55		2.0	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.29	J B	2.0	0.17	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 500-167232-9

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	73		1.9	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.9		1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.4	J	1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.0		1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	15		1.9	0.82	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.81	J	1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.96	J	1.9	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.43	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.68	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.8		1.9	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	8.6		1.9	0.34	ng/L	1		537 (modified)	Total/NA
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	11	J	19	3.0	ng/L	1		537 (modified)	Total/NA
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	10	J	19	1.8	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-17 (Continued)

Lab Sample ID: 500-167232-9

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Ammonium Perfluorooctanoate (APFO)	16		2.0	0.85	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-18

Lab Sample ID: 500-167232-10

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	41		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.72	J	1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.60	J	1.9	0.55	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.34	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.1		1.9	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	12		1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.39	J	1.9	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.1	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.64	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.9		1.9	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.43	J	1.9	0.33	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	2.2		2.0	0.84	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-19

Lab Sample ID: 500-167232-11

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	18		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.84	J	1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.34	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.3	J	1.9	0.80	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.5	J	1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.35	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.50	J	1.9	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.19	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.38	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.64	J	1.9	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.41	J	1.9	0.33	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	1.3	J	2.0	0.83	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-20

Lab Sample ID: 500-167232-12

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	19		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.82	J	1.9	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.29	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	0.86	J	2.0	0.84	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-21

Lab Sample ID: 500-167232-13

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	30		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.87	J	1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.30	J	1.9	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.28	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-22

Lab Sample ID: 500-167232-14

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	48		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.4	J	1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.68	J	1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.88	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.30	J	1.9	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.98	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-23

Lab Sample ID: 500-167232-15

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	34		1.9	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.1		1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.3	J	1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.84	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.6		1.9	0.82	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	8.4		1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.1	J	1.9	0.30	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	2.4		1.9	1.1	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.6	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.30	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.82	J	1.9	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.35	J	1.9	0.34	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	4.8		2.0	0.84	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-25S

Lab Sample ID: 500-167232-16

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	48		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.7	J	1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.46	J	1.9	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.61	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.46	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.83	J	1.9	0.51	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-25D

Lab Sample ID: 500-167232-17

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	43		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.2	J	1.9	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.2	J	1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.29	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.34	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.59	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.2	J	1.9	0.51	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	1.3	J	2.0	0.84	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-26

Lab Sample ID: 500-167232-18

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	44		1.9	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.23	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-26 (Continued)

Lab Sample ID: 500-167232-18

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.28	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-27

Lab Sample ID: 500-167232-19

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	34		1.9	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.47	J	1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.25	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.1	J	1.9	0.82	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.85	J	1.9	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.21	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.28	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	1.1	J	2.0	0.85	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-28

Lab Sample ID: 500-167232-20

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	77		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.2		1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.86	J	1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.3	J B	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.90	J B	1.8	0.16	ng/L	1		537 (modified)	Total/NA

Client Sample ID: Field Blank 2

Lab Sample ID: 500-167232-22

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.29	J B	2.0	0.17	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-167232-1	MW-1	Ground Water	07/23/19 09:15	07/26/19 09:35	
500-167232-2	P-6	Ground Water	07/23/19 09:00	07/26/19 09:35	
500-167232-3	MW-7	Ground Water	07/23/19 13:15	07/26/19 09:35	
500-167232-4	MW-8	Ground Water	07/23/19 13:00	07/26/19 09:35	
500-167232-5	MW-9	Ground Water	07/24/19 14:00	07/26/19 09:35	
500-167232-6	P-10	Ground Water	07/24/19 14:15	07/26/19 09:35	
500-167232-7	MW-11	Ground Water	07/24/19 11:00	07/26/19 09:35	
500-167232-8	MW-16	Ground Water	07/24/19 08:45	07/26/19 09:35	
500-167232-9	MW-17	Ground Water	07/23/19 11:30	07/26/19 09:35	
500-167232-10	P-18	Ground Water	07/23/19 11:00	07/26/19 09:35	
500-167232-11	P-19	Ground Water	07/23/19 11:45	07/26/19 09:35	
500-167232-12	P-20	Ground Water	07/23/19 09:30	07/26/19 09:35	
500-167232-13	MW-21	Ground Water	07/23/19 16:00	07/26/19 09:35	
500-167232-14	MW-22	Ground Water	07/23/19 14:20	07/26/19 09:35	
500-167232-15	P-23	Ground Water	07/23/19 10:50	07/26/19 09:35	
500-167232-16	P-25S	Ground Water	07/23/19 13:40	07/26/19 09:35	
500-167232-17	P-25D	Ground Water	07/23/19 13:50	07/26/19 09:35	
500-167232-18	MW-26	Ground Water	07/23/19 15:45	07/26/19 09:35	
500-167232-19	P-27	Ground Water	07/23/19 15:30	07/26/19 09:35	
500-167232-20	MW-28	Ground Water	07/24/19 08:45	07/26/19 09:35	
500-167232-22	Field Blank 2	Water	07/23/19 14:30	07/26/19 09:35	

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-1
Date Collected: 07/23/19 09:15
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-1
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	36		1.8	0.32	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluoropentanoic acid (PFPeA)	1.0	J	1.8	0.45	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorohexanoic acid (PFHxA)	0.73	J	1.8	0.54	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluoroheptanoic acid (PFHpA)	0.44	J	1.8	0.23	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorooctanoic acid (PFOA)	1.3	J	1.8	0.79	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorodecanoic acid (PFDA)	<0.29		1.8	0.29	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.8	0.51	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.8	1.2	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorotetradecanoic acid (PFTeA)	<0.27		1.8	0.27	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.82		1.8	0.82	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorobutanesulfonic acid (PFBS)	0.36	J B	1.8	0.18	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.43		1.8	0.43	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.8	0.28	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorohexanesulfonic acid (PFHxS)	0.51	J B	1.8	0.16	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.8	0.18	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorooctanesulfonic acid (PFOS)	0.83	J	1.8	0.50	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.8	0.15	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.8	0.30	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorooctanesulfonamide (FOSA)	0.65	J	1.8	0.32	ng/L		07/29/19 05:56	07/30/19 08:51	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		18	2.9	ng/L		07/29/19 05:56	07/30/19 08:51	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		18	1.8	ng/L		07/29/19 05:56	07/30/19 08:51	1
4:2 FTS	<4.8		18	4.8	ng/L		07/29/19 05:56	07/30/19 08:51	1
6:2 FTS	<1.8		18	1.8	ng/L		07/29/19 05:56	07/30/19 08:51	1
8:2 FTS	<1.8		18	1.8	ng/L		07/29/19 05:56	07/30/19 08:51	1
Perfluorododecanesulfonic acid (PFDoS)	<0.42		1.8	0.42	ng/L		07/29/19 05:56	07/30/19 08:51	1
ADONA	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 08:51	1
F-53B Major	<0.22		1.8	0.22	ng/L		07/29/19 05:56	07/30/19 08:51	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		07/29/19 05:56	07/30/19 08:51	1
F-53B Minor	<0.30		1.8	0.30	ng/L		07/29/19 05:56	07/30/19 08:51	1
10:2 FTS	<0.18		1.8	0.18	ng/L		07/29/19 05:56	07/30/19 08:51	1
NaDONA	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 08:51	1
DONA	<0.17		1.8	0.17	ng/L		07/29/19 05:56	07/30/19 08:51	1
Ammonium Perfluorooctanoate (APFO)	1.3	J	1.9	0.81	ng/L		07/29/19 05:56	07/30/19 08:51	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	79		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C5 PFPeA	86		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C2 PFHxA	83		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C4 PFHpA	89		25 - 150	07/29/19 05:56	07/30/19 08:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-1

Lab Sample ID: 500-167232-1

Date Collected: 07/23/19 09:15

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOA	83		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C5 PFNA	82		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C2 PFDA	81		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C2 PFHxDA	55		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C2 PFUnA	75		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C2 PFDoA	63		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C2 PFTeDA	54		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C3 PFBS	86		25 - 150	07/29/19 05:56	07/30/19 08:51	1
18O2 PFHxS	81		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C4 PFOS	80		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C8 FOSA	61		25 - 150	07/29/19 05:56	07/30/19 08:51	1
d3-NMeFOSAA	61		25 - 150	07/29/19 05:56	07/30/19 08:51	1
d5-NEtFOSAA	62		25 - 150	07/29/19 05:56	07/30/19 08:51	1
M2-6:2 FTS	114		25 - 150	07/29/19 05:56	07/30/19 08:51	1
M2-8:2 FTS	89		25 - 150	07/29/19 05:56	07/30/19 08:51	1
M2-4:2 FTS	109		25 - 150	07/29/19 05:56	07/30/19 08:51	1
13C3 HFPO-DA	78		25 - 150	07/29/19 05:56	07/30/19 08:51	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-6
Date Collected: 07/23/19 09:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-2
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	35		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluoropentanoic acid (PFPeA)	1.3	J	1.9	0.46	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorohexanoic acid (PFHxA)	1.3	J	1.9	0.54	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluoroheptanoic acid (PFHpA)	0.82	J	1.9	0.23	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorooctanoic acid (PFOA)	3.8		1.9	0.79	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorononanoic acid (PFNA)	1.6	J	1.9	0.25	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorodecanoic acid (PFDA)	1.6	J	1.9	0.29	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorotetradecanoic acid (PFTeA)	<0.27		1.9	0.27	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.83		1.9	0.83	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorobutanesulfonic acid (PFBS)	0.68	J B	1.9	0.19	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorohexanesulfonic acid (PFHxS)	0.36	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorooctanesulfonic acid (PFOS)	0.57	J	1.9	0.50	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorooctanesulfonamide (FOSA)	0.57	J	1.9	0.33	ng/L		07/29/19 05:56	07/30/19 08:59	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		19	2.9	ng/L		07/29/19 05:56	07/30/19 08:59	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 08:59	1
4:2 FTS	<4.8		19	4.8	ng/L		07/29/19 05:56	07/30/19 08:59	1
6:2 FTS	5.1	J	19	1.9	ng/L		07/29/19 05:56	07/30/19 08:59	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 08:59	1
Perfluorododecanesulfonic acid (PFDoS)	<0.42		1.9	0.42	ng/L		07/29/19 05:56	07/30/19 08:59	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 08:59	1
F-53B Major	<0.22		1.9	0.22	ng/L		07/29/19 05:56	07/30/19 08:59	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		07/29/19 05:56	07/30/19 08:59	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 08:59	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 08:59	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 08:59	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 08:59	1
Ammonium Perfluorooctanoate (APFO)	4.0		2.0	0.82	ng/L		07/29/19 05:56	07/30/19 08:59	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	74		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C5 PFPeA	91		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C2 PFHxA	87		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C4 PFHpA	96		25 - 150	07/29/19 05:56	07/30/19 08:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-6

Lab Sample ID: 500-167232-2

Date Collected: 07/23/19 09:00

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOA	95		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C5 PFNA	95		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C2 PFDA	95		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C2 PFHxDA	57		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C2 PFUnA	94		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C2 PFDoA	91		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C2 PFTeDA	92		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C3 PFBS	93		25 - 150	07/29/19 05:56	07/30/19 08:59	1
18O2 PFHxS	88		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C4 PFOS	88		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C8 FOSA	72		25 - 150	07/29/19 05:56	07/30/19 08:59	1
d3-NMeFOSAA	78		25 - 150	07/29/19 05:56	07/30/19 08:59	1
d5-NEtFOSAA	77		25 - 150	07/29/19 05:56	07/30/19 08:59	1
M2-6:2 FTS	131		25 - 150	07/29/19 05:56	07/30/19 08:59	1
M2-8:2 FTS	121		25 - 150	07/29/19 05:56	07/30/19 08:59	1
M2-4:2 FTS	115		25 - 150	07/29/19 05:56	07/30/19 08:59	1
13C3 HFPO-DA	84		25 - 150	07/29/19 05:56	07/30/19 08:59	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-7
Date Collected: 07/23/19 13:15
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-3
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	51		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluoropentanoic acid (PFPeA)	1.4	J	1.9	0.46	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorohexanoic acid (PFHxA)	0.59	J	1.9	0.55	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorooctanoic acid (PFOA)	<0.80		1.9	0.80	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorotetradecanoic acid (PFTeA)	<0.27		1.9	0.27	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.84		1.9	0.84	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorobutanesulfonic acid (PFBS)	0.89	J B	1.9	0.19	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorohexanesulfonic acid (PFHxS)	0.55	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorooctanesulfonic acid (PFOS)	0.63	J	1.9	0.51	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorooctanesulfonamide (FOSA)	0.45	J	1.9	0.33	ng/L		07/29/19 05:56	07/30/19 09:07	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		19	2.9	ng/L		07/29/19 05:56	07/30/19 09:07	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 09:07	1
4:2 FTS	<4.9		19	4.9	ng/L		07/29/19 05:56	07/30/19 09:07	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 09:07	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 09:07	1
Perfluorododecanesulfonic acid (PFDoS)	<0.42		1.9	0.42	ng/L		07/29/19 05:56	07/30/19 09:07	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 09:07	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 09:07	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	07/30/19 09:07	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 09:07	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 09:07	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 09:07	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 09:07	1
Ammonium Perfluorooctanoate (APFO)	<0.83		2.0	0.83	ng/L		07/29/19 05:56	07/30/19 09:07	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	80		25 - 150				07/29/19 05:56	07/30/19 09:07	1
13C5 PFPeA	87		25 - 150				07/29/19 05:56	07/30/19 09:07	1
13C2 PFHxA	86		25 - 150				07/29/19 05:56	07/30/19 09:07	1
13C4 PFHpA	90		25 - 150				07/29/19 05:56	07/30/19 09:07	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-7
Date Collected: 07/23/19 13:15
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-3
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOA	89		25 - 150	07/29/19 05:56	07/30/19 09:07	1
13C5 PFNA	90		25 - 150	07/29/19 05:56	07/30/19 09:07	1
13C2 PFDA	83		25 - 150	07/29/19 05:56	07/30/19 09:07	1
13C2 PFHxDA	79		25 - 150	07/29/19 05:56	07/30/19 09:07	1
13C2 PFUnA	72		25 - 150	07/29/19 05:56	07/30/19 09:07	1
13C2 PFDoA	64		25 - 150	07/29/19 05:56	07/30/19 09:07	1
13C2 PFTeDA	73		25 - 150	07/29/19 05:56	07/30/19 09:07	1
13C3 PFBS	90		25 - 150	07/29/19 05:56	07/30/19 09:07	1
18O2 PFHxS	90		25 - 150	07/29/19 05:56	07/30/19 09:07	1
13C4 PFOS	82		25 - 150	07/29/19 05:56	07/30/19 09:07	1
13C8 FOSA	72		25 - 150	07/29/19 05:56	07/30/19 09:07	1
d3-NMeFOSAA	74		25 - 150	07/29/19 05:56	07/30/19 09:07	1
d5-NEtFOSAA	73		25 - 150	07/29/19 05:56	07/30/19 09:07	1
M2-6:2 FTS	109		25 - 150	07/29/19 05:56	07/30/19 09:07	1
M2-8:2 FTS	91		25 - 150	07/29/19 05:56	07/30/19 09:07	1
M2-4:2 FTS	108		25 - 150	07/29/19 05:56	07/30/19 09:07	1
13C3 HFPO-DA	75		25 - 150	07/29/19 05:56	07/30/19 09:07	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-8
Date Collected: 07/23/19 13:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-4
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	44		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluoropentanoic acid (PFPeA)	2.6		1.9	0.46	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorooctanoic acid (PFOA)	<0.80		1.9	0.80	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorotetradecanoic acid (PFTeA)	<0.27		1.9	0.27	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.84		1.9	0.84	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorobutanesulfonic acid (PFBS)	0.68	J B	1.9	0.19	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorohexanesulfonic acid (PFHxS)	0.37	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorooctanesulfonic acid (PFOS)	<0.51		1.9	0.51	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorooctanesulfonamide (FOSA)	<0.33		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 09:15	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		19	2.9	ng/L		07/29/19 05:56	07/30/19 09:15	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 09:15	1
4:2 FTS	<4.9		19	4.9	ng/L		07/29/19 05:56	07/30/19 09:15	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 09:15	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 09:15	1
Perfluorododecanesulfonic acid (PFDoS)	<0.42		1.9	0.42	ng/L		07/29/19 05:56	07/30/19 09:15	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 09:15	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 09:15	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	07/30/19 09:15	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 09:15	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 09:15	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 09:15	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 09:15	1
Ammonium Perfluorooctanoate (APFO)	<0.83		2.0	0.83	ng/L		07/29/19 05:56	07/30/19 09:15	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	68		25 - 150				07/29/19 05:56	07/30/19 09:15	1
13C5 PFPeA	74		25 - 150				07/29/19 05:56	07/30/19 09:15	1
13C2 PFHxA	73		25 - 150				07/29/19 05:56	07/30/19 09:15	1
13C4 PFHpA	76		25 - 150				07/29/19 05:56	07/30/19 09:15	1
13C4 PFOA	80		25 - 150				07/29/19 05:56	07/30/19 09:15	1
13C5 PFNA	78		25 - 150				07/29/19 05:56	07/30/19 09:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-8
Date Collected: 07/23/19 13:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-4
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	71		25 - 150	07/29/19 05:56	07/30/19 09:15	1
13C2 PFHxDA	58		25 - 150	07/29/19 05:56	07/30/19 09:15	1
13C2 PFUnA	65		25 - 150	07/29/19 05:56	07/30/19 09:15	1
13C2 PFDoA	59		25 - 150	07/29/19 05:56	07/30/19 09:15	1
13C2 PFTeDA	63		25 - 150	07/29/19 05:56	07/30/19 09:15	1
13C3 PFBS	78		25 - 150	07/29/19 05:56	07/30/19 09:15	1
18O2 PFHxS	79		25 - 150	07/29/19 05:56	07/30/19 09:15	1
13C4 PFOS	70		25 - 150	07/29/19 05:56	07/30/19 09:15	1
13C8 FOSA	65		25 - 150	07/29/19 05:56	07/30/19 09:15	1
d3-NMeFOSAA	65		25 - 150	07/29/19 05:56	07/30/19 09:15	1
d5-NEFOSAA	69		25 - 150	07/29/19 05:56	07/30/19 09:15	1
M2-6:2 FTS	94		25 - 150	07/29/19 05:56	07/30/19 09:15	1
M2-8:2 FTS	83		25 - 150	07/29/19 05:56	07/30/19 09:15	1
M2-4:2 FTS	101		25 - 150	07/29/19 05:56	07/30/19 09:15	1
13C3 HFPO-DA	65		25 - 150	07/29/19 05:56	07/30/19 09:15	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-9
Date Collected: 07/24/19 14:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-5
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	36		1.9	0.33	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluoropentanoic acid (PFPeA)	<0.47		1.9	0.47	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorohexanoic acid (PFHxA)	<0.55		1.9	0.55	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluoroheptanoic acid (PFHpA)	0.32	J	1.9	0.24	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorooctanoic acid (PFOA)	2.2		1.9	0.81	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.85		1.9	0.85	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorobutanesulfonic acid (PFBS)	0.35	J B	1.9	0.19	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorohexanesulfonic acid (PFHxS)	0.53	J B	1.9	0.16	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorooctanesulfonic acid (PFOS)	5.1		1.9	0.52	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorooctanesulfonamide (FOSA)	1.9		1.9	0.33	ng/L		07/29/19 05:56	08/08/19 10:48	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	8.4	J	19	3.0	ng/L		07/29/19 05:56	08/08/19 10:48	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	7.3	J	19	1.8	ng/L		07/29/19 05:56	08/08/19 10:48	1
4:2 FTS	<5.0		19	5.0	ng/L		07/29/19 05:56	08/08/19 10:48	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	08/08/19 10:48	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	08/08/19 10:48	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	08/08/19 10:48	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	08/08/19 10:48	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	08/08/19 10:48	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	08/08/19 10:48	1
F-53B Minor	<0.31		1.9	0.31	ng/L		07/29/19 05:56	08/08/19 10:48	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	08/08/19 10:48	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	08/08/19 10:48	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	08/08/19 10:48	1
Ammonium Perfluorooctanoate (APFO)	2.2		2.0	0.84	ng/L		07/29/19 05:56	08/08/19 10:48	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	83		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C5 PFPeA	89		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C2 PFHxA	87		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C4 PFHpA	91		25 - 150	07/29/19 05:56	08/08/19 10:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-9
Date Collected: 07/24/19 14:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-5
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOA	102		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C5 PFNA	98		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C2 PFDA	96		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C2 PFHxDA	69		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C2 PFUnA	96		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C2 PFDoA	95		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C2 PFTeDA	78		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C3 PFBS	93		25 - 150	07/29/19 05:56	08/08/19 10:48	1
18O2 PFHxS	90		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C4 PFOS	89		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C8 FOSA	87		25 - 150	07/29/19 05:56	08/08/19 10:48	1
d3-NMeFOSAA	131		25 - 150	07/29/19 05:56	08/08/19 10:48	1
d5-NEtFOSAA	123		25 - 150	07/29/19 05:56	08/08/19 10:48	1
M2-6:2 FTS	124		25 - 150	07/29/19 05:56	08/08/19 10:48	1
M2-8:2 FTS	185 *		25 - 150	07/29/19 05:56	08/08/19 10:48	1
M2-4:2 FTS	105		25 - 150	07/29/19 05:56	08/08/19 10:48	1
13C3 HFPO-DA	78		25 - 150	07/29/19 05:56	08/08/19 10:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-10

Lab Sample ID: 500-167232-6

Date Collected: 07/24/19 14:15

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	24		1.9	0.33	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluoropentanoic acid (PFPeA)	<0.47		1.9	0.47	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorohexanoic acid (PFHxA)	<0.55		1.9	0.55	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorooctanoic acid (PFOA)	<0.81		1.9	0.81	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.85		1.9	0.85	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorobutanesulfonic acid (PFBS)	0.20	J B	1.9	0.19	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorohexanesulfonic acid (PFHxS)	0.69	J B	1.9	0.16	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorooctanesulfonic acid (PFOS)	1.9		1.9	0.52	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorooctanesulfonamide (FOSA)	0.91	J	1.9	0.33	ng/L		07/29/19 05:56	08/08/19 10:56	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.0		19	3.0	ng/L		07/29/19 05:56	08/08/19 10:56	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	08/08/19 10:56	1
4:2 FTS	<5.0		19	5.0	ng/L		07/29/19 05:56	08/08/19 10:56	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	08/08/19 10:56	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	08/08/19 10:56	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	08/08/19 10:56	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	08/08/19 10:56	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	08/08/19 10:56	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	08/08/19 10:56	1
F-53B Minor	<0.31		1.9	0.31	ng/L		07/29/19 05:56	08/08/19 10:56	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	08/08/19 10:56	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	08/08/19 10:56	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	08/08/19 10:56	1
Ammonium Perfluorooctanoate (APFO)	<0.84		2.0	0.84	ng/L		07/29/19 05:56	08/08/19 10:56	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	92		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C5 PFPeA	89		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C2 PFHxA	92		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C4 PFHpA	93		25 - 150	07/29/19 05:56	08/08/19 10:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-10

Lab Sample ID: 500-167232-6

Date Collected: 07/24/19 14:15

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOA	95		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C5 PFNA	95		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C2 PFDA	97		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C2 PFHxDA	88		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C2 PFUnA	99		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C2 PFDoA	97		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C2 PFTeDA	95		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C3 PFBS	102		25 - 150	07/29/19 05:56	08/08/19 10:56	1
18O2 PFHxS	94		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C4 PFOS	91		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C8 FOSA	85		25 - 150	07/29/19 05:56	08/08/19 10:56	1
d3-NMeFOSAA	101		25 - 150	07/29/19 05:56	08/08/19 10:56	1
d5-NEtFOSAA	102		25 - 150	07/29/19 05:56	08/08/19 10:56	1
M2-6:2 FTS	114		25 - 150	07/29/19 05:56	08/08/19 10:56	1
M2-8:2 FTS	161 *		25 - 150	07/29/19 05:56	08/08/19 10:56	1
M2-4:2 FTS	115		25 - 150	07/29/19 05:56	08/08/19 10:56	1
13C3 HFPO-DA	87		25 - 150	07/29/19 05:56	08/08/19 10:56	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-11
Date Collected: 07/24/19 11:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-7
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	35		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluoropentanoic acid (PFPeA)	0.63	J	1.9	0.47	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorohexanoic acid (PFHxA)	<0.55		1.9	0.55	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorooctanoic acid (PFOA)	<0.81		1.9	0.81	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.85		1.9	0.85	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorobutanesulfonic acid (PFBS)	0.35	J B	1.9	0.19	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorohexanesulfonic acid (PFHxS)	0.35	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorooctanesulfonic acid (PFOS)	<0.51		1.9	0.51	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorooctanesulfonamide (FOSA)	<0.33		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 09:55	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.0		19	3.0	ng/L		07/29/19 05:56	07/30/19 09:55	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 09:55	1
4:2 FTS	<4.9		19	4.9	ng/L		07/29/19 05:56	07/30/19 09:55	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 09:55	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 09:55	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 09:55	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 09:55	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 09:55	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	07/30/19 09:55	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 09:55	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 09:55	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 09:55	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 09:55	1
Ammonium Perfluorooctanoate (APFO)	<0.84		2.0	0.84	ng/L		07/29/19 05:56	07/30/19 09:55	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	88		25 - 150				07/29/19 05:56	07/30/19 09:55	1
13C5 PFPeA	97		25 - 150				07/29/19 05:56	07/30/19 09:55	1
13C2 PFHxA	89		25 - 150				07/29/19 05:56	07/30/19 09:55	1
13C4 PFHpA	100		25 - 150				07/29/19 05:56	07/30/19 09:55	1
13C4 PFOA	97		25 - 150				07/29/19 05:56	07/30/19 09:55	1
13C5 PFNA	97		25 - 150				07/29/19 05:56	07/30/19 09:55	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-11

Date Collected: 07/24/19 11:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-7

Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	95		25 - 150	07/29/19 05:56	07/30/19 09:55	1
13C2 PFHxDA	93		25 - 150	07/29/19 05:56	07/30/19 09:55	1
13C2 PFUnA	95		25 - 150	07/29/19 05:56	07/30/19 09:55	1
13C2 PFDoA	94		25 - 150	07/29/19 05:56	07/30/19 09:55	1
13C2 PFTeDA	99		25 - 150	07/29/19 05:56	07/30/19 09:55	1
13C3 PFBS	100		25 - 150	07/29/19 05:56	07/30/19 09:55	1
18O2 PFHxS	95		25 - 150	07/29/19 05:56	07/30/19 09:55	1
13C4 PFOS	95		25 - 150	07/29/19 05:56	07/30/19 09:55	1
13C8 FOSA	85		25 - 150	07/29/19 05:56	07/30/19 09:55	1
d3-NMeFOSAA	96		25 - 150	07/29/19 05:56	07/30/19 09:55	1
d5-NEFOSAA	102		25 - 150	07/29/19 05:56	07/30/19 09:55	1
M2-6:2 FTS	127		25 - 150	07/29/19 05:56	07/30/19 09:55	1
M2-8:2 FTS	112		25 - 150	07/29/19 05:56	07/30/19 09:55	1
M2-4:2 FTS	109		25 - 150	07/29/19 05:56	07/30/19 09:55	1
13C3 HFPO-DA	99		25 - 150	07/29/19 05:56	07/30/19 09:55	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-16
Date Collected: 07/24/19 08:45
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-8
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	55		2.0	0.34	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluoropentanoic acid (PFPeA)	<0.48		2.0	0.48	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorohexanoic acid (PFHxA)	<0.57		2.0	0.57	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorooctanoic acid (PFOA)	<0.83		2.0	0.83	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorodecanoic acid (PFDA)	<0.30		2.0	0.30	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	0.54	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		2.0	0.28	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.87		2.0	0.87	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.45		2.0	0.45	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		2.0	0.29	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorohexanesulfonic acid (PFHxS)	0.29	J B	2.0	0.17	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorooctanesulfonic acid (PFOS)	<0.53		2.0	0.53	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorononanesulfonic acid (PFNS)	<0.16		2.0	0.16	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		2.0	0.31	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorooctanesulfonamide (FOSA)	<0.34		2.0	0.34	ng/L		07/29/19 05:56	07/30/19 10:03	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.0		20	3.0	ng/L		07/29/19 05:56	07/30/19 10:03	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.9		20	1.9	ng/L		07/29/19 05:56	07/30/19 10:03	1
4:2 FTS	<5.1		20	5.1	ng/L		07/29/19 05:56	07/30/19 10:03	1
6:2 FTS	<2.0		20	2.0	ng/L		07/29/19 05:56	07/30/19 10:03	1
8:2 FTS	<2.0		20	2.0	ng/L		07/29/19 05:56	07/30/19 10:03	1
Perfluorododecanesulfonic acid (PFDoS)	<0.44		2.0	0.44	ng/L		07/29/19 05:56	07/30/19 10:03	1
ADONA	<0.19		2.1	0.19	ng/L		07/29/19 05:56	07/30/19 10:03	1
F-53B Major	<0.24		2.0	0.24	ng/L		07/29/19 05:56	07/30/19 10:03	1
HFPO-DA (GenX)	<1.5		3.9	1.5	ng/L		07/29/19 05:56	07/30/19 10:03	1
F-53B Minor	<0.31		2.0	0.31	ng/L		07/29/19 05:56	07/30/19 10:03	1
10:2 FTS	<0.19		2.0	0.19	ng/L		07/29/19 05:56	07/30/19 10:03	1
NaDONA	<0.19		2.1	0.19	ng/L		07/29/19 05:56	07/30/19 10:03	1
DONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 10:03	1
Ammonium Perfluorooctanoate (APFO)	<0.86		2.1	0.86	ng/L		07/29/19 05:56	07/30/19 10:03	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	84		25 - 150				07/29/19 05:56	07/30/19 10:03	1
13C5 PFPeA	88		25 - 150				07/29/19 05:56	07/30/19 10:03	1
13C2 PFHxA	87		25 - 150				07/29/19 05:56	07/30/19 10:03	1
13C4 PFHpA	91		25 - 150				07/29/19 05:56	07/30/19 10:03	1
13C4 PFOA	95		25 - 150				07/29/19 05:56	07/30/19 10:03	1
13C5 PFNA	93		25 - 150				07/29/19 05:56	07/30/19 10:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-16
Date Collected: 07/24/19 08:45
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-8
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	97		25 - 150	07/29/19 05:56	07/30/19 10:03	1
13C2 PFHxDA	84		25 - 150	07/29/19 05:56	07/30/19 10:03	1
13C2 PFUnA	89		25 - 150	07/29/19 05:56	07/30/19 10:03	1
13C2 PFDoA	91		25 - 150	07/29/19 05:56	07/30/19 10:03	1
13C2 PFTeDA	97		25 - 150	07/29/19 05:56	07/30/19 10:03	1
13C3 PFBS	95		25 - 150	07/29/19 05:56	07/30/19 10:03	1
18O2 PFHxS	92		25 - 150	07/29/19 05:56	07/30/19 10:03	1
13C4 PFOS	90		25 - 150	07/29/19 05:56	07/30/19 10:03	1
13C8 FOSA	82		25 - 150	07/29/19 05:56	07/30/19 10:03	1
d3-NMeFOSAA	95		25 - 150	07/29/19 05:56	07/30/19 10:03	1
d5-NEFOSAA	95		25 - 150	07/29/19 05:56	07/30/19 10:03	1
M2-6:2 FTS	120		25 - 150	07/29/19 05:56	07/30/19 10:03	1
M2-8:2 FTS	115		25 - 150	07/29/19 05:56	07/30/19 10:03	1
M2-4:2 FTS	108		25 - 150	07/29/19 05:56	07/30/19 10:03	1
13C3 HFPO-DA	97		25 - 150	07/29/19 05:56	07/30/19 10:03	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-17
Date Collected: 07/23/19 11:30
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-9
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	73		1.9	0.34	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluoropentanoic acid (PFPeA)	2.9		1.9	0.47	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorohexanoic acid (PFHxA)	1.4	J	1.9	0.56	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluoroheptanoic acid (PFHpA)	2.0		1.9	0.24	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorooctanoic acid (PFOA)	15		1.9	0.82	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorononanoic acid (PFNA)	0.81	J	1.9	0.26	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorodecanoic acid (PFDA)	0.96	J	1.9	0.30	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorotridecanoic acid (PFTriA)	<1.3		1.9	1.3	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.86		1.9	0.86	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorobutanesulfonic acid (PFBS)	0.43	J B	1.9	0.19	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorohexanesulfonic acid (PFHxS)	0.68	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorooctanesulfonic acid (PFOS)	5.8		1.9	0.52	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorooctanesulfonamide (FOSA)	8.6		1.9	0.34	ng/L		07/29/19 05:56	07/30/19 10:11	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	11	J	19	3.0	ng/L		07/29/19 05:56	07/30/19 10:11	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	10	J	19	1.8	ng/L		07/29/19 05:56	07/30/19 10:11	1
4:2 FTS	<5.0		19	5.0	ng/L		07/29/19 05:56	07/30/19 10:11	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 10:11	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 10:11	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 10:11	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 10:11	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 10:11	1
HFPO-DA (GenX)	<1.4		3.9	1.4	ng/L		07/29/19 05:56	07/30/19 10:11	1
F-53B Minor	<0.31		1.9	0.31	ng/L		07/29/19 05:56	07/30/19 10:11	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 10:11	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 10:11	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 10:11	1
Ammonium Perfluorooctanoate (APFO)	16		2.0	0.85	ng/L		07/29/19 05:56	07/30/19 10:11	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	85		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C5 PFPeA	92		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C2 PFHxA	91		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C4 PFHpA	96		25 - 150	07/29/19 05:56	07/30/19 10:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-17

Date Collected: 07/23/19 11:30

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-9

Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOA	91		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C5 PFNA	98		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C2 PFDA	98		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C2 PFHxDA	86		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C2 PFUnA	95		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C2 PFDoA	94		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C2 PFTeDA	96		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C3 PFBS	98		25 - 150	07/29/19 05:56	07/30/19 10:11	1
18O2 PFHxS	97		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C4 PFOS	95		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C8 FOSA	79		25 - 150	07/29/19 05:56	07/30/19 10:11	1
d3-NMeFOSAA	95		25 - 150	07/29/19 05:56	07/30/19 10:11	1
d5-NEtFOSAA	100		25 - 150	07/29/19 05:56	07/30/19 10:11	1
M2-6:2 FTS	113		25 - 150	07/29/19 05:56	07/30/19 10:11	1
M2-8:2 FTS	116		25 - 150	07/29/19 05:56	07/30/19 10:11	1
M2-4:2 FTS	110		25 - 150	07/29/19 05:56	07/30/19 10:11	1
13C3 HFPO-DA	75		25 - 150	07/29/19 05:56	07/30/19 10:11	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-18
Date Collected: 07/23/19 11:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-10
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	41		1.9	0.33	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluoropentanoic acid (PFPeA)	0.72	J	1.9	0.47	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorohexanoic acid (PFHxA)	0.60	J	1.9	0.55	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluoroheptanoic acid (PFHpA)	0.34	J	1.9	0.24	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorooctanoic acid (PFOA)	2.1		1.9	0.81	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorononanoic acid (PFNA)	12		1.9	0.26	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorodecanoic acid (PFDA)	0.39	J	1.9	0.30	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.85		1.9	0.85	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorobutanesulfonic acid (PFBS)	1.1	J B	1.9	0.19	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorohexanesulfonic acid (PFHxS)	0.64	J B	1.9	0.16	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorooctanesulfonic acid (PFOS)	1.9		1.9	0.51	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorooctanesulfonamide (FOSA)	0.43	J	1.9	0.33	ng/L		07/29/19 05:56	08/08/19 11:04	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.0		19	3.0	ng/L		07/29/19 05:56	08/08/19 11:04	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	08/08/19 11:04	1
4:2 FTS	<5.0		19	5.0	ng/L		07/29/19 05:56	08/08/19 11:04	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	08/08/19 11:04	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	08/08/19 11:04	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	08/08/19 11:04	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	08/08/19 11:04	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	08/08/19 11:04	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	08/08/19 11:04	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	08/08/19 11:04	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	08/08/19 11:04	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	08/08/19 11:04	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	08/08/19 11:04	1
Ammonium Perfluorooctanoate (APFO)	2.2		2.0	0.84	ng/L		07/29/19 05:56	08/08/19 11:04	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
¹³ C4 PFBA	93		25 - 150	07/29/19 05:56	08/08/19 11:04	1
¹³ C5 PFPeA	96		25 - 150	07/29/19 05:56	08/08/19 11:04	1
¹³ C2 PFHxA	88		25 - 150	07/29/19 05:56	08/08/19 11:04	1
¹³ C4 PFHpA	93		25 - 150	07/29/19 05:56	08/08/19 11:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-18

Lab Sample ID: 500-167232-10

Date Collected: 07/23/19 11:00

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOA	99		25 - 150	07/29/19 05:56	08/08/19 11:04	1
13C5 PFNA	101		25 - 150	07/29/19 05:56	08/08/19 11:04	1
13C2 PFDA	103		25 - 150	07/29/19 05:56	08/08/19 11:04	1
13C2 PFHxDA	76		25 - 150	07/29/19 05:56	08/08/19 11:04	1
13C2 PFUnA	101		25 - 150	07/29/19 05:56	08/08/19 11:04	1
13C2 PFDaA	102		25 - 150	07/29/19 05:56	08/08/19 11:04	1
13C2 PFTeDA	90		25 - 150	07/29/19 05:56	08/08/19 11:04	1
13C3 PFBS	96		25 - 150	07/29/19 05:56	08/08/19 11:04	1
18O2 PFHxS	94		25 - 150	07/29/19 05:56	08/08/19 11:04	1
13C4 PFOS	93		25 - 150	07/29/19 05:56	08/08/19 11:04	1
13C8 FOSA	82		25 - 150	07/29/19 05:56	08/08/19 11:04	1
d3-NMeFOSAA	159	*	25 - 150	07/29/19 05:56	08/08/19 11:04	1
d5-NEtFOSAA	170	*	25 - 150	07/29/19 05:56	08/08/19 11:04	1
M2-6:2 FTS	172	*	25 - 150	07/29/19 05:56	08/08/19 11:04	1
M2-8:2 FTS	221	*	25 - 150	07/29/19 05:56	08/08/19 11:04	1
M2-4:2 FTS	113		25 - 150	07/29/19 05:56	08/08/19 11:04	1
13C3 HFPO-DA	102		25 - 150	07/29/19 05:56	08/08/19 11:04	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-19

Lab Sample ID: 500-167232-11

Date Collected: 07/23/19 11:45

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	18		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluoropentanoic acid (PFPeA)	0.84	J	1.9	0.46	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorohexanoic acid (PFHxA)	<0.55		1.9	0.55	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluoroheptanoic acid (PFHpA)	0.34	J	1.9	0.24	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorooctanoic acid (PFOA)	1.3	J	1.9	0.80	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorononanoic acid (PFNA)	1.5	J	1.9	0.26	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorodecanoic acid (PFDA)	0.35	J	1.9	0.29	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorotetradecanoic acid (PFTeA)	0.50	J	1.9	0.27	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.84		1.9	0.84	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorobutanesulfonic acid (PFBS)	0.19	J B	1.9	0.19	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorohexanesulfonic acid (PFHxS)	0.38	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorooctanesulfonic acid (PFOS)	0.64	J	1.9	0.51	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorooctanesulfonamide (FOSA)	0.41	J	1.9	0.33	ng/L		07/29/19 05:56	07/30/19 10:27	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		19	2.9	ng/L		07/29/19 05:56	07/30/19 10:27	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 10:27	1
4:2 FTS	<4.9		19	4.9	ng/L		07/29/19 05:56	07/30/19 10:27	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 10:27	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 10:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 10:27	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 10:27	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 10:27	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	07/30/19 10:27	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 10:27	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 10:27	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 10:27	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 10:27	1
Ammonium Perfluorooctanoate (APFO)	1.3	J	2.0	0.83	ng/L		07/29/19 05:56	07/30/19 10:27	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	88		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C5 PFPeA	86		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C2 PFHxA	89		25 - 150	07/29/19 05:56	07/30/19 10:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-19

Lab Sample ID: 500-167232-11

Date Collected: 07/23/19 11:45

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFHpA	92		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C4 PFOA	94		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C5 PFNA	97		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C2 PFDA	103		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C2 PFHxDA	85		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C2 PFUnA	98		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C2 PFDoA	92		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C2 PFTeDA	88		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C3 PFBS	89		25 - 150	07/29/19 05:56	07/30/19 10:27	1
18O2 PFHxS	87		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C4 PFOS	89		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C8 FOSA	78		25 - 150	07/29/19 05:56	07/30/19 10:27	1
d3-NMeFOSAA	149		25 - 150	07/29/19 05:56	07/30/19 10:27	1
d5-NEtFOSAA	165 *		25 - 150	07/29/19 05:56	07/30/19 10:27	1
M2-6:2 FTS	215 *		25 - 150	07/29/19 05:56	07/30/19 10:27	1
M2-8:2 FTS	247 *		25 - 150	07/29/19 05:56	07/30/19 10:27	1
M2-4:2 FTS	164 *		25 - 150	07/29/19 05:56	07/30/19 10:27	1
13C3 HFPO-DA	92		25 - 150	07/29/19 05:56	07/30/19 10:27	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-20

Lab Sample ID: 500-167232-12

Date Collected: 07/23/19 09:30

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	19		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluoropentanoic acid (PFPeA)	<0.47		1.9	0.47	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorohexanoic acid (PFHxA)	<0.55		1.9	0.55	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorooctanoic acid (PFOA)	0.82	J	1.9	0.81	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.84		1.9	0.84	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorohexanesulfonic acid (PFHxS)	0.29	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorooctanesulfonic acid (PFOS)	<0.51		1.9	0.51	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorooctanesulfonamide (FOSA)	<0.33		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 10:35	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		19	2.9	ng/L		07/29/19 05:56	07/30/19 10:35	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 10:35	1
4:2 FTS	<4.9		19	4.9	ng/L		07/29/19 05:56	07/30/19 10:35	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 10:35	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 10:35	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 10:35	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 10:35	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 10:35	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	07/30/19 10:35	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 10:35	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 10:35	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 10:35	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 10:35	1
Ammonium Perfluorooctanoate (APFO)	0.86	J	2.0	0.84	ng/L		07/29/19 05:56	07/30/19 10:35	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	92		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C5 PFPeA	99		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C2 PFHxA	93		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C4 PFHpA	97		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C4 PFOA	97		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C5 PFNA	95		25 - 150	07/29/19 05:56	07/30/19 10:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-20

Lab Sample ID: 500-167232-12

Date Collected: 07/23/19 09:30

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	98		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C2 PFHxDA	90		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C2 PFUnA	90		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C2 PFDoA	96		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C2 PFTeDA	94		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C3 PFBS	98		25 - 150	07/29/19 05:56	07/30/19 10:35	1
18O2 PFHxS	92		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C4 PFOS	91		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C8 FOSA	73		25 - 150	07/29/19 05:56	07/30/19 10:35	1
d3-NMeFOSAA	98		25 - 150	07/29/19 05:56	07/30/19 10:35	1
d5-NEFOSAA	114		25 - 150	07/29/19 05:56	07/30/19 10:35	1
M2-6:2 FTS	128		25 - 150	07/29/19 05:56	07/30/19 10:35	1
M2-8:2 FTS	138		25 - 150	07/29/19 05:56	07/30/19 10:35	1
M2-4:2 FTS	130		25 - 150	07/29/19 05:56	07/30/19 10:35	1
13C3 HFPO-DA	88		25 - 150	07/29/19 05:56	07/30/19 10:35	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-21
Date Collected: 07/23/19 16:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-13
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	30		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluoropentanoic acid (PFPeA)	0.87	J	1.9	0.46	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorohexanoic acid (PFHxA)	<0.55		1.9	0.55	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorooctanoic acid (PFOA)	<0.80		1.9	0.80	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorotetradecanoic acid (PFTeA)	0.30	J	1.9	0.27	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.84		1.9	0.84	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorohexanesulfonic acid (PFHxS)	0.28	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorooctanesulfonic acid (PFOS)	<0.51		1.9	0.51	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorooctanesulfonamide (FOSA)	<0.33		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 10:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		19	2.9	ng/L		07/29/19 05:56	07/30/19 10:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 10:43	1
4:2 FTS	<4.9		19	4.9	ng/L		07/29/19 05:56	07/30/19 10:43	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 10:43	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 10:43	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 10:43	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 10:43	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 10:43	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	07/30/19 10:43	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 10:43	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 10:43	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 10:43	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 10:43	1
Ammonium Perfluorooctanoate (APFO)	<0.83		2.0	0.83	ng/L		07/29/19 05:56	07/30/19 10:43	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	93		25 - 150				07/29/19 05:56	07/30/19 10:43	1
13C5 PFPeA	96		25 - 150				07/29/19 05:56	07/30/19 10:43	1
13C2 PFHxA	94		25 - 150				07/29/19 05:56	07/30/19 10:43	1
13C4 PFHpA	97		25 - 150				07/29/19 05:56	07/30/19 10:43	1
13C4 PFOA	101		25 - 150				07/29/19 05:56	07/30/19 10:43	1
13C5 PFNA	96		25 - 150				07/29/19 05:56	07/30/19 10:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-21
Date Collected: 07/23/19 16:00
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-13
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	100		25 - 150	07/29/19 05:56	07/30/19 10:43	1
13C2 PFHxDA	83		25 - 150	07/29/19 05:56	07/30/19 10:43	1
13C2 PFUnA	95		25 - 150	07/29/19 05:56	07/30/19 10:43	1
13C2 PFDoA	91		25 - 150	07/29/19 05:56	07/30/19 10:43	1
13C2 PFTeDA	94		25 - 150	07/29/19 05:56	07/30/19 10:43	1
13C3 PFBS	100		25 - 150	07/29/19 05:56	07/30/19 10:43	1
18O2 PFHxS	93		25 - 150	07/29/19 05:56	07/30/19 10:43	1
13C4 PFOS	93		25 - 150	07/29/19 05:56	07/30/19 10:43	1
13C8 FOSA	80		25 - 150	07/29/19 05:56	07/30/19 10:43	1
d3-NMeFOSAA	96		25 - 150	07/29/19 05:56	07/30/19 10:43	1
d5-NEFOSAA	101		25 - 150	07/29/19 05:56	07/30/19 10:43	1
M2-6:2 FTS	125		25 - 150	07/29/19 05:56	07/30/19 10:43	1
M2-8:2 FTS	112		25 - 150	07/29/19 05:56	07/30/19 10:43	1
M2-4:2 FTS	118		25 - 150	07/29/19 05:56	07/30/19 10:43	1
13C3 HFPO-DA	87		25 - 150	07/29/19 05:56	07/30/19 10:43	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-22
Date Collected: 07/23/19 14:20
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-14
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	48		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluoropentanoic acid (PFPeA)	1.4	J	1.9	0.46	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorohexanoic acid (PFHxA)	0.68	J	1.9	0.54	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorooctanoic acid (PFOA)	<0.80		1.9	0.80	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorotetradecanoic acid (PFTeA)	<0.27		1.9	0.27	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.83		1.9	0.83	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorobutanesulfonic acid (PFBS)	0.88	J B	1.9	0.19	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluoropentanesulfonic acid (PFPeS)	0.30	J	1.9	0.28	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorohexanesulfonic acid (PFHxS)	0.98	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorooctanesulfonic acid (PFOS)	<0.51		1.9	0.51	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorooctanesulfonamide (FOSA)	<0.33		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 11:07	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		19	2.9	ng/L		07/29/19 05:56	07/30/19 11:07	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 11:07	1
4:2 FTS	<4.9		19	4.9	ng/L		07/29/19 05:56	07/30/19 11:07	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 11:07	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 11:07	1
Perfluorododecanesulfonic acid (PFDoS)	<0.42		1.9	0.42	ng/L		07/29/19 05:56	07/30/19 11:07	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 11:07	1
F-53B Major	<0.22		1.9	0.22	ng/L		07/29/19 05:56	07/30/19 11:07	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		07/29/19 05:56	07/30/19 11:07	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 11:07	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 11:07	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 11:07	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 11:07	1
Ammonium Perfluorooctanoate (APFO)	<0.82		2.0	0.82	ng/L		07/29/19 05:56	07/30/19 11:07	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	67		25 - 150				07/29/19 05:56	07/30/19 11:07	1
13C5 PFPeA	74		25 - 150				07/29/19 05:56	07/30/19 11:07	1
13C2 PFHxA	68		25 - 150				07/29/19 05:56	07/30/19 11:07	1
13C4 PFHpA	77		25 - 150				07/29/19 05:56	07/30/19 11:07	1
13C4 PFOA	77		25 - 150				07/29/19 05:56	07/30/19 11:07	1
13C5 PFNA	76		25 - 150				07/29/19 05:56	07/30/19 11:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-22
Date Collected: 07/23/19 14:20
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-14
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	70		25 - 150	07/29/19 05:56	07/30/19 11:07	1
13C2 PFHxDA	22	*	25 - 150	07/29/19 05:56	07/30/19 11:07	1
13C2 PFUnA	64		25 - 150	07/29/19 05:56	07/30/19 11:07	1
13C2 PFDoA	53		25 - 150	07/29/19 05:56	07/30/19 11:07	1
13C2 PFTeDA	27		25 - 150	07/29/19 05:56	07/30/19 11:07	1
13C3 PFBS	72		25 - 150	07/29/19 05:56	07/30/19 11:07	1
18O2 PFHxS	73		25 - 150	07/29/19 05:56	07/30/19 11:07	1
13C4 PFOS	68		25 - 150	07/29/19 05:56	07/30/19 11:07	1
13C8 FOSA	59		25 - 150	07/29/19 05:56	07/30/19 11:07	1
d3-NMeFOSAA	65		25 - 150	07/29/19 05:56	07/30/19 11:07	1
d5-NEFOSAA	66		25 - 150	07/29/19 05:56	07/30/19 11:07	1
M2-6:2 FTS	93		25 - 150	07/29/19 05:56	07/30/19 11:07	1
M2-8:2 FTS	82		25 - 150	07/29/19 05:56	07/30/19 11:07	1
M2-4:2 FTS	84		25 - 150	07/29/19 05:56	07/30/19 11:07	1
13C3 HFPO-DA	66		25 - 150	07/29/19 05:56	07/30/19 11:07	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-23

Lab Sample ID: 500-167232-15

Date Collected: 07/23/19 10:50

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	34		1.9	0.34	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluoropentanoic acid (PFPeA)	2.1		1.9	0.47	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorohexanoic acid (PFHxA)	1.3	J	1.9	0.56	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluoroheptanoic acid (PFHpA)	0.84	J	1.9	0.24	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorooctanoic acid (PFOA)	4.6		1.9	0.82	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorononanoic acid (PFNA)	8.4		1.9	0.26	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorodecanoic acid (PFDA)	1.1	J	1.9	0.30	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluoroundecanoic acid (PFUnA)	2.4		1.9	1.1	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.85		1.9	0.85	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorobutanesulfonic acid (PFBS)	1.6	J B	1.9	0.19	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorohexanesulfonic acid (PFHxS)	0.30	J B	1.9	0.16	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorooctanesulfonic acid (PFOS)	0.82	J	1.9	0.52	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorooctanesulfonamide (FOSA)	0.35	J	1.9	0.34	ng/L		07/29/19 05:56	08/08/19 11:28	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.0		19	3.0	ng/L		07/29/19 05:56	08/08/19 11:28	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	08/08/19 11:28	1
4:2 FTS	<5.0		19	5.0	ng/L		07/29/19 05:56	08/08/19 11:28	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	08/08/19 11:28	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	08/08/19 11:28	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	08/08/19 11:28	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	08/08/19 11:28	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	08/08/19 11:28	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	08/08/19 11:28	1
F-53B Minor	<0.31		1.9	0.31	ng/L		07/29/19 05:56	08/08/19 11:28	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	08/08/19 11:28	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	08/08/19 11:28	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	08/08/19 11:28	1
Ammonium Perfluorooctanoate (APFO)	4.8		2.0	0.84	ng/L		07/29/19 05:56	08/08/19 11:28	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	76		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C5 PFPeA	94		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C2 PFHxA	99		25 - 150	07/29/19 05:56	08/08/19 11:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-23

Lab Sample ID: 500-167232-15

Date Collected: 07/23/19 10:50

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFHpA	98		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C4 PFOA	98		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C5 PFNA	101		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C2 PFDA	96		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C2 PFHxDA	58		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C2 PFUnA	95		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C2 PFDoA	91		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C2 PFTeDA	82		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C3 PFBS	91		25 - 150	07/29/19 05:56	08/08/19 11:28	1
18O2 PFHxS	92		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C4 PFOS	90		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C8 FOSA	80		25 - 150	07/29/19 05:56	08/08/19 11:28	1
d3-NMeFOSAA	92		25 - 150	07/29/19 05:56	08/08/19 11:28	1
d5-NEtFOSAA	98		25 - 150	07/29/19 05:56	08/08/19 11:28	1
M2-6:2 FTS	193 *		25 - 150	07/29/19 05:56	08/08/19 11:28	1
M2-8:2 FTS	154 *		25 - 150	07/29/19 05:56	08/08/19 11:28	1
M2-4:2 FTS	168 *		25 - 150	07/29/19 05:56	08/08/19 11:28	1
13C3 HFPO-DA	90		25 - 150	07/29/19 05:56	08/08/19 11:28	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-25S
Date Collected: 07/23/19 13:40
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-16
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	48		1.9	0.33	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluoropentanoic acid (PFPeA)	1.7	J	1.9	0.46	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorohexanoic acid (PFHxA)	<0.55		1.9	0.55	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorooctanoic acid (PFOA)	<0.81		1.9	0.81	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorotetradecanoic acid (PFTeA)	0.46	J	1.9	0.27	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.84		1.9	0.84	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorobutanesulfonic acid (PFBS)	0.61	J B	1.9	0.19	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorohexanesulfonic acid (PFHxS)	0.46	J B	1.9	0.16	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorooctanesulfonic acid (PFOS)	0.83	J	1.9	0.51	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorooctanesulfonamide (FOSA)	<0.33		1.9	0.33	ng/L		07/29/19 05:56	08/08/19 11:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		19	2.9	ng/L		07/29/19 05:56	08/08/19 11:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	08/08/19 11:36	1
4:2 FTS	<4.9		19	4.9	ng/L		07/29/19 05:56	08/08/19 11:36	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	08/08/19 11:36	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	08/08/19 11:36	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	08/08/19 11:36	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	08/08/19 11:36	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	08/08/19 11:36	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	08/08/19 11:36	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	08/08/19 11:36	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	08/08/19 11:36	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	08/08/19 11:36	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	08/08/19 11:36	1
Ammonium Perfluorooctanoate (APFO)	<0.83		2.0	0.83	ng/L		07/29/19 05:56	08/08/19 11:36	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	95		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C5 PFPeA	91		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C2 PFHxA	88		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C4 PFHpA	95		25 - 150	07/29/19 05:56	08/08/19 11:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-25S

Lab Sample ID: 500-167232-16

Date Collected: 07/23/19 13:40

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOA	95		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C5 PFNA	97		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C2 PFDA	98		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C2 PFHxDA	77		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C2 PFUnA	97		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C2 PFDaA	91		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C2 PFTeDA	84		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C3 PFBS	95		25 - 150	07/29/19 05:56	08/08/19 11:36	1
18O2 PFHxS	101		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C4 PFOS	98		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C8 FOSA	90		25 - 150	07/29/19 05:56	08/08/19 11:36	1
d3-NMeFOSAA	109		25 - 150	07/29/19 05:56	08/08/19 11:36	1
d5-NEtFOSAA	107		25 - 150	07/29/19 05:56	08/08/19 11:36	1
M2-6:2 FTS	129		25 - 150	07/29/19 05:56	08/08/19 11:36	1
M2-8:2 FTS	198 *		25 - 150	07/29/19 05:56	08/08/19 11:36	1
M2-4:2 FTS	119		25 - 150	07/29/19 05:56	08/08/19 11:36	1
13C3 HFPO-DA	98		25 - 150	07/29/19 05:56	08/08/19 11:36	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-25D
Date Collected: 07/23/19 13:50
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-17
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	43		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluoropentanoic acid (PFPeA)	<0.47		1.9	0.47	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorohexanoic acid (PFHxA)	<0.55		1.9	0.55	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorooctanoic acid (PFOA)	1.2 J		1.9	0.81	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorononanoic acid (PFNA)	1.2 J		1.9	0.26	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorodecanoic acid (PFDA)	0.29 J		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.85		1.9	0.85	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorobutanesulfonic acid (PFBS)	0.34 J B		1.9	0.19	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorohexanesulfonic acid (PFHxS)	0.59 J B		1.9	0.16	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorooctanesulfonic acid (PFOS)	1.2 J		1.9	0.51	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorooctanesulfonamide (FOSA)	<0.33		1.9	0.33	ng/L		07/29/19 05:56	07/30/19 11:31	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		19	2.9	ng/L		07/29/19 05:56	07/30/19 11:31	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 11:31	1
4:2 FTS	<4.9		19	4.9	ng/L		07/29/19 05:56	07/30/19 11:31	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 11:31	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 11:31	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 11:31	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 11:31	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 11:31	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	07/30/19 11:31	1
F-53B Minor	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 11:31	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 11:31	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 11:31	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 11:31	1
Ammonium Perfluorooctanoate (APFO)	1.3 J		2.0	0.84	ng/L		07/29/19 05:56	07/30/19 11:31	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	65		25 - 150				07/29/19 05:56	07/30/19 11:31	1
13C5 PFPeA	69		25 - 150				07/29/19 05:56	07/30/19 11:31	1
13C2 PFHxA	69		25 - 150				07/29/19 05:56	07/30/19 11:31	1
13C4 PFHpA	70		25 - 150				07/29/19 05:56	07/30/19 11:31	1
13C4 PFOA	69		25 - 150				07/29/19 05:56	07/30/19 11:31	1

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-25D

Lab Sample ID: 500-167232-17

Date Collected: 07/23/19 13:50

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C5 PFNA	66		25 - 150	07/29/19 05:56	07/30/19 11:31	1
13C2 PFDA	64		25 - 150	07/29/19 05:56	07/30/19 11:31	1
13C2 PFHxDA	34		25 - 150	07/29/19 05:56	07/30/19 11:31	1
13C2 PFUnA	59		25 - 150	07/29/19 05:56	07/30/19 11:31	1
13C2 PFDoA	47		25 - 150	07/29/19 05:56	07/30/19 11:31	1
13C2 PFTeDA	31		25 - 150	07/29/19 05:56	07/30/19 11:31	1
13C3 PFBS	73		25 - 150	07/29/19 05:56	07/30/19 11:31	1
18O2 PFHxS	68		25 - 150	07/29/19 05:56	07/30/19 11:31	1
13C4 PFOS	59		25 - 150	07/29/19 05:56	07/30/19 11:31	1
13C8 FOSA	48		25 - 150	07/29/19 05:56	07/30/19 11:31	1
d3-NMeFOSAA	63		25 - 150	07/29/19 05:56	07/30/19 11:31	1
d5-NEtFOSAA	63		25 - 150	07/29/19 05:56	07/30/19 11:31	1
M2-6:2 FTS	89		25 - 150	07/29/19 05:56	07/30/19 11:31	1
M2-8:2 FTS	133		25 - 150	07/29/19 05:56	07/30/19 11:31	1
M2-4:2 FTS	104		25 - 150	07/29/19 05:56	07/30/19 11:31	1
13C3 HFPO-DA	59		25 - 150	07/29/19 05:56	07/30/19 11:31	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-26
Date Collected: 07/23/19 15:45
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-18
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	44		1.9	0.34	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluoropentanoic acid (PFPeA)	<0.47		1.9	0.47	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorohexanoic acid (PFHxA)	<0.56		1.9	0.56	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorooctanoic acid (PFOA)	<0.81		1.9	0.81	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.85		1.9	0.85	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorobutanesulfonic acid (PFBS)	0.23	J B	1.9	0.19	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorohexanesulfonic acid (PFHxS)	0.28	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorooctanesulfonic acid (PFOS)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorooctanesulfonamide (FOSA)	<0.34		1.9	0.34	ng/L		07/29/19 05:56	07/30/19 11:39	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.0		19	3.0	ng/L		07/29/19 05:56	07/30/19 11:39	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 11:39	1
4:2 FTS	<5.0		19	5.0	ng/L		07/29/19 05:56	07/30/19 11:39	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 11:39	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 11:39	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 11:39	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 11:39	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 11:39	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	07/30/19 11:39	1
F-53B Minor	<0.31		1.9	0.31	ng/L		07/29/19 05:56	07/30/19 11:39	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 11:39	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 11:39	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 11:39	1
Ammonium Perfluorooctanoate (APFO)	<0.84		2.0	0.84	ng/L		07/29/19 05:56	07/30/19 11:39	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	66		25 - 150				07/29/19 05:56	07/30/19 11:39	1
13C5 PFPeA	71		25 - 150				07/29/19 05:56	07/30/19 11:39	1
13C2 PFHxA	71		25 - 150				07/29/19 05:56	07/30/19 11:39	1
13C4 PFHpA	74		25 - 150				07/29/19 05:56	07/30/19 11:39	1
13C4 PFOA	75		25 - 150				07/29/19 05:56	07/30/19 11:39	1
13C5 PFNA	73		25 - 150				07/29/19 05:56	07/30/19 11:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-26
Date Collected: 07/23/19 15:45
Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-18
Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	72		25 - 150	07/29/19 05:56	07/30/19 11:39	1
13C2 PFHxDA	40		25 - 150	07/29/19 05:56	07/30/19 11:39	1
13C2 PFUnA	69		25 - 150	07/29/19 05:56	07/30/19 11:39	1
13C2 PFDoA	58		25 - 150	07/29/19 05:56	07/30/19 11:39	1
13C2 PFTeDA	32		25 - 150	07/29/19 05:56	07/30/19 11:39	1
13C3 PFBS	79		25 - 150	07/29/19 05:56	07/30/19 11:39	1
18O2 PFHxS	73		25 - 150	07/29/19 05:56	07/30/19 11:39	1
13C4 PFOS	69		25 - 150	07/29/19 05:56	07/30/19 11:39	1
13C8 FOSA	55		25 - 150	07/29/19 05:56	07/30/19 11:39	1
d3-NMeFOSAA	66		25 - 150	07/29/19 05:56	07/30/19 11:39	1
d5-NEFOSAA	98		25 - 150	07/29/19 05:56	07/30/19 11:39	1
M2-6:2 FTS	91		25 - 150	07/29/19 05:56	07/30/19 11:39	1
M2-8:2 FTS	108		25 - 150	07/29/19 05:56	07/30/19 11:39	1
M2-4:2 FTS	94		25 - 150	07/29/19 05:56	07/30/19 11:39	1
13C3 HFPO-DA	72		25 - 150	07/29/19 05:56	07/30/19 11:39	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-27

Lab Sample ID: 500-167232-19

Date Collected: 07/23/19 15:30

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	34		1.9	0.34	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluoropentanoic acid (PFPeA)	0.47	J	1.9	0.47	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorohexanoic acid (PFHxA)	<0.56		1.9	0.56	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluoroheptanoic acid (PFHpA)	0.25	J	1.9	0.24	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorooctanoic acid (PFOA)	1.1	J	1.9	0.82	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorodecanoic acid (PFDA)	0.85	J	1.9	0.30	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorotridecanoic acid (PFTriA)	<1.3		1.9	1.3	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorotetradecanoic acid (PFTeA)	<0.28		1.9	0.28	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.86		1.9	0.86	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorobutanesulfonic acid (PFBS)	0.21	J B	1.9	0.19	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.44		1.9	0.44	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorohexanesulfonic acid (PFHxS)	0.28	J B	1.9	0.16	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorooctanesulfonic acid (PFOS)	<0.52		1.9	0.52	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.9	0.15	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorooctanesulfonamide (FOSA)	<0.34		1.9	0.34	ng/L		07/29/19 05:56	07/30/19 11:47	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.0		19	3.0	ng/L		07/29/19 05:56	07/30/19 11:47	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.8		19	1.8	ng/L		07/29/19 05:56	07/30/19 11:47	1
4:2 FTS	<5.0		19	5.0	ng/L		07/29/19 05:56	07/30/19 11:47	1
6:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 11:47	1
8:2 FTS	<1.9		19	1.9	ng/L		07/29/19 05:56	07/30/19 11:47	1
Perfluorododecanesulfonic acid (PFDoS)	<0.43		1.9	0.43	ng/L		07/29/19 05:56	07/30/19 11:47	1
ADONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 11:47	1
F-53B Major	<0.23		1.9	0.23	ng/L		07/29/19 05:56	07/30/19 11:47	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		07/29/19 05:56	07/30/19 11:47	1
F-53B Minor	<0.31		1.9	0.31	ng/L		07/29/19 05:56	07/30/19 11:47	1
10:2 FTS	<0.18		1.9	0.18	ng/L		07/29/19 05:56	07/30/19 11:47	1
NaDONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 11:47	1
DONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 11:47	1
Ammonium Perfluorooctanoate (APFO)	1.1	J	2.0	0.85	ng/L		07/29/19 05:56	07/30/19 11:47	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	5	*	25 - 150				07/29/19 05:56	07/30/19 11:47	1
13C5 PFPeA	41		25 - 150				07/29/19 05:56	07/30/19 11:47	1
13C2 PFHxA	81		25 - 150				07/29/19 05:56	07/30/19 11:47	1
13C4 PFHpA	77		25 - 150				07/29/19 05:56	07/30/19 11:47	1
13C4 PFOA	89		25 - 150				07/29/19 05:56	07/30/19 11:47	1
13C5 PFNA	92		25 - 150				07/29/19 05:56	07/30/19 11:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-27

Lab Sample ID: 500-167232-19

Date Collected: 07/23/19 15:30

Matrix: Ground Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	89		25 - 150	07/29/19 05:56	07/30/19 11:47	1
13C2 PFHxDA	43		25 - 150	07/29/19 05:56	07/30/19 11:47	1
13C2 PFUnA	83		25 - 150	07/29/19 05:56	07/30/19 11:47	1
13C2 PFDoA	82		25 - 150	07/29/19 05:56	07/30/19 11:47	1
13C2 PFTeDA	78		25 - 150	07/29/19 05:56	07/30/19 11:47	1
13C3 PFBS	83		25 - 150	07/29/19 05:56	07/30/19 11:47	1
18O2 PFHxS	81		25 - 150	07/29/19 05:56	07/30/19 11:47	1
13C4 PFOS	88		25 - 150	07/29/19 05:56	07/30/19 11:47	1
13C8 FOSA	71		25 - 150	07/29/19 05:56	07/30/19 11:47	1
d3-NMeFOSAA	45		25 - 150	07/29/19 05:56	07/30/19 11:47	1
d5-NEFOSAA	54		25 - 150	07/29/19 05:56	07/30/19 11:47	1
M2-6:2 FTS	132		25 - 150	07/29/19 05:56	07/30/19 11:47	1
M2-8:2 FTS	106		25 - 150	07/29/19 05:56	07/30/19 11:47	1
M2-4:2 FTS	124		25 - 150	07/29/19 05:56	07/30/19 11:47	1
13C3 HFPO-DA	70		25 - 150	07/29/19 05:56	07/30/19 11:47	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-28

Date Collected: 07/24/19 08:45

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-20

Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	77		1.8	0.32	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluoropentanoic acid (PFPeA)	2.2		1.8	0.45	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorohexanoic acid (PFHxA)	0.86	J	1.8	0.53	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorooctanoic acid (PFOA)	<0.78		1.8	0.78	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.8	1.2	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorotetradecanoic acid (PFTeA)	<0.26		1.8	0.26	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.81		1.8	0.81	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorobutanesulfonic acid (PFBS)	1.3	J B	1.8	0.18	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.42		1.8	0.42	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorohexanesulfonic acid (PFHxS)	0.90	J B	1.8	0.16	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.8	0.15	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorooctanesulfonamide (FOSA)	<0.32		1.8	0.32	ng/L		07/29/19 05:56	07/30/19 11:55	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.8		18	2.8	ng/L		07/29/19 05:56	07/30/19 11:55	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.7		18	1.7	ng/L		07/29/19 05:56	07/30/19 11:55	1
4:2 FTS	<4.7		18	4.7	ng/L		07/29/19 05:56	07/30/19 11:55	1
6:2 FTS	<1.8		18	1.8	ng/L		07/29/19 05:56	07/30/19 11:55	1
8:2 FTS	<1.8		18	1.8	ng/L		07/29/19 05:56	07/30/19 11:55	1
Perfluorododecanesulfonic acid (PFDoS)	<0.41		1.8	0.41	ng/L		07/29/19 05:56	07/30/19 11:55	1
ADONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 11:55	1
F-53B Major	<0.22		1.8	0.22	ng/L		07/29/19 05:56	07/30/19 11:55	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		07/29/19 05:56	07/30/19 11:55	1
F-53B Minor	<0.29		1.8	0.29	ng/L		07/29/19 05:56	07/30/19 11:55	1
10:2 FTS	<0.17		1.8	0.17	ng/L		07/29/19 05:56	07/30/19 11:55	1
NaDONA	<0.17		1.9	0.17	ng/L		07/29/19 05:56	07/30/19 11:55	1
DONA	<0.16		1.8	0.16	ng/L		07/29/19 05:56	07/30/19 11:55	1
Ammonium Perfluorooctanoate (APFO)	<0.80		1.9	0.80	ng/L		07/29/19 05:56	07/30/19 11:55	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	72		25 - 150				07/29/19 05:56	07/30/19 11:55	1
13C5 PFPeA	77		25 - 150				07/29/19 05:56	07/30/19 11:55	1
13C2 PFHxA	78		25 - 150				07/29/19 05:56	07/30/19 11:55	1
13C4 PFHpA	84		25 - 150				07/29/19 05:56	07/30/19 11:55	1
13C4 PFOA	82		25 - 150				07/29/19 05:56	07/30/19 11:55	1
13C5 PFNA	80		25 - 150				07/29/19 05:56	07/30/19 11:55	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-28

Date Collected: 07/24/19 08:45

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-20

Matrix: Ground Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	77		25 - 150	07/29/19 05:56	07/30/19 11:55	1
13C2 PFHxDA	55		25 - 150	07/29/19 05:56	07/30/19 11:55	1
13C2 PFUnA	64		25 - 150	07/29/19 05:56	07/30/19 11:55	1
13C2 PFDoA	58		25 - 150	07/29/19 05:56	07/30/19 11:55	1
13C2 PFTeDA	57		25 - 150	07/29/19 05:56	07/30/19 11:55	1
13C3 PFBS	81		25 - 150	07/29/19 05:56	07/30/19 11:55	1
18O2 PFHxS	79		25 - 150	07/29/19 05:56	07/30/19 11:55	1
13C4 PFOS	70		25 - 150	07/29/19 05:56	07/30/19 11:55	1
13C8 FOSA	63		25 - 150	07/29/19 05:56	07/30/19 11:55	1
d3-NMeFOSAA	63		25 - 150	07/29/19 05:56	07/30/19 11:55	1
d5-NEFOSAA	61		25 - 150	07/29/19 05:56	07/30/19 11:55	1
M2-6:2 FTS	102		25 - 150	07/29/19 05:56	07/30/19 11:55	1
M2-8:2 FTS	82		25 - 150	07/29/19 05:56	07/30/19 11:55	1
M2-4:2 FTS	93		25 - 150	07/29/19 05:56	07/30/19 11:55	1
13C3 HFPO-DA	73		25 - 150	07/29/19 05:56	07/30/19 11:55	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: Field Blank 2

Lab Sample ID: 500-167232-22

Date Collected: 07/23/19 14:30

Matrix: Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.35		2.0	0.35	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorotetradecanoic acid (PFTeA)	<0.29		2.0	0.29	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.46		2.0	0.46	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorohexanesulfonic acid (PFHxS)	0.29	J B	2.0	0.17	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorononanesulfonic acid (PFNS)	<0.16		2.0	0.16	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorooctanesulfonamide (FOSA)	<0.35		2.0	0.35	ng/L		07/29/19 05:48	07/30/19 06:02	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.1		20	3.1	ng/L		07/29/19 05:48	07/30/19 06:02	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.9		20	1.9	ng/L		07/29/19 05:48	07/30/19 06:02	1
4:2 FTS	<5.2		20	5.2	ng/L		07/29/19 05:48	07/30/19 06:02	1
6:2 FTS	<2.0		20	2.0	ng/L		07/29/19 05:48	07/30/19 06:02	1
8:2 FTS	<2.0		20	2.0	ng/L		07/29/19 05:48	07/30/19 06:02	1
Perfluorododecanesulfonic acid (PFDoS)	<0.45		2.0	0.45	ng/L		07/29/19 05:48	07/30/19 06:02	1
ADONA	<0.19		2.1	0.19	ng/L		07/29/19 05:48	07/30/19 06:02	1
F-53B Major	<0.24		2.0	0.24	ng/L		07/29/19 05:48	07/30/19 06:02	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		07/29/19 05:48	07/30/19 06:02	1
F-53B Minor	<0.32		2.0	0.32	ng/L		07/29/19 05:48	07/30/19 06:02	1
10:2 FTS	<0.19		2.0	0.19	ng/L		07/29/19 05:48	07/30/19 06:02	1
NaDONA	<0.19		2.1	0.19	ng/L		07/29/19 05:48	07/30/19 06:02	1
DONA	<0.18		2.0	0.18	ng/L		07/29/19 05:48	07/30/19 06:02	1
Ammonium Perfluorooctanoate (APFO)	<0.88		2.1	0.88	ng/L		07/29/19 05:48	07/30/19 06:02	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	97		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C5 PFPeA	97		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C2 PFHxA	94		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C4 PFHpA	101		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C4 PFOA	104		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C5 PFNA	100		25 - 150	07/29/19 05:48	07/30/19 06:02	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: Field Blank 2

Lab Sample ID: 500-167232-22

Date Collected: 07/23/19 14:30

Matrix: Water

Date Received: 07/26/19 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	101		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C2 PFHxDA	100		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C2 PFUnA	99		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C2 PFDoA	101		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C2 PFTeDA	104		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C3 PFBS	104		25 - 150	07/29/19 05:48	07/30/19 06:02	1
18O2 PFHxS	100		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C4 PFOS	97		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C8 FOSA	88		25 - 150	07/29/19 05:48	07/30/19 06:02	1
d3-NMeFOSAA	102		25 - 150	07/29/19 05:48	07/30/19 06:02	1
d5-NEFOSAA	109		25 - 150	07/29/19 05:48	07/30/19 06:02	1
M2-6:2 FTS	134		25 - 150	07/29/19 05:48	07/30/19 06:02	1
M2-8:2 FTS	130		25 - 150	07/29/19 05:48	07/30/19 06:02	1
M2-4:2 FTS	116		25 - 150	07/29/19 05:48	07/30/19 06:02	1
13C3 HFPO-DA	91		25 - 150	07/29/19 05:48	07/30/19 06:02	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Qualifiers

LCMS

Qualifier	Qualifier Description
*	Isotope Dilution analyte is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

LCMS

Prep Batch: 310777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167232-22	Field Blank 2	Total/NA	Water	3535	
MB 320-310777/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-310777/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-310777/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Prep Batch: 310779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167232-1	MW-1	Total/NA	Ground Water	3535	
500-167232-2	P-6	Total/NA	Ground Water	3535	
500-167232-3	MW-7	Total/NA	Ground Water	3535	
500-167232-4	MW-8	Total/NA	Ground Water	3535	
500-167232-5	MW-9	Total/NA	Ground Water	3535	
500-167232-6	P-10	Total/NA	Ground Water	3535	
500-167232-7	MW-11	Total/NA	Ground Water	3535	
500-167232-8	MW-16	Total/NA	Ground Water	3535	
500-167232-9	MW-17	Total/NA	Ground Water	3535	
500-167232-10	P-18	Total/NA	Ground Water	3535	
500-167232-11	P-19	Total/NA	Ground Water	3535	
500-167232-12	P-20	Total/NA	Ground Water	3535	
500-167232-13	MW-21	Total/NA	Ground Water	3535	
500-167232-14	MW-22	Total/NA	Ground Water	3535	
500-167232-15	P-23	Total/NA	Ground Water	3535	
500-167232-16	P-25S	Total/NA	Ground Water	3535	
500-167232-17	P-25D	Total/NA	Ground Water	3535	
500-167232-18	MW-26	Total/NA	Ground Water	3535	
500-167232-19	P-27	Total/NA	Ground Water	3535	
500-167232-20	MW-28	Total/NA	Ground Water	3535	
MB 320-310779/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-310779/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-310779/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 311111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167232-22	Field Blank 2	Total/NA	Water	537 (modified)	310777
MB 320-310777/1-A	Method Blank	Total/NA	Water	537 (modified)	310777
LCS 320-310777/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	310777
LCSD 320-310777/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	310777

Analysis Batch: 311119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167232-1	MW-1	Total/NA	Ground Water	537 (modified)	310779
500-167232-2	P-6	Total/NA	Ground Water	537 (modified)	310779
500-167232-3	MW-7	Total/NA	Ground Water	537 (modified)	310779
500-167232-4	MW-8	Total/NA	Ground Water	537 (modified)	310779
500-167232-7	MW-11	Total/NA	Ground Water	537 (modified)	310779
500-167232-8	MW-16	Total/NA	Ground Water	537 (modified)	310779
500-167232-9	MW-17	Total/NA	Ground Water	537 (modified)	310779
500-167232-11	P-19	Total/NA	Ground Water	537 (modified)	310779
500-167232-12	P-20	Total/NA	Ground Water	537 (modified)	310779
500-167232-13	MW-21	Total/NA	Ground Water	537 (modified)	310779
500-167232-14	MW-22	Total/NA	Ground Water	537 (modified)	310779

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

LCMS (Continued)

Analysis Batch: 311119 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167232-17	P-25D	Total/NA	Ground Water	537 (modified)	310779
500-167232-18	MW-26	Total/NA	Ground Water	537 (modified)	310779
500-167232-19	P-27	Total/NA	Ground Water	537 (modified)	310779
500-167232-20	MW-28	Total/NA	Ground Water	537 (modified)	310779
MB 320-310779/1-A	Method Blank	Total/NA	Water	537 (modified)	310779
LCS 320-310779/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	310779
LCSD 320-310779/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	310779

Analysis Batch: 313536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167232-5	MW-9	Total/NA	Ground Water	537 (modified)	310779
500-167232-6	P-10	Total/NA	Ground Water	537 (modified)	310779
500-167232-10	P-18	Total/NA	Ground Water	537 (modified)	310779
500-167232-15	P-23	Total/NA	Ground Water	537 (modified)	310779
500-167232-16	P-25S	Total/NA	Ground Water	537 (modified)	310779

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-310777/1-A
Matrix: Water
Analysis Batch: 311111

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 310777

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.35		2.0	0.35	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorotetradecanoic acid (PFTeA)	<0.29		2.0	0.29	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.46		2.0	0.46	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorohexanesulfonic acid (PFHxS)	0.244	J	2.0	0.17	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorononanesulfonic acid (PFNS)	<0.16		2.0	0.16	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorooctanesulfonamide (FOSA)	<0.35		2.0	0.35	ng/L		07/29/19 05:48	07/30/19 02:42	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.1		20	3.1	ng/L		07/29/19 05:48	07/30/19 02:42	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.9		20	1.9	ng/L		07/29/19 05:48	07/30/19 02:42	1
4:2 FTS	<5.2		20	5.2	ng/L		07/29/19 05:48	07/30/19 02:42	1
6:2 FTS	<2.0		20	2.0	ng/L		07/29/19 05:48	07/30/19 02:42	1
8:2 FTS	<2.0		20	2.0	ng/L		07/29/19 05:48	07/30/19 02:42	1
Perfluorododecanesulfonic acid (PFDoS)	<0.45		2.0	0.45	ng/L		07/29/19 05:48	07/30/19 02:42	1
ADONA	<0.19		2.1	0.19	ng/L		07/29/19 05:48	07/30/19 02:42	1
F-53B Major	<0.24		2.0	0.24	ng/L		07/29/19 05:48	07/30/19 02:42	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		07/29/19 05:48	07/30/19 02:42	1
F-53B Minor	<0.32		2.0	0.32	ng/L		07/29/19 05:48	07/30/19 02:42	1
10:2 FTS	<0.19		2.0	0.19	ng/L		07/29/19 05:48	07/30/19 02:42	1
NaDONA	<0.19		2.1	0.19	ng/L		07/29/19 05:48	07/30/19 02:42	1
DONA	<0.18		2.0	0.18	ng/L		07/29/19 05:48	07/30/19 02:42	1
Ammonium Perfluorooctanoate (APFO)	<0.88		2.1	0.88	ng/L		07/29/19 05:48	07/30/19 02:42	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	93		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C5 PFPeA	94		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C2 PFHxA	89		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C4 PFHpA	95		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C4 PFOA	94		25 - 150	07/29/19 05:48	07/30/19 02:42	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-310777/1-A
Matrix: Water
Analysis Batch: 311111

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 310777

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C5 PFNA	99		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C2 PFDA	96		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C2 PFHxDA	88		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C2 PFUnA	97		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C2 PFDoA	92		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C2 PFTeDA	96		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C3 PFBS	96		25 - 150	07/29/19 05:48	07/30/19 02:42	1
18O2 PFHxS	95		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C4 PFOS	91		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C8 FOSA	79		25 - 150	07/29/19 05:48	07/30/19 02:42	1
d3-NMeFOSAA	93		25 - 150	07/29/19 05:48	07/30/19 02:42	1
d5-NEtFOSAA	98		25 - 150	07/29/19 05:48	07/30/19 02:42	1
M2-6:2 FTS	122		25 - 150	07/29/19 05:48	07/30/19 02:42	1
M2-8:2 FTS	105		25 - 150	07/29/19 05:48	07/30/19 02:42	1
M2-4:2 FTS	113		25 - 150	07/29/19 05:48	07/30/19 02:42	1
13C3 HFPO-DA	104		25 - 150	07/29/19 05:48	07/30/19 02:42	1

Lab Sample ID: LCS 320-310777/2-A
Matrix: Water
Analysis Batch: 311111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 310777

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	43.3		ng/L		108	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	39.0		ng/L		98	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	41.1		ng/L		103	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	43.5		ng/L		109	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	42.0		ng/L		105	64 - 124
Perfluorononanoic acid (PFNA)	40.0	39.6		ng/L		99	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	43.8		ng/L		110	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	38.7		ng/L		97	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	42.6		ng/L		106	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	44.0		ng/L		110	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	41.1		ng/L		103	68 - 128
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	42.8		ng/L		107	72 - 132
Perfluorobutanesulfonic acid (PFBS)	35.4	35.0		ng/L		99	73 - 133
Perfluoro-n-octadecanoic acid (PFODA)	40.0	40.1		ng/L		100	74 - 134
Perfluoropentanesulfonic acid (PFPeS)	37.5	38.1		ng/L		102	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.6		ng/L		98	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	43.3		ng/L		114	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	36.6		ng/L		99	67 - 127

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-310777/2-A
Matrix: Water
Analysis Batch: 311111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 310777

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorononanesulfonic acid (PFNS)	38.4	40.6		ng/L		106	70 - 130
Perfluorodecanesulfonic acid (PFDS)	38.6	40.8		ng/L		106	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	46.6		ng/L		116	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	41.1		ng/L		103	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	38.7		ng/L		97	65 - 125
4:2 FTS	37.4	38.2		ng/L		102	70 - 130
6:2 FTS	37.9	37.2		ng/L		98	66 - 126
8:2 FTS	38.3	40.1		ng/L		105	67 - 127
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.9		ng/L		95	70 - 130
ADONA	39.5	43.6		ng/L		110	70 - 130
F-53B Major	37.3	40.9		ng/L		110	70 - 130
HFPO-DA (GenX)	40.0	42.4		ng/L		106	70 - 130
F-53B Minor	37.7	44.1		ng/L		117	70 - 130
10:2 FTS	38.6	42.6		ng/L		111	70 - 130
NaDONA	40.0	44.2		ng/L		110	70 - 130
DONA	37.7	41.6		ng/L		110	70 - 130
Ammonium Perfluorooctanoate (APFO)	41.6	43.7		ng/L		105	64 - 124

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	90		25 - 150
13C5 PFPeA	94		25 - 150
13C2 PFHxA	91		25 - 150
13C4 PFHpA	92		25 - 150
13C4 PFOA	99		25 - 150
13C5 PFNA	97		25 - 150
13C2 PFDA	97		25 - 150
13C2 PFHxDA	90		25 - 150
13C2 PFUnA	96		25 - 150
13C2 PFDoA	94		25 - 150
13C2 PFTeDA	98		25 - 150
13C3 PFBS	102		25 - 150
18O2 PFHxS	95		25 - 150
13C4 PFOS	93		25 - 150
13C8 FOSA	79		25 - 150
d3-NMeFOSAA	94		25 - 150
d5-NEtFOSAA	100		25 - 150
M2-6:2 FTS	131		25 - 150
M2-8:2 FTS	118		25 - 150
M2-4:2 FTS	114		25 - 150
13C3 HFPO-DA	92		25 - 150

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-310777/3-A

Matrix: Water

Analysis Batch: 311111

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 310777

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	40.0	44.4		ng/L		111	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	40.0	39.8		ng/L		99	66 - 126	2	30
Perfluorohexanoic acid (PFHxA)	40.0	39.6		ng/L		99	66 - 126	4	30
Perfluoroheptanoic acid (PFHpA)	40.0	41.3		ng/L		103	66 - 126	5	30
Perfluorooctanoic acid (PFOA)	40.0	43.9		ng/L		110	64 - 124	4	30
Perfluorononanoic acid (PFNA)	40.0	41.6		ng/L		104	68 - 128	5	30
Perfluorodecanoic acid (PFDA)	40.0	42.5		ng/L		106	69 - 129	3	30
Perfluoroundecanoic acid (PFUnA)	40.0	38.8		ng/L		97	60 - 120	0	30
Perfluorododecanoic acid (PFDoA)	40.0	41.3		ng/L		103	71 - 131	3	30
Perfluorotridecanoic acid (PFTriA)	40.0	43.9		ng/L		110	72 - 132	0	30
Perfluorotetradecanoic acid (PFTeA)	40.0	38.7		ng/L		97	68 - 128	6	30
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	42.1		ng/L		105	72 - 132	2	30
Perfluorobutanesulfonic acid (PFBS)	35.4	37.3		ng/L		105	73 - 133	6	30
Perfluoro-n-octadecanoic acid (PFODA)	40.0	40.0		ng/L		100	74 - 134	0	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	39.2		ng/L		104	70 - 130	3	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.8		ng/L		101	63 - 123	3	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	42.4		ng/L		111	68 - 128	2	30
Perfluorooctanesulfonic acid (PFOS)	37.1	36.3		ng/L		98	67 - 127	1	30
Perfluorononanesulfonic acid (PFNS)	38.4	40.0		ng/L		104	70 - 130	2	30
Perfluorodecanesulfonic acid (PFDS)	38.6	41.4		ng/L		107	68 - 128	1	30
Perfluorooctanesulfonamide (FOSA)	40.0	45.5		ng/L		114	70 - 130	2	30
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	40.0	39.1		ng/L		98	67 - 127	5	30
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	40.0	40.5		ng/L		101	65 - 125	4	30
4:2 FTS	37.4	34.7		ng/L		93	70 - 130	10	30
6:2 FTS	37.9	34.1		ng/L		90	66 - 126	9	30
8:2 FTS	38.3	37.4		ng/L		98	67 - 127	7	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	38.9		ng/L		101	70 - 130	5	30
ADONA	39.5	42.4		ng/L		107	70 - 130	3	30
F-53B Major	37.3	40.7		ng/L		109	70 - 130	1	30
HFPO-DA (GenX)	40.0	42.4		ng/L		106	70 - 130	0	30
F-53B Minor	37.7	42.6		ng/L		113	70 - 130	3	30
10:2 FTS	38.6	40.4		ng/L		105	70 - 130	5	30
NaDONA	40.0	42.9		ng/L		107	70 - 130	3	30
DONA	37.7	40.5		ng/L		107	70 - 130	3	30
Ammonium Perfluorooctanoate (APFO)	41.6	45.7		ng/L		110	64 - 124	4	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>LCS D LCS D</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C4 PFBA	90		25 - 150
13C5 PFPeA	95		25 - 150
13C2 PFHxA	93		25 - 150
13C4 PFHpA	95		25 - 150
13C4 PFOA	94		25 - 150
13C5 PFNA	97		25 - 150
13C2 PFDA	95		25 - 150
13C2 PFHxDA	91		25 - 150
13C2 PFUnA	98		25 - 150
13C2 PFDoA	97		25 - 150
13C2 PFTeDA	103		25 - 150
13C3 PFBS	98		25 - 150
18O2 PFHxS	92		25 - 150
13C4 PFOS	93		25 - 150
13C8 FOSA	82		25 - 150
d3-NMeFOSAA	98		25 - 150
d5-NEtFOSAA	103		25 - 150
M2-6:2 FTS	129		25 - 150
M2-8:2 FTS	117		25 - 150
M2-4:2 FTS	121		25 - 150
13C3 HFPO-DA	87		25 - 150

Lab Sample ID: MB 320-310779/1-A
Matrix: Water
Analysis Batch: 311119

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 310779

<i>Analyte</i>	<i>MB MB</i>		<i>LOQ</i>	<i>LOD</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
	<i>Result</i>	<i>Qualifier</i>							
Perfluorobutanoic acid (PFBA)	<0.35		2.0	0.35	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorotetradecanoic acid (PFTeA)	<0.29		2.0	0.29	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorobutanesulfonic acid (PFBS)	0.261	J	2.0	0.20	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.46		2.0	0.46	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorohexanesulfonic acid (PFHxS)	0.353	J	2.0	0.17	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorononanesulfonic acid (PFNS)	<0.16		2.0	0.16	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorooctanesulfonamide (FOSA)	<0.35		2.0	0.35	ng/L		07/29/19 05:56	07/30/19 08:27	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-310779/1-A
Matrix: Water
Analysis Batch: 311119

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 310779

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.1		20	3.1	ng/L		07/29/19 05:56	07/30/19 08:27	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.9		20	1.9	ng/L		07/29/19 05:56	07/30/19 08:27	1
4:2 FTS	<5.2		20	5.2	ng/L		07/29/19 05:56	07/30/19 08:27	1
6:2 FTS	<2.0		20	2.0	ng/L		07/29/19 05:56	07/30/19 08:27	1
8:2 FTS	<2.0		20	2.0	ng/L		07/29/19 05:56	07/30/19 08:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.45		2.0	0.45	ng/L		07/29/19 05:56	07/30/19 08:27	1
ADONA	<0.19		2.1	0.19	ng/L		07/29/19 05:56	07/30/19 08:27	1
F-53B Major	<0.24		2.0	0.24	ng/L		07/29/19 05:56	07/30/19 08:27	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		07/29/19 05:56	07/30/19 08:27	1
F-53B Minor	<0.32		2.0	0.32	ng/L		07/29/19 05:56	07/30/19 08:27	1
10:2 FTS	<0.19		2.0	0.19	ng/L		07/29/19 05:56	07/30/19 08:27	1
NaDONA	<0.19		2.1	0.19	ng/L		07/29/19 05:56	07/30/19 08:27	1
DONA	<0.18		2.0	0.18	ng/L		07/29/19 05:56	07/30/19 08:27	1
Ammonium Perfluorooctanoate (APFO)	<0.88		2.1	0.88	ng/L		07/29/19 05:56	07/30/19 08:27	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	92		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C5 PFPeA	94		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C2 PFHxA	91		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C4 PFHpA	100		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C4 PFOA	97		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C5 PFNA	97		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C2 PFDA	101		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C2 PFHxDA	85		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C2 PFUnA	97		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C2 PFDoA	96		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C2 PFTeDA	100		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C3 PFBS	99		25 - 150	07/29/19 05:56	07/30/19 08:27	1
18O2 PFHxS	98		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C4 PFOS	96		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C8 FOSA	82		25 - 150	07/29/19 05:56	07/30/19 08:27	1
d3-NMeFOSAA	98		25 - 150	07/29/19 05:56	07/30/19 08:27	1
d5-NEtFOSAA	98		25 - 150	07/29/19 05:56	07/30/19 08:27	1
M2-6:2 FTS	117		25 - 150	07/29/19 05:56	07/30/19 08:27	1
M2-8:2 FTS	101		25 - 150	07/29/19 05:56	07/30/19 08:27	1
M2-4:2 FTS	110		25 - 150	07/29/19 05:56	07/30/19 08:27	1
13C3 HFPO-DA	81		25 - 150	07/29/19 05:56	07/30/19 08:27	1

Lab Sample ID: LCS 320-310779/2-A
Matrix: Water
Analysis Batch: 311119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 310779

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	45.5		ng/L		114	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	38.7		ng/L		97	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	42.7		ng/L		107	66 - 126

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-310779/2-A
Matrix: Water
Analysis Batch: 311119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 310779

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanoic acid (PFHpA)	40.0	43.8		ng/L		109	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	43.6		ng/L		109	64 - 124
Perfluorononanoic acid (PFNA)	40.0	40.7		ng/L		102	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	39.9		ng/L		100	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	39.3		ng/L		98	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	44.0		ng/L		110	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	43.8		ng/L		110	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	40.6		ng/L		102	68 - 128
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	43.7		ng/L		109	72 - 132
Perfluorobutanesulfonic acid (PFBS)	35.4	35.9		ng/L		102	73 - 133
Perfluoro-n-octadecanoic acid (PFODA)	40.0	40.4		ng/L		101	74 - 134
Perfluoropentanesulfonic acid (PFPeS)	37.5	35.8		ng/L		95	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.5		ng/L		97	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	42.0		ng/L		110	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	36.1		ng/L		97	67 - 127
Perfluorononanesulfonic acid (PFNS)	38.4	40.0		ng/L		104	70 - 130
Perfluorodecanesulfonic acid (PFDS)	38.6	40.5		ng/L		105	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	45.0		ng/L		113	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	40.1		ng/L		100	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	39.1		ng/L		98	65 - 125
4:2 FTS	37.4	38.6		ng/L		103	70 - 130
6:2 FTS	37.9	33.4		ng/L		88	66 - 126
8:2 FTS	38.3	42.5		ng/L		111	67 - 127
Perfluorododecanesulfonic acid (PFDoS)	38.7	39.3		ng/L		101	70 - 130
ADONA	39.5	42.4		ng/L		107	70 - 130
F-53B Major	37.3	39.8		ng/L		107	70 - 130
HFPO-DA (GenX)	40.0	40.0		ng/L		100	70 - 130
F-53B Minor	37.7	42.3		ng/L		112	70 - 130
10:2 FTS	38.6	40.4		ng/L		105	70 - 130
NaDONA	40.0	42.9		ng/L		107	70 - 130
DONA	37.7	40.4		ng/L		107	70 - 130
Ammonium Perfluorooctanoate (APFO)	41.6	45.3		ng/L		109	64 - 124

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
¹³ C4 PFBA	92		25 - 150

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-310779/2-A
Matrix: Water
Analysis Batch: 311119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 310779

<i>Isotope Dilution</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>
13C5 PFPeA	99		25 - 150
13C2 PFHxA	94		25 - 150
13C4 PFHpA	98		25 - 150
13C4 PFOA	98		25 - 150
13C5 PFNA	98		25 - 150
13C2 PFDA	104		25 - 150
13C2 PFHxDA	93		25 - 150
13C2 PFUnA	98		25 - 150
13C2 PFDoA	96		25 - 150
13C2 PFTeDA	104		25 - 150
13C3 PFBS	105		25 - 150
18O2 PFHxS	102		25 - 150
13C4 PFOS	97		25 - 150
13C8 FOSA	83		25 - 150
d3-NMeFOSAA	99		25 - 150
d5-NEtFOSAA	98		25 - 150
M2-6:2 FTS	131		25 - 150
M2-8:2 FTS	110		25 - 150
M2-4:2 FTS	110		25 - 150
13C3 HFPO-DA	93		25 - 150

Lab Sample ID: LCSD 320-310779/3-A
Matrix: Water
Analysis Batch: 311119

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 310779

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCSD</i> <i>Result</i>	<i>LCSD</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>	<i>RPD</i>	<i>RPD</i> <i>Limit</i>
Perfluorobutanoic acid (PFBA)	40.0	44.7		ng/L		112	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	40.0	38.4		ng/L		96	66 - 126	1	30
Perfluorohexanoic acid (PFHxA)	40.0	40.9		ng/L		102	66 - 126	4	30
Perfluoroheptanoic acid (PFHpA)	40.0	43.2		ng/L		108	66 - 126	1	30
Perfluorooctanoic acid (PFOA)	40.0	41.4		ng/L		104	64 - 124	5	30
Perfluorononanoic acid (PFNA)	40.0	42.3		ng/L		106	68 - 128	4	30
Perfluorodecanoic acid (PFDA)	40.0	44.2		ng/L		110	69 - 129	10	30
Perfluoroundecanoic acid (PFUnA)	40.0	38.9		ng/L		97	60 - 120	1	30
Perfluorododecanoic acid (PFDoA)	40.0	42.8		ng/L		107	71 - 131	3	30
Perfluorotridecanoic acid (PFTriA)	40.0	44.5		ng/L		111	72 - 132	1	30
Perfluorotetradecanoic acid (PFTeA)	40.0	38.6		ng/L		97	68 - 128	5	30
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	43.0		ng/L		107	72 - 132	2	30
Perfluorobutanesulfonic acid (PFBS)	35.4	36.1		ng/L		102	73 - 133	1	30
Perfluoro-n-octadecanoic acid (PFODA)	40.0	39.6		ng/L		99	74 - 134	2	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	39.6		ng/L		106	70 - 130	10	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.7		ng/L		98	63 - 123	1	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-310779/3-A
Matrix: Water
Analysis Batch: 311119

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 310779

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	43.1		ng/L		113	68 - 128	3	30
Perfluorooctanesulfonic acid (PFOS)	37.1	35.6		ng/L		96	67 - 127	1	30
Perfluorononanesulfonic acid (PFNS)	38.4	37.1		ng/L		97	70 - 130	7	30
Perfluorodecanesulfonic acid (PFDS)	38.6	40.0		ng/L		104	68 - 128	1	30
Perfluorooctanesulfonamide (FOSA)	40.0	45.3		ng/L		113	70 - 130	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	41.4		ng/L		103	67 - 127	3	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	42.2		ng/L		105	65 - 125	8	30
4:2 FTS	37.4	38.9		ng/L		104	70 - 130	1	30
6:2 FTS	37.9	37.8		ng/L		100	66 - 126	12	30
8:2 FTS	38.3	39.3		ng/L		102	67 - 127	8	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.6		ng/L		94	70 - 130	7	30
ADONA	39.5	40.5		ng/L		102	70 - 130	5	30
F-53B Major	37.3	39.8		ng/L		107	70 - 130	0	30
HFPO-DA (GenX)	40.0	42.3		ng/L		106	70 - 130	6	30
F-53B Minor	37.7	42.6		ng/L		113	70 - 130	1	30
10:2 FTS	38.6	37.0		ng/L		96	70 - 130	9	30
NaDONA	40.0	41.0		ng/L		102	70 - 130	5	30
DONA	37.7	38.6		ng/L		102	70 - 130	5	30
Ammonium Perfluorooctanoate (APFO)	41.6	43.1		ng/L		104	64 - 124	5	30

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
13C4 PFBA	93		25 - 150
13C5 PFPeA	96		25 - 150
13C2 PFHxA	93		25 - 150
13C4 PFHpA	98		25 - 150
13C4 PFOA	100		25 - 150
13C5 PFNA	97		25 - 150
13C2 PFDA	99		25 - 150
13C2 PFHxDA	94		25 - 150
13C2 PFUnA	100		25 - 150
13C2 PFDoA	95		25 - 150
13C2 PFTeDA	103		25 - 150
13C3 PFBS	100		25 - 150
18O2 PFHxS	99		25 - 150
13C4 PFOS	97		25 - 150
13C8 FOSA	82		25 - 150
d3-NMeFOSAA	98		25 - 150
d5-NEtFOSAA	98		25 - 150
M2-6:2 FTS	118		25 - 150
M2-8:2 FTS	117		25 - 150
M2-4:2 FTS	118		25 - 150
13C3 HFPO-DA	90		25 - 150

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-1

Date Collected: 07/23/19 09:15

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 08:51	D1R	TAL SAC

Client Sample ID: P-6

Date Collected: 07/23/19 09:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 08:59	D1R	TAL SAC

Client Sample ID: MW-7

Date Collected: 07/23/19 13:15

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 09:07	D1R	TAL SAC

Client Sample ID: MW-8

Date Collected: 07/23/19 13:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 09:15	D1R	TAL SAC

Client Sample ID: MW-9

Date Collected: 07/24/19 14:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	313536	08/08/19 10:48	S1M	TAL SAC

Client Sample ID: P-10

Date Collected: 07/24/19 14:15

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	313536	08/08/19 10:56	S1M	TAL SAC

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-11

Date Collected: 07/24/19 11:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 09:55	D1R	TAL SAC

Client Sample ID: MW-16

Date Collected: 07/24/19 08:45

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-8

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 10:03	D1R	TAL SAC

Client Sample ID: MW-17

Date Collected: 07/23/19 11:30

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-9

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 10:11	D1R	TAL SAC

Client Sample ID: P-18

Date Collected: 07/23/19 11:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-10

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	313536	08/08/19 11:04	S1M	TAL SAC

Client Sample ID: P-19

Date Collected: 07/23/19 11:45

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-11

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 10:27	D1R	TAL SAC

Client Sample ID: P-20

Date Collected: 07/23/19 09:30

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-12

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 10:35	D1R	TAL SAC

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: MW-21

Date Collected: 07/23/19 16:00

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-13

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 10:43	D1R	TAL SAC

Client Sample ID: MW-22

Date Collected: 07/23/19 14:20

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-14

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 11:07	D1R	TAL SAC

Client Sample ID: P-23

Date Collected: 07/23/19 10:50

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-15

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	313536	08/08/19 11:28	S1M	TAL SAC

Client Sample ID: P-25S

Date Collected: 07/23/19 13:40

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-16

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	313536	08/08/19 11:36	S1M	TAL SAC

Client Sample ID: P-25D

Date Collected: 07/23/19 13:50

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-17

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 11:31	D1R	TAL SAC

Client Sample ID: MW-26

Date Collected: 07/23/19 15:45

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-18

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 11:39	D1R	TAL SAC

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Client Sample ID: P-27

Date Collected: 07/23/19 15:30

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-19

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 11:47	D1R	TAL SAC

Client Sample ID: MW-28

Date Collected: 07/24/19 08:45

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-20

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310779	07/29/19 05:56	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311119	07/30/19 11:55	D1R	TAL SAC

Client Sample ID: Field Blank 2

Date Collected: 07/23/19 14:30

Date Received: 07/26/19 09:35

Lab Sample ID: 500-167232-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			310777	07/29/19 05:48	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	311111	07/30/19 06:02	P1N	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-19 *

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD		L2468	01-20-21
ANAB	DOE		L2468.01	01-20-21
ANAB	ISO/IEC 17025		L2468	08-09-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-20
California	State Program	9	2897	01-31-20
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State		PH-0691	06-30-21
Connecticut	State Program	1	PH-0691	06-30-21
Florida	NELAP	4	E87570	06-30-20
Florida	NELAP		E87570	06-30-20
Hawaii	State		<cert No.>	01-29-20
Hawaii	State Program	9	N/A	01-29-20
Illinois	NELAP	5	200060	03-17-20 *
Kansas	NELAP	7	E-10375	10-31-19
Louisiana	NELAP	6	30612	06-30-20
Maine	State Program	1	CA0004	04-14-20
Michigan	State		9947	01-29-20
Michigan	State Program	5	9947	01-31-20
New Hampshire	NELAP	1	2997	04-20-20
New York	NELAP	2	11666	04-01-20
Oregon	NELAP	10	4040	01-29-20
Oregon	NELAP		4040	01-29-20
Pennsylvania	NELAP	3	68-01272	03-31-20
Pennsylvania	NELAP		68-01272	03-31-20
Texas	NELAP	6	T104704399	05-31-20
Texas	NELAP		T104704399-19-13	05-31-20
US Fish & Wildlife	Federal		LE148388-0	07-31-20
US Fish & Wildlife	US Federal Programs		58448	07-31-20
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	12-31-20
Utah	NELAP	8	CA00044	02-29-20
Vermont	State Program	1	VT-4040	04-16-20
Virginia	NELAP	3	460278	03-14-20
Virginia	NELAP		460278	03-14-20
Washington	State Program	10	C581	05-05-20
West Virginia (DW)	State Program	3	9930C	12-31-19
Wyoming	State Program	8	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Chicago

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: Mitch Evenson +
Company: Anna Beckman
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____ 500-167232 COC
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-167232
Chain of Custody Number: _____
Page 1 of 2
Temperature °C of Cooler: 2.8, 0.4

Client		Client Project #		Preservative		Parameter												Preservative Key	
<u>Cedar Corp</u>																		1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Sampling		# of Containers		Matrix										Comments	
<u>Town of Warren</u>				Date Time		Matrix													
Project Location/State		Lab Project #																	
<u>Hudson, WI</u>																			
Sampler		Lab PM																	
<u>AMB + LCS</u>		<u>Sandie Fredrick</u>																	
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix													
<u>1</u>		<u>mw-1</u>	<u>7/23</u>	<u>0915</u>	<u>5</u>	<u>GW</u>	<u>X</u>	<u>X</u>											
<u>2</u>		<u>P-10</u>	<u>7/23</u>	<u>0900</u>															
<u>3</u>		<u>mw-7</u>	<u>7/23</u>	<u>1315</u>															
<u>4</u>		<u>mw-8</u>	<u>7/23</u>	<u>1300</u>															
<u>5</u>		<u>mw-9</u>	<u>7/24</u>	<u>1400</u>															
<u>6</u>		<u>P-10</u>	<u>7/24</u>	<u>1415</u>															
<u>7</u>		<u>mw-11</u>	<u>7/24</u>	<u>1100</u>															
<u>8</u>		<u>mw-16</u>	<u>7/24</u>	<u>0845</u>															
<u>9</u>		<u>mw-17</u>	<u>7/23</u>	<u>1130</u>															
<u>10</u>		<u>P-18</u>	<u>7/23</u>	<u>1100</u>															

Turnaround Time Required (Business Days) _____
 Requested Due Date _____
 Sample Disposal: Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
<u>Anna Beckman</u>	<u>Cedar</u>	<u>7/25/19</u>	<u>0700</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>7/26/19</u>	<u>0935</u>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Matrix Key: WW - Wastewater, SE - Sediment, W - Water, SO - Soil, S - Soil, L - Leachate, SL - Sludge, WI - Wipe, MS - Miscellaneous, DW - Drinking Water, OL - Oil, O - Other, A - Air

Client Comments: Trio Blanks included
1 cooler for VOCs
1 cooler for PFAS

Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: Mitch Evenson +
Company: Anna Beckman
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference#: _____

Chain of Custody Record

Lab Job # 500-167232
Chain of Custody Number: _____
Page 2 of 2
Temperature °C of Cooler: 2.8, 0.4

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Sampling		# of Containers		Matrix			
Project Location/State		Lab PM		Date	Time						
Lab ID	MS/MSD	Sample ID									
Cedar Corp		Town of Warren		Hudson, WI		Sandie Fredrick		VOCS		PFAS	
Amb & LCS											
11		P-19		7/23	1145	5	GW	X	X		
12		P-20		7/23	0930						
13		MW-21		7/23	1600						
14		MW-22		7/23	1420						
15		P-23		7/23	1050						
16		P-253		7/23	1340						
17		P-250		7/23	1350						
18		MW-26		7/23	1545						
19		P-27		7/23	1530						
20		MW-28		7/24	0845						
21		Trip Blank		7/23	1430			X	X		

Turnaround Time Required (Business Days)
 1 Day 2 Days 3 Days 4 Days 5 Days 7 Days 10 Days 15 Days Other
 Requested Due Date: _____
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>Anna Beckman</u> Company: <u>Cedar</u> Date: <u>7/25/19</u> Time: <u>0700</u>	Received By: <u>[Signature]</u> Company: <u>MA</u> Date: <u>7/26/19</u> Time: <u>[Signature]</u>	Lab Courier: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Shipped: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments
Trip Blank included
1 cooler for VOCS
1 cooler for PFAS

Lab Comments: _____

ORIGIN ID:PHDA (716) 235-9081
MITCH EVENSON
CEDAR CORPORATION
604 WILSON AVENUE

SHIP DATE: 20MAY19
ACTWT: 10.00 LB MAN
CAD: US62071/CAFE3211

MENOMONIE, WI 54751
UNITED STATES US

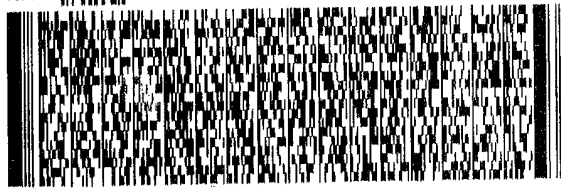
TO **SAMPLE RECEIVING**
TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 604843101

(708) 634-6200

REF: **8600-72414**

RMA: ||| ||| |||



FedEx
Express



J11011808111101

55121/20567/104C



500-167232 Waybill

TRK# 4931 8202 9651
0221

RETURNS MON-SAT
PRIORITY OVERNIGHT

FRI - 26 JUL 10:30A
PRIORITY OVERNIGHT 484

EX
4931 8202 9651

60484
IL-US
ORD

GE JOTA



48qt.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

ORIGIN ID:PHDA (715) 235-8081
MITCH EVENSON
CEDAR CORPORATION
604 WILSON AVENUE

SHIP DATE: 15 JUL 19
ACTWGT: 10.00 LB MAN
CAD: 0662066/CAFE3211

MENOMONIE, WI 54751
UNITED STATES US

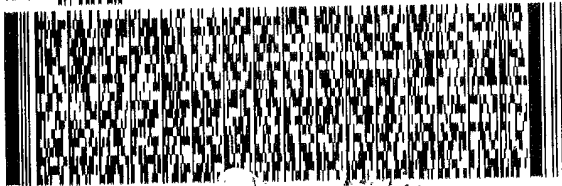
TO **SAMPLE RECEIVING**
TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 604843101

(708) 634-6200

REF: S600-73815

RMA: ||| ||| |||



FedEx
Express



TRK# 1054
0221

GE JOTA

RETURNS MON-SAT
PRIORITY OVERNIGHT

60484

FRI - 26 JUL 10
PRIORITY OVERNIGHT

60484
IL-US
ORD



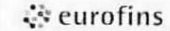
FID 543899-25JUL19 ENVA 568C2/16F9/0C8A

30qt

Eurofins TestAmerica, Chicago

2417 Bond Street
 University Park, IL 60484
 Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record



Environment Testing
 TestAmerica

Client Information (Sub Contract Lab)		Sampler:		Lab PM: Fredrick, Sandie		Carrier Tracking No(s):		COC No: 500-123912.1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: sandie.fredrick@testamericainc.com		State of Origin: Wisconsin		Page: Page 1 of 3			
Company: TestAmerica Laboratories, Inc.				Accreditations Required (See note): State Program - Wisconsin				Job #: 500-167232-2			
Address: 880 Riverside Parkway, City: West Sacramento State, Zip: CA, 95605 Phone: 916-373-5600(Tel) 916-372-1059(Fax) Email:		Due Date Requested: 8/19/2019 TAT Requested (days):		Analysis Requested						Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:	
Project Name: Town of Warren Site:		Project #: 50006557 SSOW#:									
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA3535_PFC (MOD) PFAS, Standard List (32 Analyses)	Total Number of containers	Special Instructions/Note:	
				Preservation Code:							
MW-1 (500-167232-1)		7/23/19	09:15 Central		Water		X			2	
P-6 (500-167232-2)		7/23/19	09:00 Central		Water		X			2	
MW-7 (500-167232-3)		7/23/19	13:15 Central		Water		X			2	
MW-8 (500-167232-4)		7/23/19	13:00 Central		Water		X			2	
MW-9 (500-167232-5)		7/24/19	14:00 Central		Water		X			2	
P-10 (500-167232-6)		7/24/19	14:15 Central		Water		X			2	
MW-11 (500-167232-7)		7/24/19	11:00 Central		Water		X			2	
MW-16 (500-167232-8)		7/24/19	08:45 Central		Water		X			2	
MW-17 (500-167232-9)		7/23/19	11:30 Central		Water		X			2	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.											
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested: I, II, III, IV, Other (specify)			Primary Deliverable Rank: 2		Special Instructions/QC Requirements:						
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:					
Relinquished by: <i>[Signature]</i>		Date/Time: 7/26/19 17:00		Company:		Received by: <i>[Signature]</i>		Date/Time: 7/27/19 9:00		Company: <i>[Signature]</i>	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.: 768/64			Cooler Temperature(s) °C and Other Remarks: 22							

Page 74 of 82

8/12/2019



Eurofins TestAmerica, Chicago

2417 Bond Street
 University Park, IL 60484
 Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record



Environment Testing
 TestAmerica

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:					
Client Contact: Shipping/Receiving		Phone:	Fredrick, Sandie	State of Origin:	500-123912.2					
Company: TestAmerica Laboratories, Inc.		E-Mail:	sandie.fredrick@testamericainc.com	Wisconsin	Page: Page 2 of 3					
Address: 880 Riverside Parkway, City: West Sacramento State, Zip: CA, 95605 Phone: 916-373-5600(Tel) 916-372-1059(Fax) Email:		Due Date Requested: 8/19/2019 TAT Requested (days):	Accreditations Required (See note): State Program - Wisconsin		Job #: 500-167232-2					
Project Name: Town of Warren Site:		Project #: 50006557 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 - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filled Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC, IDA/3535, PFC (MOD) PFAS, Standard List (32 Analytes)	Total Number of containers	Special Instructions/Note:
P-18 (500-167232-10)		7/23/19	11:00 Central		Water		X		2	
P-19 (500-167232-11)		7/23/19	11:45 Central		Water		X		2	
P-20 (500-167232-12)		7/23/19	09:30 Central		Water		X		2	
MW-21 (500-167232-13)		7/23/19	16:00 Central		Water		X		2	
MW-22 (500-167232-14)		7/23/19	14:20 Central		Water		X		2	
P-23 (500-167232-15)		7/23/19	10:50 Central		Water		X		2	
P-25S (500-167232-16)		7/23/19	13:40 Central		Water		X		2	
P-25D (500-167232-17)		7/23/19	13:50 Central		Water		X		2	
MW-26 (500-167232-18)		7/23/19	15:45 Central		Water		X		2	
<p>Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.</p>										
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)			Primary Deliverable Rank: 2		Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:				
Relinquished by: <i>[Signature]</i>		Date/Time: 7/26/19 1700		Company:		Received by: <i>[Signature]</i>		Date/Time: 7/27/19 900		Company: <i>ETA sac</i>
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: 768169		Cooler Temperature(s) °C and Other Remarks: 2-2						

Page 75 of 82

8/12/2019



Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-167232-2

Login Number: 167232

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4, 2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-167232-2

Login Number: 167232

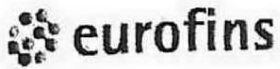
List Number: 2

Creator: Thompson, Sarah W

List Source: Eurofins TestAmerica, Sacramento

List Creation: 07/27/19 02:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	768164
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing
TestAmerica

Sacramento
Sample Receiving Notes



500-167232 Field Sheet

Job: _____

Tracking #: 4059 7182 0840

PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Notes: _____

Therm. ID: A160 Corr. Factor: _____
Ice Wet Gel _____ Other _____
Cooler Custody Seal: 768164
Sample Custody Seal: _____
Cooler ID: _____
Temp Observed: 2.2 Corrected: 2.2

From: Temp Blank Sample
NCM Filed: Yes No

	Yes	No	NA
Perchlorate has headspace? (Methods 314, 331, 6850)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alkalinity has no headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CoC is complete w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample preservatives verified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cooler compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample containers have legible labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Containers are not broken or leaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample date/times are provided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate containers are used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample bottles are completely filled?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zero headspace?*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Multiphasic samples are not present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample temp OK?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample out of temp?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Initials: ST Date: 7/27/19

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

WHD

Isotope Dilution Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Ground Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFHxDA (25-150)
500-167232-1	MW-1	79	86	83	89	83	82	81	55
500-167232-2	P-6	74	91	87	96	95	95	95	57
500-167232-3	MW-7	80	87	86	90	89	90	83	79
500-167232-4	MW-8	68	74	73	76	80	78	71	58
500-167232-5	MW-9	83	89	87	91	102	98	96	69
500-167232-6	P-10	92	89	92	93	95	95	97	88
500-167232-7	MW-11	88	97	89	100	97	97	95	93
500-167232-8	MW-16	84	88	87	91	95	93	97	84
500-167232-9	MW-17	85	92	91	96	91	98	98	86
500-167232-10	P-18	93	96	88	93	99	101	103	76
500-167232-11	P-19	88	86	89	92	94	97	103	85
500-167232-12	P-20	92	99	93	97	97	95	98	90
500-167232-13	MW-21	93	96	94	97	101	96	100	83
500-167232-14	MW-22	67	74	68	77	77	76	70	22 *
500-167232-15	P-23	76	94	99	98	98	101	96	58
500-167232-16	P-25S	95	91	88	95	95	97	98	77
500-167232-17	P-25D	65	69	69	70	69	66	64	34
500-167232-18	MW-26	66	71	71	74	75	73	72	40
500-167232-19	P-27	5 *	41	81	77	89	92	89	43
500-167232-20	MW-28	72	77	78	84	82	80	77	55

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFUnA (25-150)	PFDoA (25-150)	PFTDA (25-150)	3C3-PFB (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOS (25-150)
500-167232-1	MW-1	75	63	54	86	81	80	61	61
500-167232-2	P-6	94	91	92	93	88	88	72	78
500-167232-3	MW-7	72	64	73	90	90	82	72	74
500-167232-4	MW-8	65	59	63	78	79	70	65	65
500-167232-5	MW-9	96	95	78	93	90	89	87	131
500-167232-6	P-10	99	97	95	102	94	91	85	101
500-167232-7	MW-11	95	94	99	100	95	95	85	96
500-167232-8	MW-16	89	91	97	95	92	90	82	95
500-167232-9	MW-17	95	94	96	98	97	95	79	95
500-167232-10	P-18	101	102	90	96	94	93	82	159 *
500-167232-11	P-19	98	92	88	89	87	89	78	149
500-167232-12	P-20	90	96	94	98	92	91	73	98
500-167232-13	MW-21	95	91	94	100	93	93	80	96
500-167232-14	MW-22	64	53	27	72	73	68	59	65
500-167232-15	P-23	95	91	82	91	92	90	80	92
500-167232-16	P-25S	97	91	84	95	101	98	90	109
500-167232-17	P-25D	59	47	31	73	68	59	48	63
500-167232-18	MW-26	69	58	32	79	73	69	55	66
500-167232-19	P-27	83	82	78	83	81	88	71	45
500-167232-20	MW-28	64	58	57	81	79	70	63	63

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	-NEtFOS/ (25-150)	M262FTS (25-150)	M282FTS (25-150)	M242FTS (25-150)	HFPODA (25-150)
500-167232-1	MW-1	62	114	89	109	78
500-167232-2	P-6	77	131	121	115	84
500-167232-3	MW-7	73	109	91	108	75

Eurofins TestAmerica, Chicago

Isotope Dilution Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Ground Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)				
		-NEtFOS/ (25-150)	M262FTS (25-150)	M282FTS (25-150)	M242FTS (25-150)	HFPODA (25-150)
500-167232-4	MW-8	69	94	83	101	65
500-167232-5	MW-9	123	124	185 *	105	78
500-167232-6	P-10	102	114	161 *	115	87
500-167232-7	MW-11	102	127	112	109	99
500-167232-8	MW-16	95	120	115	108	97
500-167232-9	MW-17	100	113	116	110	75
500-167232-10	P-18	170 *	172 *	221 *	113	102
500-167232-11	P-19	165 *	215 *	247 *	164 *	92
500-167232-12	P-20	114	128	138	130	88
500-167232-13	MW-21	101	125	112	118	87
500-167232-14	MW-22	66	93	82	84	66
500-167232-15	P-23	98	193 *	154 *	168 *	90
500-167232-16	P-25S	107	129	198 *	119	98
500-167232-17	P-25D	63	89	133	104	59
500-167232-18	MW-26	98	91	108	94	72
500-167232-19	P-27	54	132	106	124	70
500-167232-20	MW-28	61	102	82	93	73

Surrogate Legend

- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- PFHxA = 13C2 PFHxA
- PFHpA = 13C4 PFHpA
- PFOA = 13C4 PFOA
- PFNA = 13C5 PFNA
- PFDA = 13C2 PFDA
- PFHxDA = 13C2 PFHxDA
- PFUnA = 13C2 PFUnA
- PFDoA = 13C2 PFDoA
- PFTDA = 13C2 PFTeDA
- 13C3-PFBS = 13C3 PFBS
- PFHxS = 18O2 PFHxS
- PFOS = 13C4 PFOS
- PFOSA = 13C8 FOSA
- d3-NMeFOSAA = d3-NMeFOSAA
- d5-NEtFOSAA = d5-NEtFOSAA
- M262FTS = M2-6:2 FTS
- M282FTS = M2-8:2 FTS
- M242FTS = M2-4:2 FTS
- HFPODA = 13C3 HFPO-DA

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFHxDA (25-150)
500-167232-22	Field Blank 2	97	97	94	101	104	100	101	100
LCS 320-310777/2-A	Lab Control Sample	90	94	91	92	99	97	97	90
LCS 320-310779/2-A	Lab Control Sample	92	99	94	98	98	98	104	93
LCSD 320-310777/3-A	Lab Control Sample Dup	90	95	93	95	94	97	95	91

Eurofins TestAmerica, Chicago

Isotope Dilution Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167232-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFHxDA (25-150)
LCSD 320-310779/3-A	Lab Control Sample Dup	93	96	93	98	100	97	99	94
MB 320-310777/1-A	Method Blank	93	94	89	95	94	99	96	88
MB 320-310779/1-A	Method Blank	92	94	91	100	97	97	101	85

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFUnA (25-150)	PFDoA (25-150)	PFTDA (25-150)	3C3-PFBs (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	NMeFOS (25-150)
500-167232-22	Field Blank 2	99	101	104	104	100	97	88	102
LCS 320-310777/2-A	Lab Control Sample	96	94	98	102	95	93	79	94
LCS 320-310779/2-A	Lab Control Sample	98	96	104	105	102	97	83	99
LCSD 320-310777/3-A	Lab Control Sample Dup	98	97	103	98	92	93	82	98
LCSD 320-310779/3-A	Lab Control Sample Dup	100	95	103	100	99	97	82	98
MB 320-310777/1-A	Method Blank	97	92	96	96	95	91	79	93
MB 320-310779/1-A	Method Blank	97	96	100	99	98	96	82	98

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	NMeFOS (25-150)	M262FTS (25-150)	M282FTS (25-150)	M242FTS (25-150)	HFPODA (25-150)
500-167232-22	Field Blank 2	109	134	130	116	91
LCS 320-310777/2-A	Lab Control Sample	100	131	118	114	92
LCS 320-310779/2-A	Lab Control Sample	98	131	110	110	93
LCSD 320-310777/3-A	Lab Control Sample Dup	103	129	117	121	87
LCSD 320-310779/3-A	Lab Control Sample Dup	98	118	117	118	90
MB 320-310777/1-A	Method Blank	98	122	105	113	104
MB 320-310779/1-A	Method Blank	98	117	101	110	81

Surrogate Legend

- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- PFHxA = 13C2 PFHxA
- PFHpA = 13C4 PFHpA
- PFOA = 13C4 PFOA
- PFNA = 13C5 PFNA
- PFDA = 13C2 PFDA
- PFHxDA = 13C2 PFHxDA
- PFUnA = 13C2 PFUnA
- PFDoA = 13C2 PFDoA
- PFTDA = 13C2 PFTeDA
- 13C3-PFBs = 13C3 PFBS
- PFHxS = 18O2 PFHxS
- PFOS = 13C4 PFOS
- PFOSA = 13C8 FOSA
- d3-NMeFOSAA = d3-NMeFOSAA
- d5-NEtFOSAA = d5-NEtFOSAA
- M262FTS = M2-6:2 FTS
- M282FTS = M2-8:2 FTS
- M242FTS = M2-4:2 FTS
- HFPODA = 13C3 HFPO-DA

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-167423-2
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
8/8/2019 10:46:47 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	6
Sample Summary	7
Client Sample Results	8
Definitions	20
QC Association	21
QC Sample Results	22
Chronicle	27
Certification Summary	28
Chain of Custody	29
Receipt Checklists	32
Field Data Sheets	34
Isotope Dilution Summary	35

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Job ID: 500-167423-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-167423-2

Comments

No additional comments.

Receipt

The samples were received on 7/27/2019 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

LCMS

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-8:2 FTS the following samples: MW-3 (500-167423-1). The samples were re-analyzed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

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

Organic Prep

Method(s) 3535: The following samples contain floating particulate at the bottom of the bottle prior to extraction: P-15 (500-167423-4) 320-312020 Method: 3535 PFC-W

Method(s) 3535: The following samples contain floating particulate and a thin layer of sediment at the bottom of the bottle prior to extraction: MW-3 (500-167423-1), MW-5 (500-167423-3) and MW-29 (500-167423-5) 320-312020 Method: 3535 PFC-W

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-312020. 320-312020 Method: 3535 PFC-W

Method(s) 3535: During the solid phase extraction process, the following samples have non-settable particulates which clogged the solid phase extraction column extraction: MW-3 (500-167423-1), MW-5 (500-167423-3), P-15 (500-167423-4) and MW-29 (500-167423-5). 320-312020

Method: 3535 PFC-W

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: MW-3

Lab Sample ID: 500-167423-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	17		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.72	J	1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.3	J	1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.33	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoro-n-octadecanoic acid (PFODA)	0.42	J	1.8	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.70	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.92	J	1.8	0.49	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	1.3	J	1.9	0.80	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-4

Lab Sample ID: 500-167423-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	53		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.7	J	1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.74	J	1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.33	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.5	J	1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.30	J	1.8	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.90	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.68	J B	1.8	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.8		1.8	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.63	J	1.8	0.32	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	1.6	J	1.9	0.81	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 500-167423-3

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	61		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	9.7		1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.2		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.99	J	1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.60	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.44	J B	1.8	0.16	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	1.0	J	1.9	0.81	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-15

Lab Sample ID: 500-167423-4

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	22		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.87	J	1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.2	J	1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.52	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.6	J	1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.78	J	1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.35	J	1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.32	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.83	J B	1.8	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.4		1.8	0.49	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	1.6	J	1.9	0.80	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: MW-29

Lab Sample ID: 500-167423-5

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	22		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.3	J	1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.76	J	1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.37	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.78	J	1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.80	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.69	J B	1.8	0.16	ng/L	1		537 (modified)	Total/NA
Ammonium Perfluorooctanoate (APFO)	0.82	J	1.9	0.81	ng/L	1		537 (modified)	Total/NA

Client Sample ID: P-30

Lab Sample ID: 500-167423-6

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	48		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.2	J	1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.48	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.51	J B	1.8	0.16	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-167423-1	MW-3	Water	07/25/19 09:00	07/27/19 09:10	
500-167423-2	P-4	Water	07/25/19 09:15	07/27/19 09:10	
500-167423-3	MW-5	Water	07/25/19 10:00	07/27/19 09:10	
500-167423-4	P-15	Water	07/25/19 08:30	07/27/19 09:10	
500-167423-5	MW-29	Water	07/25/19 10:30	07/27/19 09:10	
500-167423-6	P-30	Water	07/25/19 10:45	07/27/19 09:10	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: MW-3
Date Collected: 07/25/19 09:00
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-1
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	17		1.8	0.32	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluoropentanoic acid (PFPeA)	0.72	J	1.8	0.44	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorohexanoic acid (PFHxA)	<0.53		1.8	0.53	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorooctanoic acid (PFOA)	1.3	J	1.8	0.77	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.8	1.2	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorotetradecanoic acid (PFTeA)	<0.26		1.8	0.26	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.81		1.8	0.81	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorobutanesulfonic acid (PFBS)	0.33	J	1.8	0.18	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluoro-n-octadecanoic acid (PFODA)	0.42	J	1.8	0.42	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorohexanesulfonic acid (PFHxS)	0.70	J B	1.8	0.15	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorooctanesulfonic acid (PFOS)	0.92	J	1.8	0.49	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorononanesulfonic acid (PFNS)	<0.14		1.8	0.14	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorooctanesulfonamide (FOSA)	<0.32		1.8	0.32	ng/L		08/02/19 05:19	08/06/19 20:49	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.8		18	2.8	ng/L		08/02/19 05:19	08/06/19 20:49	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.7		18	1.7	ng/L		08/02/19 05:19	08/06/19 20:49	1
4:2 FTS	<4.7		18	4.7	ng/L		08/02/19 05:19	08/06/19 20:49	1
6:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/06/19 20:49	1
8:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/06/19 20:49	1
Perfluorododecanesulfonic acid (PFDoS)	<0.41		1.8	0.41	ng/L		08/02/19 05:19	08/06/19 20:49	1
ADONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/06/19 20:49	1
F-53B Major	<0.22		1.8	0.22	ng/L		08/02/19 05:19	08/06/19 20:49	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		08/02/19 05:19	08/06/19 20:49	1
F-53B Minor	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/06/19 20:49	1
10:2 FTS	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/06/19 20:49	1
NaDONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/06/19 20:49	1
DONA	<0.16		1.8	0.16	ng/L		08/02/19 05:19	08/06/19 20:49	1
Ammonium Perfluorooctanoate (APFO)	1.3	J	1.9	0.80	ng/L		08/02/19 05:19	08/06/19 20:49	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	53		25 - 150				08/02/19 05:19	08/06/19 20:49	1
13C5 PFPeA	59		25 - 150				08/02/19 05:19	08/06/19 20:49	1
13C2 PFHxA	61		25 - 150				08/02/19 05:19	08/06/19 20:49	1
13C4 PFHpA	61		25 - 150				08/02/19 05:19	08/06/19 20:49	1
13C4 PFOA	65		25 - 150				08/02/19 05:19	08/06/19 20:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: MW-3
Date Collected: 07/25/19 09:00
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-1
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C5 PFNA	64		25 - 150	08/02/19 05:19	08/06/19 20:49	1
13C2 PFDA	76		25 - 150	08/02/19 05:19	08/06/19 20:49	1
13C2 PFHxDA	49		25 - 150	08/02/19 05:19	08/06/19 20:49	1
13C2 PFUnA	63		25 - 150	08/02/19 05:19	08/06/19 20:49	1
13C2 PFDoA	60		25 - 150	08/02/19 05:19	08/06/19 20:49	1
13C2 PFTeDA	55		25 - 150	08/02/19 05:19	08/06/19 20:49	1
13C3 PFBS	53		25 - 150	08/02/19 05:19	08/06/19 20:49	1
18O2 PFHxS	57		25 - 150	08/02/19 05:19	08/06/19 20:49	1
13C4 PFOS	54		25 - 150	08/02/19 05:19	08/06/19 20:49	1
13C8 FOSA	51		25 - 150	08/02/19 05:19	08/06/19 20:49	1
d3-NMeFOSAA	97		25 - 150	08/02/19 05:19	08/06/19 20:49	1
d5-NEtFOSAA	84		25 - 150	08/02/19 05:19	08/06/19 20:49	1
M2-6:2 FTS	81		25 - 150	08/02/19 05:19	08/06/19 20:49	1
M2-8:2 FTS	247 *		25 - 150	08/02/19 05:19	08/06/19 20:49	1
M2-4:2 FTS	86		25 - 150	08/02/19 05:19	08/06/19 20:49	1
13C3 HFPO-DA	62		25 - 150	08/02/19 05:19	08/06/19 20:49	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: P-4

Lab Sample ID: 500-167423-2

Date Collected: 07/25/19 09:15

Matrix: Water

Date Received: 07/27/19 09:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	53		1.8	0.32	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluoropentanoic acid (PFPeA)	1.7	J	1.8	0.45	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorohexanoic acid (PFHxA)	0.74	J	1.8	0.53	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluoroheptanoic acid (PFHpA)	0.33	J	1.8	0.23	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorooctanoic acid (PFOA)	1.5	J	1.8	0.78	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorodecanoic acid (PFDA)	0.30	J	1.8	0.29	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.8	0.51	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.8	1.2	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorotetradecanoic acid (PFTeA)	<0.27		1.8	0.27	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.82		1.8	0.82	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorobutanesulfonic acid (PFBS)	0.90	J	1.8	0.18	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.42		1.8	0.42	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.8	0.28	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorohexanesulfonic acid (PFHxS)	0.68	J B	1.8	0.16	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorooctanesulfonic acid (PFOS)	2.8		1.8	0.50	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.8	0.15	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorooctanesulfonamide (FOSA)	0.63	J	1.8	0.32	ng/L		08/02/19 05:19	08/02/19 22:48	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.9		18	2.9	ng/L		08/02/19 05:19	08/02/19 22:48	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.7		18	1.7	ng/L		08/02/19 05:19	08/02/19 22:48	1
4:2 FTS	<4.8		18	4.8	ng/L		08/02/19 05:19	08/02/19 22:48	1
6:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/02/19 22:48	1
8:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/02/19 22:48	1
Perfluorododecanesulfonic acid (PFDoS)	<0.41		1.8	0.41	ng/L		08/02/19 05:19	08/02/19 22:48	1
ADONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/02/19 22:48	1
F-53B Major	<0.22		1.8	0.22	ng/L		08/02/19 05:19	08/02/19 22:48	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		08/02/19 05:19	08/02/19 22:48	1
F-53B Minor	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/02/19 22:48	1
10:2 FTS	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 22:48	1
NaDONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/02/19 22:48	1
DONA	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 22:48	1
Ammonium Perfluorooctanoate (APFO)	1.6	J	1.9	0.81	ng/L		08/02/19 05:19	08/02/19 22:48	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
¹³ C4 PFBA	76		25 - 150	08/02/19 05:19	08/02/19 22:48	1
¹³ C5 PFPeA	84		25 - 150	08/02/19 05:19	08/02/19 22:48	1
¹³ C2 PFHxA	85		25 - 150	08/02/19 05:19	08/02/19 22:48	1
¹³ C4 PFHpA	88		25 - 150	08/02/19 05:19	08/02/19 22:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: P-4

Lab Sample ID: 500-167423-2

Date Collected: 07/25/19 09:15

Matrix: Water

Date Received: 07/27/19 09:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOA	87		25 - 150	08/02/19 05:19	08/02/19 22:48	1
13C5 PFNA	90		25 - 150	08/02/19 05:19	08/02/19 22:48	1
13C2 PFDA	92		25 - 150	08/02/19 05:19	08/02/19 22:48	1
13C2 PFHxDA	74		25 - 150	08/02/19 05:19	08/02/19 22:48	1
13C2 PFUnA	94		25 - 150	08/02/19 05:19	08/02/19 22:48	1
13C2 PFDaA	95		25 - 150	08/02/19 05:19	08/02/19 22:48	1
13C2 PFTeDA	97		25 - 150	08/02/19 05:19	08/02/19 22:48	1
13C3 PFBS	88		25 - 150	08/02/19 05:19	08/02/19 22:48	1
18O2 PFHxS	87		25 - 150	08/02/19 05:19	08/02/19 22:48	1
13C4 PFOS	84		25 - 150	08/02/19 05:19	08/02/19 22:48	1
13C8 FOSA	76		25 - 150	08/02/19 05:19	08/02/19 22:48	1
d3-NMeFOSAA	78		25 - 150	08/02/19 05:19	08/02/19 22:48	1
d5-NEtFOSAA	82		25 - 150	08/02/19 05:19	08/02/19 22:48	1
M2-6:2 FTS	98		25 - 150	08/02/19 05:19	08/02/19 22:48	1
M2-8:2 FTS	108		25 - 150	08/02/19 05:19	08/02/19 22:48	1
M2-4:2 FTS	87		25 - 150	08/02/19 05:19	08/02/19 22:48	1
13C3 HFPO-DA	90		25 - 150	08/02/19 05:19	08/02/19 22:48	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: MW-5
Date Collected: 07/25/19 10:00
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-3
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	61		1.8	0.32	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluoropentanoic acid (PFPeA)	9.7		1.8	0.45	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorohexanoic acid (PFHxA)	3.2		1.8	0.53	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorooctanoic acid (PFOA)	0.99	J	1.8	0.78	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.8	1.2	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorotetradecanoic acid (PFTeA)	<0.27		1.8	0.27	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.82		1.8	0.82	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorobutanesulfonic acid (PFBS)	0.60	J	1.8	0.18	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.42		1.8	0.42	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorohexanesulfonic acid (PFHxS)	0.44	J B	1.8	0.16	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.8	0.15	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorooctanesulfonamide (FOSA)	<0.32		1.8	0.32	ng/L		08/02/19 05:19	08/02/19 22:56	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.8		18	2.8	ng/L		08/02/19 05:19	08/02/19 22:56	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.7		18	1.7	ng/L		08/02/19 05:19	08/02/19 22:56	1
4:2 FTS	<4.8		18	4.8	ng/L		08/02/19 05:19	08/02/19 22:56	1
6:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/02/19 22:56	1
8:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/02/19 22:56	1
Perfluorododecanesulfonic acid (PFDoS)	<0.41		1.8	0.41	ng/L		08/02/19 05:19	08/02/19 22:56	1
ADONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/02/19 22:56	1
F-53B Major	<0.22		1.8	0.22	ng/L		08/02/19 05:19	08/02/19 22:56	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		08/02/19 05:19	08/02/19 22:56	1
F-53B Minor	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/02/19 22:56	1
10:2 FTS	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 22:56	1
NaDONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/02/19 22:56	1
DONA	<0.16		1.8	0.16	ng/L		08/02/19 05:19	08/02/19 22:56	1
Ammonium Perfluorooctanoate (APFO)	1.0	J	1.9	0.81	ng/L		08/02/19 05:19	08/02/19 22:56	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	80		25 - 150				08/02/19 05:19	08/02/19 22:56	1
13C5 PFPeA	93		25 - 150				08/02/19 05:19	08/02/19 22:56	1
13C2 PFHxA	95		25 - 150				08/02/19 05:19	08/02/19 22:56	1
13C4 PFHpA	94		25 - 150				08/02/19 05:19	08/02/19 22:56	1
13C4 PFOA	95		25 - 150				08/02/19 05:19	08/02/19 22:56	1
13C5 PFNA	96		25 - 150				08/02/19 05:19	08/02/19 22:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: MW-5
Date Collected: 07/25/19 10:00
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-3
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	96		25 - 150	08/02/19 05:19	08/02/19 22:56	1
13C2 PFHxDA	67		25 - 150	08/02/19 05:19	08/02/19 22:56	1
13C2 PFUnA	91		25 - 150	08/02/19 05:19	08/02/19 22:56	1
13C2 PFDoA	89		25 - 150	08/02/19 05:19	08/02/19 22:56	1
13C2 PFTeDA	85		25 - 150	08/02/19 05:19	08/02/19 22:56	1
13C3 PFBS	94		25 - 150	08/02/19 05:19	08/02/19 22:56	1
18O2 PFHxS	93		25 - 150	08/02/19 05:19	08/02/19 22:56	1
13C4 PFOS	88		25 - 150	08/02/19 05:19	08/02/19 22:56	1
13C8 FOSA	84		25 - 150	08/02/19 05:19	08/02/19 22:56	1
d3-NMeFOSAA	75		25 - 150	08/02/19 05:19	08/02/19 22:56	1
d5-NEFOSAA	77		25 - 150	08/02/19 05:19	08/02/19 22:56	1
M2-6:2 FTS	98		25 - 150	08/02/19 05:19	08/02/19 22:56	1
M2-8:2 FTS	91		25 - 150	08/02/19 05:19	08/02/19 22:56	1
M2-4:2 FTS	88		25 - 150	08/02/19 05:19	08/02/19 22:56	1
13C3 HFPO-DA	95		25 - 150	08/02/19 05:19	08/02/19 22:56	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: P-15

Lab Sample ID: 500-167423-4

Date Collected: 07/25/19 08:30

Matrix: Water

Date Received: 07/27/19 09:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	22		1.8	0.32	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluoropentanoic acid (PFPeA)	0.87	J	1.8	0.45	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorohexanoic acid (PFHxA)	1.2	J	1.8	0.53	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluoroheptanoic acid (PFHpA)	0.52	J	1.8	0.23	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorooctanoic acid (PFOA)	1.6	J	1.8	0.78	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorononanoic acid (PFNA)	0.78	J	1.8	0.25	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.8	1.2	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorotetradecanoic acid (PFTeA)	0.35	J	1.8	0.27	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.81		1.8	0.81	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorobutanesulfonic acid (PFBS)	0.32	J	1.8	0.18	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.42		1.8	0.42	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorohexanesulfonic acid (PFHxS)	0.83	J B	1.8	0.16	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorooctanesulfonic acid (PFOS)	3.4		1.8	0.49	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.8	0.15	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorooctanesulfonamide (FOSA)	<0.32		1.8	0.32	ng/L		08/02/19 05:19	08/02/19 23:20	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.8		18	2.8	ng/L		08/02/19 05:19	08/02/19 23:20	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.7		18	1.7	ng/L		08/02/19 05:19	08/02/19 23:20	1
4:2 FTS	<4.8		18	4.8	ng/L		08/02/19 05:19	08/02/19 23:20	1
6:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/02/19 23:20	1
8:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/02/19 23:20	1
Perfluorododecanesulfonic acid (PFDoS)	<0.41		1.8	0.41	ng/L		08/02/19 05:19	08/02/19 23:20	1
ADONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/02/19 23:20	1
F-53B Major	<0.22		1.8	0.22	ng/L		08/02/19 05:19	08/02/19 23:20	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		08/02/19 05:19	08/02/19 23:20	1
F-53B Minor	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/02/19 23:20	1
10:2 FTS	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 23:20	1
NaDONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/02/19 23:20	1
DONA	<0.16		1.8	0.16	ng/L		08/02/19 05:19	08/02/19 23:20	1
Ammonium Perfluorooctanoate (APFO)	1.6	J	1.9	0.80	ng/L		08/02/19 05:19	08/02/19 23:20	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
¹³ C4 PFBA	78		25 - 150	08/02/19 05:19	08/02/19 23:20	1
¹³ C5 PFPeA	88		25 - 150	08/02/19 05:19	08/02/19 23:20	1
¹³ C2 PFHxA	93		25 - 150	08/02/19 05:19	08/02/19 23:20	1
¹³ C4 PFHpA	93		25 - 150	08/02/19 05:19	08/02/19 23:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: P-15

Lab Sample ID: 500-167423-4

Date Collected: 07/25/19 08:30

Matrix: Water

Date Received: 07/27/19 09:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOA	96		25 - 150	08/02/19 05:19	08/02/19 23:20	1
13C5 PFNA	92		25 - 150	08/02/19 05:19	08/02/19 23:20	1
13C2 PFDA	98		25 - 150	08/02/19 05:19	08/02/19 23:20	1
13C2 PFHxDA	81		25 - 150	08/02/19 05:19	08/02/19 23:20	1
13C2 PFUnA	77		25 - 150	08/02/19 05:19	08/02/19 23:20	1
13C2 PFDaA	75		25 - 150	08/02/19 05:19	08/02/19 23:20	1
13C2 PFTeDA	78		25 - 150	08/02/19 05:19	08/02/19 23:20	1
13C3 PFBS	93		25 - 150	08/02/19 05:19	08/02/19 23:20	1
18O2 PFHxS	93		25 - 150	08/02/19 05:19	08/02/19 23:20	1
13C4 PFOS	83		25 - 150	08/02/19 05:19	08/02/19 23:20	1
13C8 FOSA	79		25 - 150	08/02/19 05:19	08/02/19 23:20	1
d3-NMeFOSAA	74		25 - 150	08/02/19 05:19	08/02/19 23:20	1
d5-NEtFOSAA	73		25 - 150	08/02/19 05:19	08/02/19 23:20	1
M2-6:2 FTS	103		25 - 150	08/02/19 05:19	08/02/19 23:20	1
M2-8:2 FTS	119		25 - 150	08/02/19 05:19	08/02/19 23:20	1
M2-4:2 FTS	113		25 - 150	08/02/19 05:19	08/02/19 23:20	1
13C3 HFPO-DA	88		25 - 150	08/02/19 05:19	08/02/19 23:20	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: MW-29
Date Collected: 07/25/19 10:30
Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-5
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	22		1.8	0.32	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluoropentanoic acid (PFPeA)	1.3	J	1.8	0.45	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorohexanoic acid (PFHxA)	0.76	J	1.8	0.53	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluoroheptanoic acid (PFHpA)	0.37	J	1.8	0.23	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorooctanoic acid (PFOA)	0.78	J	1.8	0.78	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.8	1.2	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorotetradecanoic acid (PFTeA)	<0.27		1.8	0.27	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.82		1.8	0.82	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorobutanesulfonic acid (PFBS)	0.80	J	1.8	0.18	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.42		1.8	0.42	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorohexanesulfonic acid (PFHxS)	0.69	J B	1.8	0.16	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.8	0.15	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorooctanesulfonamide (FOSA)	<0.32		1.8	0.32	ng/L		08/02/19 05:19	08/02/19 23:28	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.8		18	2.8	ng/L		08/02/19 05:19	08/02/19 23:28	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.7		18	1.7	ng/L		08/02/19 05:19	08/02/19 23:28	1
4:2 FTS	<4.8		18	4.8	ng/L		08/02/19 05:19	08/02/19 23:28	1
6:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/02/19 23:28	1
8:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/02/19 23:28	1
Perfluorododecanesulfonic acid (PFDoS)	<0.41		1.8	0.41	ng/L		08/02/19 05:19	08/02/19 23:28	1
ADONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/02/19 23:28	1
F-53B Major	<0.22		1.8	0.22	ng/L		08/02/19 05:19	08/02/19 23:28	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		08/02/19 05:19	08/02/19 23:28	1
F-53B Minor	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/02/19 23:28	1
10:2 FTS	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 23:28	1
NaDONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/02/19 23:28	1
DONA	<0.16		1.8	0.16	ng/L		08/02/19 05:19	08/02/19 23:28	1
Ammonium Perfluorooctanoate (APFO)	0.82	J	1.9	0.81	ng/L		08/02/19 05:19	08/02/19 23:28	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	72		25 - 150				08/02/19 05:19	08/02/19 23:28	1
13C5 PFPeA	81		25 - 150				08/02/19 05:19	08/02/19 23:28	1
13C2 PFHxA	83		25 - 150				08/02/19 05:19	08/02/19 23:28	1
13C4 PFHpA	83		25 - 150				08/02/19 05:19	08/02/19 23:28	1
13C4 PFOA	83		25 - 150				08/02/19 05:19	08/02/19 23:28	1
13C5 PFNA	84		25 - 150				08/02/19 05:19	08/02/19 23:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: MW-29

Lab Sample ID: 500-167423-5

Date Collected: 07/25/19 10:30

Matrix: Water

Date Received: 07/27/19 09:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	86		25 - 150	08/02/19 05:19	08/02/19 23:28	1
13C2 PFHxDA	56		25 - 150	08/02/19 05:19	08/02/19 23:28	1
13C2 PFUnA	79		25 - 150	08/02/19 05:19	08/02/19 23:28	1
13C2 PFDoA	78		25 - 150	08/02/19 05:19	08/02/19 23:28	1
13C2 PFTeDA	78		25 - 150	08/02/19 05:19	08/02/19 23:28	1
13C3 PFBS	82		25 - 150	08/02/19 05:19	08/02/19 23:28	1
18O2 PFHxS	83		25 - 150	08/02/19 05:19	08/02/19 23:28	1
13C4 PFOS	78		25 - 150	08/02/19 05:19	08/02/19 23:28	1
13C8 FOSA	74		25 - 150	08/02/19 05:19	08/02/19 23:28	1
d3-NMeFOSAA	67		25 - 150	08/02/19 05:19	08/02/19 23:28	1
d5-NEFOSAA	68		25 - 150	08/02/19 05:19	08/02/19 23:28	1
M2-6:2 FTS	86		25 - 150	08/02/19 05:19	08/02/19 23:28	1
M2-8:2 FTS	77		25 - 150	08/02/19 05:19	08/02/19 23:28	1
M2-4:2 FTS	81		25 - 150	08/02/19 05:19	08/02/19 23:28	1
13C3 HFPO-DA	84		25 - 150	08/02/19 05:19	08/02/19 23:28	1

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: P-30

Lab Sample ID: 500-167423-6

Date Collected: 07/25/19 10:45

Matrix: Water

Date Received: 07/27/19 09:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	48		1.8	0.32	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluoropentanoic acid (PFPeA)	1.2	J	1.8	0.45	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorohexanoic acid (PFHxA)	<0.53		1.8	0.53	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorooctanoic acid (PFOA)	<0.78		1.8	0.78	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.8	0.51	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.8	1.2	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorotetradecanoic acid (PFTeA)	<0.27		1.8	0.27	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.82		1.8	0.82	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorobutanesulfonic acid (PFBS)	0.48	J	1.8	0.18	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.42		1.8	0.42	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.8	0.28	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorohexanesulfonic acid (PFHxS)	0.51	J B	1.8	0.16	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.8	0.50	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorononanesulfonic acid (PFNS)	<0.15		1.8	0.15	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorooctanesulfonamide (FOSA)	<0.32		1.8	0.32	ng/L		08/02/19 05:19	08/02/19 23:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.8		18	2.8	ng/L		08/02/19 05:19	08/02/19 23:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.7		18	1.7	ng/L		08/02/19 05:19	08/02/19 23:36	1
4:2 FTS	<4.8		18	4.8	ng/L		08/02/19 05:19	08/02/19 23:36	1
6:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/02/19 23:36	1
8:2 FTS	<1.8		18	1.8	ng/L		08/02/19 05:19	08/02/19 23:36	1
Perfluorododecanesulfonic acid (PFDoS)	<0.41		1.8	0.41	ng/L		08/02/19 05:19	08/02/19 23:36	1
ADONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/02/19 23:36	1
F-53B Major	<0.22		1.8	0.22	ng/L		08/02/19 05:19	08/02/19 23:36	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		08/02/19 05:19	08/02/19 23:36	1
F-53B Minor	<0.29		1.8	0.29	ng/L		08/02/19 05:19	08/02/19 23:36	1
10:2 FTS	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 23:36	1
NaDONA	<0.17		1.9	0.17	ng/L		08/02/19 05:19	08/02/19 23:36	1
DONA	<0.17		1.8	0.17	ng/L		08/02/19 05:19	08/02/19 23:36	1
Ammonium Perfluorooctanoate (APFO)	<0.81		1.9	0.81	ng/L		08/02/19 05:19	08/02/19 23:36	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	73		25 - 150				08/02/19 05:19	08/02/19 23:36	1
13C5 PFPeA	79		25 - 150				08/02/19 05:19	08/02/19 23:36	1
13C2 PFHxA	82		25 - 150				08/02/19 05:19	08/02/19 23:36	1
13C4 PFHpA	79		25 - 150				08/02/19 05:19	08/02/19 23:36	1
13C4 PFOA	81		25 - 150				08/02/19 05:19	08/02/19 23:36	1
13C5 PFNA	84		25 - 150				08/02/19 05:19	08/02/19 23:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: P-30

Lab Sample ID: 500-167423-6

Date Collected: 07/25/19 10:45

Matrix: Water

Date Received: 07/27/19 09:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDA	87		25 - 150	08/02/19 05:19	08/02/19 23:36	1
13C2 PFHxDA	76		25 - 150	08/02/19 05:19	08/02/19 23:36	1
13C2 PFUnA	80		25 - 150	08/02/19 05:19	08/02/19 23:36	1
13C2 PFDoA	87		25 - 150	08/02/19 05:19	08/02/19 23:36	1
13C2 PFTeDA	92		25 - 150	08/02/19 05:19	08/02/19 23:36	1
13C3 PFBS	81		25 - 150	08/02/19 05:19	08/02/19 23:36	1
18O2 PFHxS	80		25 - 150	08/02/19 05:19	08/02/19 23:36	1
13C4 PFOS	78		25 - 150	08/02/19 05:19	08/02/19 23:36	1
13C8 FOSA	73		25 - 150	08/02/19 05:19	08/02/19 23:36	1
d3-NMeFOSAA	74		25 - 150	08/02/19 05:19	08/02/19 23:36	1
d5-NEFOSAA	76		25 - 150	08/02/19 05:19	08/02/19 23:36	1
M2-6:2 FTS	84		25 - 150	08/02/19 05:19	08/02/19 23:36	1
M2-8:2 FTS	89		25 - 150	08/02/19 05:19	08/02/19 23:36	1
M2-4:2 FTS	77		25 - 150	08/02/19 05:19	08/02/19 23:36	1
13C3 HFPO-DA	83		25 - 150	08/02/19 05:19	08/02/19 23:36	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Qualifiers

LCMS

Qualifier	Qualifier Description
*	Isotope Dilution analyte is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

QC Association Summary

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167423-2

LCMS

Prep Batch: 312020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167423-1	MW-3	Total/NA	Water	3535	
500-167423-2	P-4	Total/NA	Water	3535	
500-167423-3	MW-5	Total/NA	Water	3535	
500-167423-4	P-15	Total/NA	Water	3535	
500-167423-5	MW-29	Total/NA	Water	3535	
500-167423-6	P-30	Total/NA	Water	3535	
MB 320-312020/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-312020/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-312020/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 312282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167423-2	P-4	Total/NA	Water	537 (modified)	312020
500-167423-3	MW-5	Total/NA	Water	537 (modified)	312020
500-167423-4	P-15	Total/NA	Water	537 (modified)	312020
500-167423-5	MW-29	Total/NA	Water	537 (modified)	312020
500-167423-6	P-30	Total/NA	Water	537 (modified)	312020
MB 320-312020/1-A	Method Blank	Total/NA	Water	537 (modified)	312020
LCS 320-312020/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	312020
LCSD 320-312020/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	312020

Analysis Batch: 312953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-167423-1	MW-3	Total/NA	Water	537 (modified)	312020

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-312020/1-A
Matrix: Water
Analysis Batch: 312282

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312020

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.35		2.0	0.35	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorotetradecanoic acid (PFTeA)	<0.29		2.0	0.29	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.46		2.0	0.46	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorohexanesulfonic acid (PFHxS)	0.279	J	2.0	0.17	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorononanesulfonic acid (PFNS)	<0.16		2.0	0.16	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorooctanesulfonamide (FOSA)	<0.35		2.0	0.35	ng/L		08/02/19 05:19	08/02/19 21:44	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<3.1		20	3.1	ng/L		08/02/19 05:19	08/02/19 21:44	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.9		20	1.9	ng/L		08/02/19 05:19	08/02/19 21:44	1
4:2 FTS	<5.2		20	5.2	ng/L		08/02/19 05:19	08/02/19 21:44	1
6:2 FTS	<2.0		20	2.0	ng/L		08/02/19 05:19	08/02/19 21:44	1
8:2 FTS	<2.0		20	2.0	ng/L		08/02/19 05:19	08/02/19 21:44	1
Perfluorododecanesulfonic acid (PFDoS)	<0.45		2.0	0.45	ng/L		08/02/19 05:19	08/02/19 21:44	1
ADONA	<0.19		2.1	0.19	ng/L		08/02/19 05:19	08/02/19 21:44	1
F-53B Major	<0.24		2.0	0.24	ng/L		08/02/19 05:19	08/02/19 21:44	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		08/02/19 05:19	08/02/19 21:44	1
F-53B Minor	<0.32		2.0	0.32	ng/L		08/02/19 05:19	08/02/19 21:44	1
10:2 FTS	<0.19		2.0	0.19	ng/L		08/02/19 05:19	08/02/19 21:44	1
NaDONA	<0.19		2.1	0.19	ng/L		08/02/19 05:19	08/02/19 21:44	1
DONA	<0.18		2.0	0.18	ng/L		08/02/19 05:19	08/02/19 21:44	1
Ammonium Perfluorooctanoate (APFO)	<0.88		2.1	0.88	ng/L		08/02/19 05:19	08/02/19 21:44	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	93		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C5 PFPeA	95		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C2 PFHxA	103		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C4 PFHpA	97		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C4 PFOA	102		25 - 150	08/02/19 05:19	08/02/19 21:44	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-312020/1-A
Matrix: Water
Analysis Batch: 312282

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312020

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C5 PFNA	101		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C2 PFDA	110		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C2 PFHxDA	92		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C2 PFUnA	109		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C2 PFDoA	102		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C2 PFTeDA	116		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C3 PFBS	102		25 - 150	08/02/19 05:19	08/02/19 21:44	1
18O2 PFHxS	102		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C4 PFOS	97		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C8 FOSA	88		25 - 150	08/02/19 05:19	08/02/19 21:44	1
d3-NMeFOSAA	91		25 - 150	08/02/19 05:19	08/02/19 21:44	1
d5-NEtFOSAA	93		25 - 150	08/02/19 05:19	08/02/19 21:44	1
M2-6:2 FTS	102		25 - 150	08/02/19 05:19	08/02/19 21:44	1
M2-8:2 FTS	106		25 - 150	08/02/19 05:19	08/02/19 21:44	1
M2-4:2 FTS	97		25 - 150	08/02/19 05:19	08/02/19 21:44	1
13C3 HFPO-DA	105		25 - 150	08/02/19 05:19	08/02/19 21:44	1

Lab Sample ID: LCS 320-312020/2-A
Matrix: Water
Analysis Batch: 312282

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	40.6		ng/L		102	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	37.5		ng/L		94	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	38.4		ng/L		96	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	37.3		ng/L		93	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	36.2		ng/L		90	64 - 124
Perfluorononanoic acid (PFNA)	40.0	38.7		ng/L		97	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	35.6		ng/L		89	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	36.7		ng/L		92	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	37.0		ng/L		92	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	40.4		ng/L		101	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	37.7		ng/L		94	68 - 128
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	39.9		ng/L		100	72 - 132
Perfluorobutanesulfonic acid (PFBS)	35.4	33.4		ng/L		94	73 - 133
Perfluoro-n-octadecanoic acid (PFODA)	40.0	36.1		ng/L		90	74 - 134
Perfluoropentanesulfonic acid (PFPeS)	37.5	36.2		ng/L		97	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.0		ng/L		94	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.0		ng/L		100	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	35.7		ng/L		96	67 - 127

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-312020/2-A
Matrix: Water
Analysis Batch: 312282

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorononanesulfonic acid (PFNS)	38.4	37.0		ng/L		96	70 - 130
Perfluorodecanesulfonic acid (PFDS)	38.6	35.9		ng/L		93	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	41.5		ng/L		104	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	36.6		ng/L		91	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	38.6		ng/L		96	65 - 125
4:2 FTS	37.4	35.4		ng/L		95	70 - 130
6:2 FTS	37.9	36.2		ng/L		95	66 - 126
8:2 FTS	38.3	40.0		ng/L		104	67 - 127
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.7		ng/L		95	70 - 130
ADONA	39.5	38.8		ng/L		98	70 - 130
F-53B Major	37.3	37.5		ng/L		101	70 - 130
HFPO-DA (GenX)	40.0	32.9		ng/L		82	70 - 130
F-53B Minor	37.7	40.0		ng/L		106	70 - 130
10:2 FTS	38.6	36.0		ng/L		93	70 - 130
NaDONA	40.0	39.3		ng/L		98	70 - 130
DONA	37.7	37.0		ng/L		98	70 - 130
Ammonium Perfluorooctanoate (APFO)	41.6	37.6		ng/L		90	64 - 124

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	88		25 - 150
13C5 PFPeA	94		25 - 150
13C2 PFHxA	92		25 - 150
13C4 PFHpA	100		25 - 150
13C4 PFOA	95		25 - 150
13C5 PFNA	96		25 - 150
13C2 PFDA	106		25 - 150
13C2 PFHxDA	86		25 - 150
13C2 PFUnA	95		25 - 150
13C2 PFDoA	100		25 - 150
13C2 PFTeDA	107		25 - 150
13C3 PFBS	97		25 - 150
18O2 PFHxS	96		25 - 150
13C4 PFOS	94		25 - 150
13C8 FOSA	83		25 - 150
d3-NMeFOSAA	91		25 - 150
d5-NEtFOSAA	85		25 - 150
M2-6:2 FTS	91		25 - 150
M2-8:2 FTS	99		25 - 150
M2-4:2 FTS	93		25 - 150
13C3 HFPO-DA	111		25 - 150

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-312020/3-A

Matrix: Water

Analysis Batch: 312282

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 312020

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD
									Limit
Perfluorobutanoic acid (PFBA)	40.0	39.9		ng/L		100	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	40.0	37.7		ng/L		94	66 - 126	1	30
Perfluorohexanoic acid (PFHxA)	40.0	35.4		ng/L		88	66 - 126	8	30
Perfluoroheptanoic acid (PFHpA)	40.0	37.0		ng/L		92	66 - 126	1	30
Perfluorooctanoic acid (PFOA)	40.0	35.5		ng/L		89	64 - 124	2	30
Perfluorononanoic acid (PFNA)	40.0	39.4		ng/L		99	68 - 128	2	30
Perfluorodecanoic acid (PFDA)	40.0	36.0		ng/L		90	69 - 129	1	30
Perfluoroundecanoic acid (PFUnA)	40.0	35.6		ng/L		89	60 - 120	3	30
Perfluorododecanoic acid (PFDoA)	40.0	38.3		ng/L		96	71 - 131	4	30
Perfluorotridecanoic acid (PFTriA)	40.0	41.7		ng/L		104	72 - 132	3	30
Perfluorotetradecanoic acid (PFTeA)	40.0	35.3		ng/L		88	68 - 128	7	30
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	39.6		ng/L		99	72 - 132	1	30
Perfluorobutanesulfonic acid (PFBS)	35.4	33.6		ng/L		95	73 - 133	1	30
Perfluoro-n-octadecanoic acid (PFODA)	40.0	34.9		ng/L		87	74 - 134	3	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	37.1		ng/L		99	70 - 130	3	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.9		ng/L		91	63 - 123	3	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.0		ng/L		100	68 - 128	0	30
Perfluorooctanesulfonic acid (PFOS)	37.1	35.3		ng/L		95	67 - 127	1	30
Perfluorononanesulfonic acid (PFNS)	38.4	36.3		ng/L		94	70 - 130	2	30
Perfluorodecanesulfonic acid (PFDS)	38.6	38.0		ng/L		99	68 - 128	6	30
Perfluorooctanesulfonamide (FOSA)	40.0	41.6		ng/L		104	70 - 130	0	30
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	40.0	39.4		ng/L		98	67 - 127	7	30
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	40.0	38.7		ng/L		97	65 - 125	0	30
4:2 FTS	37.4	35.6		ng/L		95	70 - 130	1	30
6:2 FTS	37.9	36.7		ng/L		97	66 - 126	1	30
8:2 FTS	38.3	35.5		ng/L		93	67 - 127	12	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	37.0		ng/L		96	70 - 130	1	30
ADONA	39.5	39.1		ng/L		99	70 - 130	1	30
F-53B Major	37.3	38.4		ng/L		103	70 - 130	2	30
HFPO-DA (GenX)	40.0	38.9		ng/L		97	70 - 130	17	30
F-53B Minor	37.7	42.1		ng/L		112	70 - 130	5	30
10:2 FTS	38.6	36.3		ng/L		94	70 - 130	1	30
NaDONA	40.0	39.6		ng/L		99	70 - 130	1	30
DONA	37.7	37.3		ng/L		99	70 - 130	1	30
Ammonium Perfluorooctanoate (APFO)	41.6	37.0		ng/L		89	64 - 124	2	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Cedar Corporation
 Project/Site: Town of Warren

Job ID: 500-167423-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>LCS D LCS D</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C4 PFBA	81		25 - 150
13C5 PFPeA	85		25 - 150
13C2 PFHxA	86		25 - 150
13C4 PFHpA	85		25 - 150
13C4 PFOA	85		25 - 150
13C5 PFNA	85		25 - 150
13C2 PFDA	94		25 - 150
13C2 PFHxDA	80		25 - 150
13C2 PFUnA	88		25 - 150
13C2 PFDoA	91		25 - 150
13C2 PFTeDA	101		25 - 150
13C3 PFBS	84		25 - 150
18O2 PFHxS	88		25 - 150
13C4 PFOS	83		25 - 150
13C8 FOSA	74		25 - 150
d3-NMeFOSAA	76		25 - 150
d5-NEtFOSAA	77		25 - 150
M2-6:2 FTS	87		25 - 150
M2-8:2 FTS	91		25 - 150
M2-4:2 FTS	80		25 - 150
13C3 HFPO-DA	87		25 - 150



Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Client Sample ID: MW-3

Date Collected: 07/25/19 09:00

Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			312020	08/02/19 05:19	MTN	TAL SAC
Total/NA	Analysis	537 (modified)		1	312953	08/06/19 20:49	S1M	TAL SAC

Client Sample ID: P-4

Date Collected: 07/25/19 09:15

Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			312020	08/02/19 05:19	MTN	TAL SAC
Total/NA	Analysis	537 (modified)		1	312282	08/02/19 22:48	S1M	TAL SAC

Client Sample ID: MW-5

Date Collected: 07/25/19 10:00

Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			312020	08/02/19 05:19	MTN	TAL SAC
Total/NA	Analysis	537 (modified)		1	312282	08/02/19 22:56	S1M	TAL SAC

Client Sample ID: P-15

Date Collected: 07/25/19 08:30

Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			312020	08/02/19 05:19	MTN	TAL SAC
Total/NA	Analysis	537 (modified)		1	312282	08/02/19 23:20	S1M	TAL SAC

Client Sample ID: MW-29

Date Collected: 07/25/19 10:30

Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			312020	08/02/19 05:19	MTN	TAL SAC
Total/NA	Analysis	537 (modified)		1	312282	08/02/19 23:28	S1M	TAL SAC

Client Sample ID: P-30

Date Collected: 07/25/19 10:45

Date Received: 07/27/19 09:10

Lab Sample ID: 500-167423-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			312020	08/02/19 05:19	MTN	TAL SAC
Total/NA	Analysis	537 (modified)		1	312282	08/02/19 23:36	S1M	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Eurofins TestAmerica, Chicago

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-19 *

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD		L2468	01-20-21
ANAB	DOE		L2468.01	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-20
California	State Program	9	2897	01-31-20
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State		PH-0691	06-30-21
Connecticut	State Program	1	PH-0691	06-30-21
Florida	NELAP	4	E87570	06-30-20
Florida	NELAP		E87570	06-30-20
Hawaii	State Program	9	N/A	01-29-20
Illinois	NELAP	5	200060	03-17-20 *
Kansas	NELAP	7	E-10375	10-31-19
Louisiana	NELAP	6	30612	06-30-20
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
New Hampshire	NELAP	1	2997	04-20-20
New York	NELAP	2	11666	04-01-20
Oregon	NELAP	10	4040	01-29-20
Oregon	NELAP		4040	01-29-20
Pennsylvania	NELAP	3	68-01272	03-31-20
Pennsylvania	NELAP		68-01272	03-31-20
Texas	NELAP	6	T104704399	05-31-20
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	12-31-20
Utah	NELAP	8	CA00044	02-29-20
Vermont	State Program	1	VT-4040	04-16-20
Virginia	NELAP	3	460278	03-14-20
Washington	State Program	10	C581	05-05-20
West Virginia (DW)	State Program	3	9930C	12-31-19
Wyoming	State Program	8	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Chicago

TestAmerica


THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To Contact: <u>Mitch Evenson &</u> Company: <u>Anna Beckman</u> Address: _____ Address: _____ Phone: _____ Fax: _____ E-Mail: _____	(optional)	Bill To Contact: _____ Company: _____ Address: _____ Address: _____ Phone: _____ Fax: _____ PO#/Reference# _____	(optional)
---	------------	---	------------

Chain of Custody Record

Lab Job #: 500-167423
Chain of Custody Number: _____
Page 1 of 1
Temperature °C of Cooler: 3.9

Client		Client Project #		Preservative		Parameter		Matrix		 500-167423 COC	Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
Project Name		Lab Project #		Sampling		# of Containers		Matrix			
Lab ID	MS/MSD	Sample ID	Date	Time							
Cedar Corp											
Town of Warren											
Hudson, WI											
Sander		Sandie Fredrick									
1		mw-3	7/25/19	0900	5	GW	X	X			
2		P-4	↓	0915	↓	↓	↓	↓			
3		mw-5	↓	1000	↓	↓	↓	↓			
4		P-15	↓	0830	↓	↓	↓	↓			
5		mw-29	↓	1030	↓	↓	↓	↓			
6		P-30	↓	1045	↓	↓	↓	↓			
7		Trip Blank									

Turnaround Time Required (Business Days):
 1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other
 Requested Due Date: _____

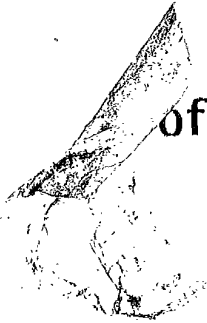
Sample Disposal:
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>Anna Beckman</u> Company: <u>Cedar</u> Date: <u>7/26/19</u> Time: <u>0730</u>	Received By <u>Paul Buckley</u> Company: <u>TACH</u> Date: <u>7/27/19</u> Time: <u>0910</u>	Lab Courier: _____
Relinquished By Company: _____ Date: _____ Time: _____	Received By Company: _____ Date: _____ Time: _____	Shipped: <input checked="" type="checkbox"/>
Relinquished By Company: _____ Date: _____ Time: _____	Received By Company: _____ Date: _____ Time: _____	Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____



ofins

Environment Testing
TestAmerica

Pat # 159470-434 RITZ EXP 05/20



500-167423 Waybill

ORIGIN ID:PHDA (715) 235-8081
MITCH EVENSON
CEDAR CORPORATION
804 WILSON AVENUE

SHIP DATE: 16JUL19
ACTWGT: 10.00 LB MAN
CAD: 0562065/CAFE9211

MENOMONIE, WI 54751
UNITED STATES US

TO **SAMPLE RECEIVING**
TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 604843101

(708) 634-6200
REF: 5600-73815

RMA: WI 1111 11



FedEx
Express



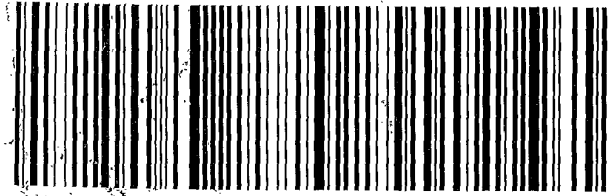
fedEx.

TRK# 1054 5426 2889
0221

MON-SAT
5:00 PM - 12:00 PM
PRIORITY OVERNIGHT

X0 JOTA

60484
IL-US
ORD



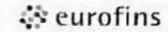
F1D 8723803 26JUL19 EADA 568C2/A6F9/0C8A



Eurofins TestAmerica, Chicago

2417 Bond Street
 University Park, IL 60484
 Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record



Environment Testing
 TestAmerica

Client Information (Sub Contract Lab)		Sampler:		Lab PM: Fredrick, Sandie		Carrier Tracking No(s):		COC No: 500-123976.1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: sandie.fredrick@testamericainc.com		State of Origin: Wisconsin		Page: Page 1 of 1			
Company: TestAmerica Laboratories, Inc.				Accreditations Required (See note): State Program - Wisconsin				Job #: 500-167423-2			
Address: 880 Riverside Parkway,		Due Date Requested: 8/20/2019		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)	
City: West Sacramento		TAT Requested (days):									
State, Zip: CA, 95605		PO #:									
Phone: 916-373-5600(Tel) 916-372-1059(Fax)		WO #:									
Email:		SSOW#:									
Project Name: Town of Warren		Project #: 50006557		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers			
Site:		SSOW#:		PFC_IDA/3535 - PFC (MOD) PFAS, Standard List (32 Analytes)							
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535 - PFC (MOD) PFAS, Standard List (32 Analytes)	Total Number of containers	Special Instructions/Note:	
				Preservation Code:							
MW-3 (500-167423-1)		7/25/19	09:00 Central		Water		X		2		
P-4 (500-167423-2)		7/25/19	09:15 Central		Water		X		2		
MW-5 (500-167423-3)		7/25/19	10:00 Central		Water		X		2		
P-15 (500-167423-4)		7/25/19	08:30 Central		Water		X		2		
MW-29 (500-167423-5)		7/25/19	10:30 Central		Water		X		2		
P-30 (500-167423-6)		7/25/19	10:45 Central		Water		X		2		
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.											
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)			Primary Deliverable Rank: 2			Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:					
Relinquished by: <i>[Signature]</i>		Date/Time: 7/29/19 1500		Company: <i>[Signature]</i>		Received by: <i>[Signature]</i>		Date/Time: 07/30/19 855		Company: ETA-500	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: 768187				Cooler Temperature(s) °C and Other Remarks: 1.0°C					

Page 31 of 36

8/8/2019



Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-167423-2

Login Number: 167423

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Buckley, Paula M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-167423-2

Login Number: 167423

List Number: 2

Creator: Kintaudi, Pauline W

List Source: Eurofins TestAmerica, Sacramento

List Creation: 07/30/19 02:38 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	768187
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.0c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing
TestAmerica

Sacramento
Sample Receiving Notes



500-167423 Field Sheet

Tracking #: 4059 7182 0942

SO (PO) / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other _____

Job: _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Notes: _____

Therm. ID: AK10 Corr. Factor: -

Ice Wet Gel _____ Other _____

Cooler Custody Seal: 768187

Sample Custody Seal: -

Cooler ID: -

Temp Observed: 1.0 Corrected: 1.0

From: Temp Blank Sample

NCM Filed: Yes No

	Yes	No	NA
Perchlorate has headspace? (Methods 314, 331, 6850)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alkalinity has no headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CoC is complete w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample preservatives verified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cooler compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample containers have legible labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Containers are not broken or leaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample date/times are provided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate containers are used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample bottles are completely filled?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zero headspace?*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Multiphasic samples are not present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample temp OK?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample out of temp?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Initials: PK Date: 07/30/19

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

W4A

Isotope Dilution Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-167423-2

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFHxDA (25-150)
500-167423-1	MW-3	53	59	61	61	65	64	76	49
500-167423-2	P-4	76	84	85	88	87	90	92	74
500-167423-3	MW-5	80	93	95	94	95	96	96	67
500-167423-4	P-15	78	88	93	93	96	92	98	81
500-167423-5	MW-29	72	81	83	83	83	84	86	56
500-167423-6	P-30	73	79	82	79	81	84	87	76
LCS 320-312020/2-A	Lab Control Sample	88	94	92	100	95	96	106	86
LCSD 320-312020/3-A	Lab Control Sample Dup	81	85	86	85	85	85	94	80
MB 320-312020/1-A	Method Blank	93	95	103	97	102	101	110	92

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFUnA (25-150)	PFDaA (25-150)	PFTDA (25-150)	3C3-PFB! (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOS (25-150)
500-167423-1	MW-3	63	60	55	53	57	54	51	97
500-167423-2	P-4	94	95	97	88	87	84	76	78
500-167423-3	MW-5	91	89	85	94	93	88	84	75
500-167423-4	P-15	77	75	78	93	93	83	79	74
500-167423-5	MW-29	79	78	78	82	83	78	74	67
500-167423-6	P-30	80	87	92	81	80	78	73	74
LCS 320-312020/2-A	Lab Control Sample	95	100	107	97	96	94	83	91
LCSD 320-312020/3-A	Lab Control Sample Dup	88	91	101	84	88	83	74	76
MB 320-312020/1-A	Method Blank	109	102	116	102	102	97	88	91

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	-NEtFOS/ (25-150)	M262FTS (25-150)	M282FTS (25-150)	M242FTS (25-150)	HFPODA (25-150)
500-167423-1	MW-3	84	81	247 *	86	62
500-167423-2	P-4	82	98	108	87	90
500-167423-3	MW-5	77	98	91	88	95
500-167423-4	P-15	73	103	119	113	88
500-167423-5	MW-29	68	86	77	81	84
500-167423-6	P-30	76	84	89	77	83
LCS 320-312020/2-A	Lab Control Sample	85	91	99	93	111
LCSD 320-312020/3-A	Lab Control Sample Dup	77	87	91	80	87
MB 320-312020/1-A	Method Blank	93	102	106	97	105

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
PFHpA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFHxDA = 13C2 PFHxDA
PFUnA = 13C2 PFUnA
PFDaA = 13C2 PFDaA
PFTDA = 13C2 PFTeDA
13C3-PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS

Isotope Dilution Summary

Job ID: 500-167423-2

Client: Cedar Corporation

Project/Site: Town of Warren

PFOSA = $^{13}\text{C}_8$ FOSA

d3-NMeFOSAA = d3-NMeFOSAA

d5-NEtFOSAA = d5-NEtFOSAA

M262FTS = M2-6:2 FTS

M282FTS = M2-8:2 FTS

M242FTS = M2-4:2 FTS

HFPODA = $^{13}\text{C}_3$ HFPO-DA

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16



August 15, 2019

Vista Work Order No. 1902281

Staff Geologist Anna Beckman
Cedar Corporation
604 Wilson Avenue
Menomonie, WI 54751

Dear Staff Geologist Beckman,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on July 25, 2019 under your Project Name 'Junker LF/Town of Warren'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at jmiller@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Miller", is written over a light blue horizontal line.

Jennifer Miller
National Sales



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Work Order No. 1902281

Case Narrative

Sample Condition on Receipt:

Two groundwater samples and one aqueous sample were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology. The client was notified of the COC sample matrix discrepancy.

Analytical Notes:

PFAS Isotope Dilution Method

Sample "MW-22" contained particulate and was centrifuged prior to extraction.

The samples were extracted and analyzed for a selected list of PFAS using the PFAS Isotope Dilution Method. This method is listed on Vista's NELAP certificate as Modified EPA Method 537. The results for PFHxS, PFOA, PFOS, MeFOSAA, and EtFOSAA include both linear and branched isomers. Results for all other analytes include the linear isomers only.

Holding Times

The samples were extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above the Reporting Limit. The OPR recovery of MeFOSA was >130%. This analyte was not detected in the samples. All other analyte recoveries were within the method acceptance criteria.

The labeled standard recoveries outside the acceptance criteria are listed in the table below.

QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
B9G0286-BLK1	B9G0286-BLK1	PFAS Isotope Dilution Method	d3-MeFOSA	H	8.40
B9G0286-BLK1	B9G0286-BLK1	PFAS Isotope Dilution Method	d5-EtFOSA	H	9.00

H = Recovery was outside laboratory acceptance criteria.

TABLE OF CONTENTS

Case Narrative.....	1
Table of Contents.....	3
Sample Inventory.....	4
Analytical Results.....	5
Qualifiers.....	16
Certifications.....	17
Sample Receipt.....	20

Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1902281-01	JMW-9	22-Jul-19 14:30	25-Jul-19 09:40	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1902281-02	Field Blank	22-Jul-19 14:35	25-Jul-19 09:40	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1902281-03	MW-22	23-Jul-19 14:20	25-Jul-19 09:40	HDPE Bottle, 250 mL HDPE Bottle, 250 mL

ANALYTICAL RESULTS

Sample ID: Method Blank
PFAS Isotope Dilution Method

Client Data		Laboratory Data		Matrix:		Aqueous			
Name:	Cedar Corporation	Lab Sample:	B9G0286-BLK1	Column:	BEH C18				
Project:	Junker LF/Town of Warren								
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFPeA	2706-90-3	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFBS	375-73-5	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
4:2 FTS	757124-72-4	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFHxA	307-24-4	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFPeS	2706-91-4	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFHpA	375-85-9	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFHxS	355-46-4	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
6:2 FTS	27619-97-2	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFOA	335-67-1	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFHpS	375-92-8	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFNA	375-95-1	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFOSA	754-91-6	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFOS	1763-23-1	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFDA	335-76-2	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
8:2 FTS	39108-34-4	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFNS	68259-12-1	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
MeFOSAA	2355-31-9	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
EtFOSAA	2991-50-6	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFUnA	2058-94-8	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFDS	335-77-3	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFDoA	307-55-1	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
MeFOSA	31506-32-8	ND	10.0		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFTrDA	72629-94-8	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFTeDA	376-06-7	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
EtFOSA	4151-50-2	ND	10.0		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFHxDA	67905-19-5	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFODA	16517-11-6	ND	3.50		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
MeFOSE	24448-09-7	ND	10.0		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
EtFOSE	1691-99-2	ND	10.0		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
HFPO-DA	13252-13-6	ND	2.50		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
ADONA	919005-14-4	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
9CI-PF3ONS	756426-58-1	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
11Cl-PF3OUdS	763051-92-9	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
PFDoS	79780-39-5	ND	2.50		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
10:2 FTS	120226-60-0	ND	2.00		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	96.3	60 - 130		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1

Sample ID: Method Blank
PFAS Isotope Dilution Method

Client Data		Laboratory Data							
Name: Cedar Corporation	Matrix: Aqueous	Lab Sample: B9G0286-BLK1	Column: BEH C18						
Project: Junker LF/Town of Warren									
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	87.8	60 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C3-PFBs	IS	99.1	60 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C2-4:2 FTS	IS	114	20 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C2-PFHxA	IS	79.0	70 - 130		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C4-PFHpA	IS	81.9	60 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C3-PFHxS	IS	109	60 - 130		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C2-6:2 FTS	IS	127	40 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C2-PFOA	IS	78.0	60 - 130		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C5-PFNA	IS	95.0	50 - 130		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C8-PFOA	IS	46.2	20 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C8-PFOS	IS	87.6	60 - 130		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C2-PFDA	IS	73.2	60 - 130		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C2-8:2 FTS	IS	106	40 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
d3-MeFOSAA	IS	58.9	50 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
d5-EtFOSAA	IS	64.8	50 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C2-PFUnA	IS	81.0	60 - 130		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C2-PFDoA	IS	90.0	30 - 130		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
d3-MeFOSA	IS	8.40	10 - 130		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C2-PFTeDA	IS	63.9	20 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
d5-EtFOSA	IS	9.00	10 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C2-PFHxDA	IS	81.5	20 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
d7-MeFOSE	IS	44.1	10 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
d9-EtFOSE	IS	40.5	10 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1
13C3-HFPO-DA	IS	129	60 - 150		B9G0286	30-Jul-19	0.250 L	03-Aug-19 14:30	1

RL - Reporting limit

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: OPR
PFAS Isotope Dilution Method

Client Data		Laboratory Data									
Name:	Cedar Corporation	Matrix:	Aqueous	Lab Sample:	B9G0286-BS1	Column:	BEH C18				
Project:	Junker LF/Town of Warren										
Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	44.1	40.0	110	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFPeA	2706-90-3	45.6	40.0	114	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFBS	375-73-5	43.4	40.0	108	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
4:2 FTS	757124-72-4	43.7	40.0	109	60 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFHxA	307-24-4	45.6	40.0	114	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFPeS	2706-91-4	43.6	40.0	109	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFHpA	375-85-9	43.6	40.0	109	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFHxS	355-46-4	48.1	40.0	120	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
6:2 FTS	27619-97-2	46.3	40.0	116	60 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFOA	335-67-1	43.3	40.0	108	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFHpS	375-92-8	49.2	40.0	123	60 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFNA	375-95-1	45.4	40.0	113	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFOSA	754-91-6	44.0	40.0	110	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFOS	1763-23-1	44.5	40.0	111	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFDA	335-76-2	47.2	40.0	118	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
8:2 FTS	39108-34-4	45.0	40.0	112	60 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFNS	68259-12-1	44.2	40.0	111	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
MeFOSAA	2355-31-9	47.6	40.0	119	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
EtFOSAA	2991-50-6	44.4	40.0	111	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFUnA	2058-94-8	47.5	40.0	119	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFDS	335-77-3	38.5	40.0	96.2	60 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFDoA	307-55-1	47.8	40.0	120	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
MeFOSA	31506-32-8	268	200	134	70 - 130	H	B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFTrDA	72629-94-8	46.4	40.0	116	60 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFTeDA	376-06-7	47.9	40.0	120	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
EtFOSA	4151-50-2	252	200	126	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFHxDA	67905-19-5	44.4	40.0	111	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
PFODA	16517-11-6	39.1	40.0	97.8	40 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
MeFOSE	24448-09-7	242	200	121	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
EtFOSE	1691-99-2	247	200	123	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
HFPO-DA	13252-13-6	46.8	40.0	117	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
ADONA	919005-14-4	40.6	40.0	102	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
9CI-PF3ONS	756426-58-1	42.5	40.0	106	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
11CI-PF3OUdS	763051-92-9	47.1	40.0	118	70 - 130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1

Sample ID: OPR **PFAS Isotope Dilution Method**

Client Data		Laboratory Data									
Name:	Cedar Corporation	Matrix:	Aqueous	Lab Sample:	B9G0286-BS1	Column:	BEH C18				
Project:	Junker LF/Town of Warren										
Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFDoS	79780-39-5	47.5	40.0	119	60-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
10:2 FTS	120226-60-0	35.3	40.0	88.1	60-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
Labeled Standards											
		Type		% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA		IS		97.8	60-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C3-PFPeA		IS		94.2	60-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C3-PFBS		IS		99.0	60-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C2-4:2 FTS		IS		96.9	20-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C2-PFHxA		IS		95.8	70-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C4-PFHpA		IS		102	60-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C3-PFHxS		IS		94.6	60-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C2-6:2 FTS		IS		88.1	40-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C2-PFOA		IS		94.8	60-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C5-PFNA		IS		91.3	50-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C8-PFOA		IS		44.9	20-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C8-PFOS		IS		79.3	60-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C2-PFDA		IS		87.7	60-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C2-8:2 FTS		IS		76.4	40-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
d3-MeFOSAA		IS		71.2	50-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
d5-EtFOSAA		IS		70.4	50-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C2-PFUnA		IS		76.2	60-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C2-PFDoA		IS		71.6	30-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
d3-MeFOSA		IS		21.3	10-130		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C2-PFTeDA		IS		76.4	20-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
d5-EtFOSA		IS		21.7	10-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C2-PFHxDA		IS		74.8	20-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
d7-MeFOSE		IS		34.7	10-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
d9-EtFOSE		IS		35.9	10-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1
13C3-HFPO-DA		IS		92.0	60-150		B9G0286	30-Jul-19	0.250 L	01-Aug-19 01:56	1

Sample ID: JMW-9
PFAS Isotope Dilution Method

Client Data		Laboratory Data		Matrix:		Limits			
Name:	Cedar Corporation	Lab Sample:	1902281-01	Date Collected:	22-Jul-19 14:30	Conc. (ng/L)	% Recovery		
Project:	Junker LF/Town of Warren	Date Received:	25-Jul-19 09:40	Date Collected:	22-Jul-19 14:30	Conc. (ng/L)	% Recovery		
Location:	Junker LF			Date Collected:	22-Jul-19 14:30	Conc. (ng/L)	% Recovery		
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	27.9	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFPeA	2706-90-3	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFBS	375-73-5	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
4:2 FTS	757124-72-4	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFHxA	307-24-4	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFPeS	2706-91-4	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFHpA	375-85-9	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFHxS	355-46-4	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
6:2 FTS	27619-97-2	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFOA	335-67-1	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFHpS	375-92-8	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFNA	375-95-1	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFOSA	754-91-6	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFOS	1763-23-1	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFDA	335-76-2	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
8:2 FTS	39108-34-4	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFNS	68259-12-1	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
MeFOSAA	2355-31-9	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
EtFOSAA	2991-50-6	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFUnA	2058-94-8	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFDS	335-77-3	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFDoA	307-55-1	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
MeFOSA	31506-32-8	ND	9.78		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFTrDA	72629-94-8	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFTeDA	376-06-7	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
EtFOSA	4151-50-2	ND	9.78		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFHxDA	67905-19-5	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFODA	16517-11-6	ND	3.42		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
MeFOSE	24448-09-7	ND	9.78		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
EtFOSE	1691-99-2	ND	9.78		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
HFPO-DA	13252-13-6	ND	2.44		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
ADONA	919005-14-4	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
9CI-PF3ONS	756426-58-1	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
11Cl-PF3OUdS	763051-92-9	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
PFDoS	79780-39-5	ND	2.44		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
10:2 FTS	120226-60-0	ND	1.96		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	95.6	60 - 130		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1

Sample ID: JMW-9
PFAS Isotope Dilution Method

Client Data		Laboratory Data							
Name:	Cedar Corporation	Lab Sample:	1902281-01						
Project:	Junker LF/Town of Warren	Date Received:	25-Jul-19 09:40						
Location:	Junker LF	Matrix:	Groundwater						
		Date Collected:	22-Jul-19 14:30						
		Column:	BEH C18						
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	91.6	60 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C3-PFBS	IS	86.6	60 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C2-4:2 FTS	IS	86.9	20 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C2-PFHxA	IS	94.8	70 - 130		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C4-PFHpA	IS	99.8	60 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C3-PFHxS	IS	90.5	60 - 130		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C2-6:2 FTS	IS	98.5	40 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C2-PFOA	IS	93.4	60 - 130		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C5-PFNA	IS	89.5	50 - 130		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C8-PFOA	IS	52.7	20 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C8-PFOS	IS	94.2	60 - 130		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C2-PFDA	IS	91.2	60 - 130		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C2-8:2 FTS	IS	85.2	40 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
d3-MeFOSAA	IS	87.4	50 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
d5-EtFOSAA	IS	80.9	50 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C2-PFUnA	IS	87.9	60 - 130		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C2-PFDoA	IS	75.7	30 - 130		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
d3-MeFOSA	IS	20.8	10 - 130		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C2-PFTeDA	IS	86.8	20 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
d5-EtFOSA	IS	22.6	10 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C2-PFHxDA	IS	79.3	20 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
d7-MeFOSE	IS	43.1	10 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
d9-EtFOSE	IS	42.9	10 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1
13C3-HFPO-DA	IS	98.5	60 - 150		B9G0286	30-Jul-19	0.256 L	01-Aug-19 02:17	1

RL - Reporting limit

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: Field Blank

PFAS Isotope Dilution Method

Client Data		Laboratory Data		Matrix:		Limits		
Name:	Cedar Corporation	Lab Sample:	1902281-02	Column:	BEH C18			
Project:	Junker LF/Town of Warren	Date Received:	25-Jul-19 09:40	Batch:				
Location:	Junker LF			Extracted	Samp Size	Analyzed	Dilution	
		Conc. (ng/L)	Qualifiers	Batch	Samp Size	Analyzed	Dilution	
Analyte	CAS Number	Conc. (ng/L)	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFPeA	2706-90-3	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFBS	375-73-5	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
4:2 FTS	757124-72-4	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFHxA	307-24-4	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFPeS	2706-91-4	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFHpA	375-85-9	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFHxS	355-46-4	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
6:2 FTS	27619-97-2	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFOA	335-67-1	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFHpS	375-92-8	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFNA	375-95-1	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFOSA	754-91-6	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFOS	1763-23-1	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFDA	335-76-2	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
8:2 FTS	39108-34-4	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFNS	68259-12-1	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
MeFOSAA	2355-31-9	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
EtFOSAA	2991-50-6	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFUnA	2058-94-8	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFDS	335-77-3	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFDoA	307-55-1	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
MeFOSA	31506-32-8	ND	9.91	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFTrDA	72629-94-8	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFTeDA	376-06-7	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
EtFOSA	4151-50-2	ND	9.91	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFHxDA	67905-19-5	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFODA	16517-11-6	ND	3.47	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
MeFOSE	24448-09-7	ND	9.91	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
EtFOSE	1691-99-2	ND	9.91	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
HFPO-DA	13252-13-6	ND	2.48	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
ADONA	919005-14-4	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
9Cl-PF3ONS	756426-58-1	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
11Cl-PF3OUdS	763051-92-9	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
PFDoS	79780-39-5	ND	2.48	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
10:2 FTS	120226-60-0	ND	1.98	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1
Labeled Standards	Type	% Recovery	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	98.5		B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1

Sample ID: Field Blank
PFAS Isotope Dilution Method

Client Data		Laboratory Data		Limits		Qualifiers		Samp Size		Analyzed		Dilution	
Name:	Cedar Corporation	Lab Sample:	1902281-02	Matrix:	Aqueous	% Recovery	Type	Batch	Extracted	Samp Size	Analyzed	Dilution	
Project:	Junker LF/Town of Warren	Date Received:	25-Jul-19 09:40	Date Collected:	22-Jul-19 14:35								
Location:	Junker LF												
Column:	BEH C18												
13C3-PFPeA	IS	93.2	60 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C3-PFBS	IS	97.7	60 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C2-4:2 FTS	IS	97.4	20 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C2-PFHxA	IS	96.3	70 - 130	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C4-PFHpA	IS	97.8	60 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C3-PFHxS	IS	95.6	60 - 130	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C2-6:2 FTS	IS	105	40 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C2-PFOA	IS	98.6	60 - 130	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C5-PFNA	IS	94.1	50 - 130	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C8-PFOA	IS	41.3	20 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C8-PFOS	IS	90.3	60 - 130	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C2-PFDA	IS	98.5	60 - 130	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C2-8:2 FTS	IS	91.3	40 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
d3-MeFOSAA	IS	77.3	50 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
d5-EtFOSAA	IS	75.3	50 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C2-PFUnA	IS	93.0	60 - 130	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C2-PFDoA	IS	76.7	30 - 130	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
d3-MeFOSA	IS	17.4	10 - 130	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C2-PFTeDA	IS	75.6	20 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
d5-EtFOSA	IS	19.2	10 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C2-PFHxDA	IS	78.6	20 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
d7-MeFOSE	IS	39.8	10 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
d9-EtFOSE	IS	40.0	10 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					
13C3-HFPO-DA	IS	81.8	60 - 150	B9G0286	30-Jul-19	0.252 L	01-Aug-19 02:28	1					

RL - Reporting limit

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: MW-22
PFAS Isotope Dilution Method

Client Data		Laboratory Data		Matrix:		Date Collected:		Date Received:		Column:	
Name:	Cedar Corporation	Lab Sample:	1902281-03	Groundwater	23-Jul-19 14:20	Matrix:	Groundwater	25-Jul-19 09:40	Column:	BEH C18	
Project:	Junker LF/Town of Warren	Date Received:	25-Jul-19 09:40	Date Collected:	23-Jul-19 14:20	Date Received:	25-Jul-19 09:40				
Location:	Town of Warren										
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution		
PFBA	375-22-4	32.9	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFPeA	2706-90-3	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFBS	375-73-5	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
4:2 FTS	757124-72-4	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFHxA	307-24-4	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFPeS	2706-91-4	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFHpA	375-85-9	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFHxS	355-46-4	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
6:2 FTS	27619-97-2	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFOA	335-67-1	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFHpS	375-92-8	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFNA	375-95-1	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFOSA	754-91-6	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFOS	1763-23-1	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFDA	335-76-2	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
8:2 FTS	39108-34-4	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFNS	68259-12-1	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
MeFOSAA	2355-31-9	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
EtFOSAA	2991-50-6	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFUnA	2058-94-8	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFDS	335-77-3	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFDoA	307-55-1	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
MeFOSA	31506-32-8	ND	10.3		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFTrDA	72629-94-8	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFTeDA	376-06-7	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
EtFOSA	4151-50-2	ND	10.3		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFHxDA	67905-19-5	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFODA	16517-11-6	ND	3.61		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
MeFOSE	24448-09-7	ND	10.3		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
EtFOSE	1691-99-2	ND	10.3		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
HFPO-DA	13252-13-6	ND	2.58		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
ADONA	919005-14-4	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
9CI-PF3ONS	756426-58-1	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
11Cl-PF3OUdS	763051-92-9	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
PFDoS	79780-39-5	ND	2.58		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
10:2 FTS	120226-60-0	ND	2.07		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution		
13C3-PFBA	IS	92.0	60 - 130		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1		

Sample ID: MW-22
PFAS Isotope Dilution Method

Client Data		Laboratory Data							
Name:	Cedar Corporation	Lab Sample:	1902281-03						
Project:	Junker LF/Town of Warren	Date Received:	25-Jul-19 09:40						
Location:	Town of Warren	Matrix:	Groundwater						
		Date Collected:	23-Jul-19 14:20						
		Column:	BEH C18						
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	91.3	60 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C3-PFBS	IS	90.9	60 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C2-4:2 FTS	IS	91.0	20 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C2-PFHxA	IS	90.3	70 - 130		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C4-PFHpA	IS	94.1	60 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C3-PFHxS	IS	87.4	60 - 130		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C2-6:2 FTS	IS	93.8	40 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C2-PFOA	IS	92.3	60 - 130		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C5-PFNA	IS	88.1	50 - 130		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C8-PFOA	IS	50.9	20 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C8-PFOS	IS	91.2	60 - 130		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C2-PFDA	IS	89.4	60 - 130		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C2-8:2 FTS	IS	92.8	40 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
d3-MeFOSAA	IS	75.8	50 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
d5-EtFOSAA	IS	84.3	50 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C2-PFUnA	IS	78.5	60 - 130		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C2-PFDoA	IS	67.0	30 - 130		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
d3-MeFOSA	IS	21.1	10 - 130		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C2-PFTeDA	IS	53.9	20 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
d5-EtFOSA	IS	19.9	10 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C2-PFHxDA	IS	54.4	20 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
d7-MeFOSE	IS	33.4	10 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
d9-EtFOSE	IS	30.9	10 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1
13C3-HFPO-DA	IS	91.0	60 - 150		B9G0286	30-Jul-19	0.242 L	01-Aug-19 02:39	1

RL - Reporting limit

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
D	Dilution
DL	Detection limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
J	The amount detected is below the Reporting Limit/LOQ
LOD	Limits of Detection
LOQ	Limits of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
NA	Not applicable
ND	Not Detected
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
TEQ	Toxic Equivalency
U	Not Detected (specific projects only)
*	See Cover Letter

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

Vista Analytical Laboratory Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	19-013-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-23
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Massachusetts Department of Environmental Protection	N/A
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718-B
New Jersey Department of Environmental Protection	190001
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	016
Texas Commission on Environmental Quality	T104704189-19-10
Vermont Department of Health	VT-4042
Virginia Department of General Services	10272
Washington Department of Ecology	C584-19
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	Method
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA TO-9A

MATRIX: Biological Tissue	
Description of Test	Method
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	Method
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613/1613B
1,4-Dioxane (1,4-Diethyleneoxide) analysis by GC/HRMS	EPA 522
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	ISO 25101 2009

MATRIX: Non-Potable Water	
Description of Test	Method
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	Method
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A



CHAIN OF CUSTODY

For Laboratory Use Only
 Laboratory Project ID: 1902281 Temp: 2.6 °C
 Storage ID: R-13, WR-2 Storage Secured: Yes No

Project ID: Junker LF/Town of Warren P.O.#: _____ Sampler: Anna Beckman (name)

TAT Standard: 21 days
 (check one): Rush (surcharge may apply)
 14 days 7 days Specify: _____

Invoice to: Name _____ Company _____ Address _____ City _____ State _____ Ph# _____ Fax# _____

Anna Beckman Cedar Corporation 604 Wilson Ave menomonie WI 715-235-9081

Relinquished by (printed name and signature) _____ Date _____ Time _____ Received by (printed name and signature) _____ Date _____ Time _____

Anna Beckman Anna Beckman 7/24/19 0700 Marissa Sparks MSparks 07/25/19 0940

Relinquished by (printed name and signature) _____ Date _____ Time _____ Received by (printed name and signature) _____ Date _____ Time _____

SHIP TO: Vista Analytical Laboratory
 1104 Windfield Way
 El Dorado Hills, CA 95762
 (916) 673-1520 * Fax (916) 673-0106
 ATTN: _____
 Method of Shipment: FedEx Priority Overnight
 Tracking No.: 808639953269

Add Analysis(es) Requested			Container(s)														Comments		
Quantity	Type	Matrix	2378-TCDD	2378-TCDD/TCDF	2378-TCDD	2378-TCDD/TCDF	2378-TCDD	2378-TCDD/TCDF	2378-TCDD	2378-TCDD/TCDF	TOTALS	COP-LANAR PCBs	209 CONGENERS	PBDE	PAH	WHO-29		Mod. EPA 837	PFAS
2	0	GW																	X
2	0	O																	X
2	0	GW																	X

Special Instructions/Comments: _____

SEND DOCUMENTATION AND RESULTS TO:

Name: Mitch Evenson
 Company: Cedar Corp
 Address: 604 Wilson Ave
 City: Menomonie State: WI Zip: 54751
 Phone: 715-235-9081 Fax: _____
 Email: mitch.evenson@cedarcorp.com

Container Types: A = 1 Liter Amber, G = Glass Jar
 P = PUF, T = MM5, O = Other: _____

Bottle Preservation Type: TZ = Trizma,
 O = Other: _____

Matrix Types: AQ = Aqueous, DW = Drinking Water, EF = Effluent, PP = Pulp/Paper, SD = Sediment,
 SL = Sludge, SO = Soil, WW = Wastewater, B = Blood/Serum, O = Other: _____

Sample Log-In Checklist

Page # 1 of 1

Vista Work Order #: 1902281

TAT std

Samples Arrival:	Date/Time 07/25/19 0940	Initials: WWS	Location: WR-2				
			Shelf/Rack: N/A				
Logged In:	Date/Time 07/26/19 1022	Initials: WWS	Location: R-13, WR-2				
			Shelf/Rack: J-2, E-2				
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> On Trac	<input type="checkbox"/> GSO	<input type="checkbox"/> DHL	<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Other
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice		<input type="checkbox"/> Dry Ice		<input type="checkbox"/> None	
Temp °C: 2.6 (uncorrected)	Probe used: Y / <input checked="" type="checkbox"/> N			Thermometer ID: ER-3			
Temp °C: 2.6 (corrected)							

	YES	NO	NA			
Adequate Sample Volume Received?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Holding Time Acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Shipping Custody Seals Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Shipping Documentation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Airbill	Trk # <u>8086 3995 3269</u>					
Sample Container Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Sample Custody Seals Intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
COC Anomaly/Sample Acceptance Form completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
If Chlorinated or Drinking Water Samples, Acceptable Preservation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Preservation Documented:	<input type="checkbox"/> Na ₂ S ₂ O ₃	<input type="checkbox"/> Trizma	<input type="checkbox"/> None	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA
Shipping Container	<input type="checkbox"/> Vista	<input checked="" type="checkbox"/> Client	<input type="checkbox"/> Retain	<input checked="" type="checkbox"/> Return	<input type="checkbox"/> Dispose	

Comments: * no sample matrix indicated for "Field Blank" sample.

Chain of Custody Anomaly/Sample Acceptance Form



Client: Cedar Corporation
Contact: Anna Beckman
Email: anna.beckman@cedarcorp.com
Phone: (715) 235-9081

Workorder Number: 1902281
Date Received: 25-Jul-19 09:40
Documented by/date: MSparks/07-26-19

Please review the following information and complete the Client Authorization section. To comply with NELAC regulations, we must receive authorization before proceeding with sample analysis.

- Sample Collection Date and/or Time not provided
- Temperature outside Method Requirement (WI-PHT)
Temperature _____ °C Ice Present? Yes No Melted
- Sample ID Not Reconcilable
- Sample Holding Time Missed
- Insufficient Sample Size
- All Sample Container(s) Broken
- Drinking Water Incorrect Container Type
- Chain-of-Custody not received, illegible or destroyed
- Other: see comments

Comments/Samples Affected:

Sample matrix not listed on COC for field blank sample.

Client Authorization

Proceed with Analysis: YES NO

Signature and Date [Signature] 08/15/19

Client Comments/Instructions Client notified via email on 07/29/19 - matrix set as "aqueous."

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-192431-1
Client Project/Site: Town of Warren

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson



Authorized for release by:
12/21/2020 12:26:26 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	11
QC Association	12
QC Sample Results	13
Chronicle	14
Certification Summary	15
Chain of Custody	16
Receipt Checklists	19

Case Narrative

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Job ID: 500-192431-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

**Job Narrative
500-192431-1**

Comments

No additional comments.

Receipt

The samples were received on 12/14/2020 10:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.8° C.

GC/MS VOA

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Client Sample ID: MW-13

Lab Sample ID: 500-192431-1

No Detections.

Client Sample ID: P-14

Lab Sample ID: 500-192431-2

No Detections.

Client Sample ID: MW-9

Lab Sample ID: 500-192431-3

No Detections.

Client Sample ID: P-10

Lab Sample ID: 500-192431-4

No Detections.

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

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Method	Method Description	Protocol	Laboratory
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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

Sample Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-192431-1	MW-13	Ground Water	12/10/20 14:00	12/14/20 10:30	
500-192431-2	P-14	Ground Water	12/10/20 14:15	12/14/20 10:30	
500-192431-3	MW-9	Ground Water	12/10/20 14:30	12/14/20 10:30	
500-192431-4	P-10	Ground Water	12/10/20 14:45	12/14/20 10:30	

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

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Client Sample ID: MW-13
Date Collected: 12/10/20 14:00
Date Received: 12/14/20 10:30

Lab Sample ID: 500-192431-1
Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<0.61		1.6	0.61	ug/L			12/18/20 13:18	1

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

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Client Sample ID: P-14

Lab Sample ID: 500-192431-2

Date Collected: 12/10/20 14:15

Matrix: Ground Water

Date Received: 12/14/20 10:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<0.61		1.6	0.61	ug/L			12/18/20 13:42	1

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

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Client Sample ID: MW-9

Lab Sample ID: 500-192431-3

Date Collected: 12/10/20 14:30

Matrix: Ground Water

Date Received: 12/14/20 10:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<0.61		1.6	0.61	ug/L			12/18/20 14:06	1

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

Client Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Client Sample ID: P-10

Lab Sample ID: 500-192431-4

Date Collected: 12/10/20 14:45

Matrix: Ground Water

Date Received: 12/14/20 10:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<0.61		1.6	0.61	ug/L			12/18/20 14:31	1

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

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

GC/MS VOA

Analysis Batch: 563804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192431-1	MW-13	Total/NA	Ground Water	8260C SIM	
500-192431-2	P-14	Total/NA	Ground Water	8260C SIM	
500-192431-3	MW-9	Total/NA	Ground Water	8260C SIM	
500-192431-4	P-10	Total/NA	Ground Water	8260C SIM	
MB 480-563804/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 480-563804/6	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 480-563804/7	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

QC Sample Results

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

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

Lab Sample ID: MB 480-563804/9
Matrix: Water
Analysis Batch: 563804

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<0.61		1.6	0.61	ug/L	-		12/18/20 12:23	1

Lab Sample ID: LCS 480-563804/6
Matrix: Water
Analysis Batch: 563804

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	16.0	16.0		ug/L	-	100	50 - 150

Lab Sample ID: LCSD 480-563804/7
Matrix: Water
Analysis Batch: 563804

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
1,4-Dioxane	16.0	16.5		ug/L	-	103	50 - 150	3	20

Lab Chronicle

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Client Sample ID: MW-13
Date Collected: 12/10/20 14:00
Date Received: 12/14/20 10:30

Lab Sample ID: 500-192431-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C SIM		1	563804	12/18/20 13:18	WJD	TAL BUF

Client Sample ID: P-14
Date Collected: 12/10/20 14:15
Date Received: 12/14/20 10:30

Lab Sample ID: 500-192431-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C SIM		1	563804	12/18/20 13:42	WJD	TAL BUF

Client Sample ID: MW-9
Date Collected: 12/10/20 14:30
Date Received: 12/14/20 10:30

Lab Sample ID: 500-192431-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C SIM		1	563804	12/18/20 14:06	WJD	TAL BUF

Client Sample ID: P-10
Date Collected: 12/10/20 14:45
Date Received: 12/14/20 10:30

Lab Sample ID: 500-192431-4
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C SIM		1	563804	12/18/20 14:31	WJD	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600



Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Town of Warren

Job ID: 500-192431-1

Laboratory: Eurofins TestAmerica, Buffalo

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


Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998310390	09-01-21

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

Address: _____

Regulatory Program: DW NPDES RCRA Other:

TAL-8210

Client Contact Company Name: <u>Cedar Corp</u> Address: _____ City/State/Zip: _____ Phone: <u>715-235-9081</u> Fax: _____ Project Name: <u>Town of Warren</u> Site: _____ P O #: _____		Project Manager: <u>Kirsten Lee</u> Tel/Email: _____ Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Site Contact: _____ Date: <u>12/11/20</u> Lab Contact: <u>Sadie F.</u> Carrier: _____		COC No: _____ 1 of 1 COCs Sampler: <u>KAL</u> For Lab Use Only: Walk-in Client: _____ Lab Sampling: _____ Job / SDG No.: <u>500-192431</u>		
		 500-192431 COC		Filtered Sample (Y / N) Perform MS / MSD (Y / N) <u>1,4-Dioxan</u> <u>method: 8260SIM</u>				
Sample Identification		Sample Date	Sample Time			Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.
1	MW-13	<u>12/11/20</u>	<u>1400</u>			<u>GW</u>	<u>3</u>	<u>X</u>
2	P-14	<u>12/10/20</u>	<u>1415</u>					<u>X</u>
3	MW-9		<u>1430</u>					<u>X</u>
4	P-10		<u>1445</u>			<u>X</u>		
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other		Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						
Special Instructions/QC Requirements & Comments:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: _____		Cooler Temp. (°C): Obs'd: <u>2.0</u> Corr'd: <u>1.8</u>		Therm ID No.: _____		
Relinquished by: <u>Kirsten Lee</u>		Company: <u>Cedar Corp</u>		Date/Time: <u>12/11/20 0800</u>		Received by: _____		
Relinquished by: _____		Company: _____		Date/Time: _____		Received by: _____		
Relinquished by: _____		Company: _____		Date/Time: _____		Received by Laboratory by: <u>Shirley Scotts</u> Company: <u>ETA CRT</u> Date/Time: <u>12/14/20 1030</u>		

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

ORIGIN ID:PHDA (715) 556-9514
NITCH EVENSON
CEDAR CORP
604 WILSON AVENUE
MENOMONIE, WI 54751
UNITED STATES US

SHIP DATE: 07JUL20
ACTWTG: 10.00 LB MAN
CAD: 0562071/CAFE3313

TO

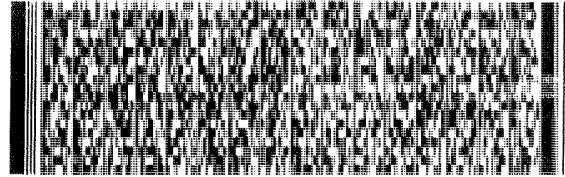
EUROFINS TESTAMERICA CHICA
2417 BOND STREET



565C2/1787/05A2

UNIVERSITY PARK IL 60484310 500-192431 Wayb
(708) 534-5200
REF: S500-83170

RMA: ||| ||| |||



FedEx
Express



J191219082001uv

TRK# 1026 7707 0000

FedEx

TRK# 0221 1926 7797 9396

A0 JOTA

60484
IL-US
ORD

RETURNS MON - SAT
SATURDAY 12:00P
PRIORITY OVERNIGHT

FID 543099 11DEC20 EAU 56DC2/9196/05A2

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-192431-1

Login Number: 192431

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-192431-1

Login Number: 192431

List Number: 2

Creator: Kolb, Chris M

List Source: Eurofins TestAmerica, Buffalo

List Creation: 12/16/20 12:12 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2 ir gun #1 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	